

THE A-SQUARE TECHNOLOGY GROUP & NASCENT APPLIED METHODS AND ENDEAVOR'S ONESIMUS EQUATIONS AS THE PRINCIPLE PARTS OF ENGLISH SPEECH INVOLVING MASLOW'S HIERARCHY OF NEEDS AS WELL AS CAESAR'S EIGHT COMMENTARIES AS A SERIES OF MATRIXED IDEOLOGIES ENGAGED IN GLOBAL SOCIOECONOMIC MARKETING WARFARE AGAINST ALL HUMAN DISEASES

The Socioeconomic Base Equations for the Individualized
Global Free Market Fusion of Information

For the first time in the history of mankind. The road representing financial security, which leads toward the Commanding Heights of global market economies, is no longer solely paved with the words, concepts & ideas of Privatization. But is additionally forged upon the creation of individualized innovative global free-market entrepreneurial business model & search engine technologies. Whose, patentable genetic-based consultative Planning & Design Approaches (PDAs) are interconnected, evolvable & user specific through personalizing internet content by way of the following grammatic formula(s); Whereas, the constant sum value of $[A^2, G^2, G^2, L^2, M^2, PA^2, T^3 \& T^3]$ equals the measured quantitative significance of any number(s), letter(s), word(s), concept(s), idea(s), genomic sequence(s) or method(s) used to describe the existence or processes of a person(s), place(s) or thing(s), both currently known or unknown. Which, are also supplanted within the driving forces [E] behind the Meaning of Life [M], the Tree of Life [T], and of course Quality of Life [Q] issues. Whereas, the Process is the genomic facilitation of single & multiple number, letter or word, strategies or tactics that simultaneously accommodate systemic personal or organizational management, from a single point of origin, throughout the following distributed infrastructural linguistic resources involving the Human Language System (HLS) as a whole;

BY WILLIAM EARL FIELDS (GCNO)



(ANMESCL² RDWEF)

ALPHA NUMEROUS
MAXIMUS
EGREGIOUS SUMMA
CUM LAUDE



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS
MAXIMA
EGREGIA SUMMA
CUM LAUDE



(ANMESCL² QUO VADIS)

ALPHA NUMEROUS
MAXIMUS
EGREGION SUMMA
CUM LAUDE



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

NAME's Approaches Toward a Cure for Various Diseases

Imagine this. A broad-based technology, that through the [Human Genome](#) ([genetics](#)), provides its users the ability to transform their varied existence into a [Search Engine](#) ([Intranet](#)), through [Virtual Laboratory](#) & [Internet Technologies](#) (i.e., [VPN/GPN/VRN-LAN/WAN/GAN](#) procedures & technologies). This in turn, converts & facilitates **all** Internet content into a customized platform that is user specific. **Specifically**, imagine your own genome or genetic profile being used to encode a personal [Encyclopedia](#) or [Library](#) of [Medical](#) & [Financial](#) information from **distributed** Internet resources. In the case of health related issues, this technology could possibly lay the foundation for you or your doctor to quickly find a cure for **whatever** currently ails you, including [Cancer](#). **For instance**, it is quite possible through today's technologies, to first diagnose the genetic profile of anyone's tumorous cancer cells. Then, through an additional process. Combine the efforts of NAME's technology-base, with that of blood clotting technologies distributed across the globe. The possibility of which, is the development of a tailor-made cancer treating magic bullet. **That is, the development of genetic-based blood clotting pathogens that will only activate within the walls of the cancerous [Tumor\(s\)](#) itself, essentially cutting off its blood supply. In effect, causing the tumor to have a stroke & die, while unaffacting normal healthy cells, veins, arteries or organs.** Overall, this possibility will render the tumor(s) inert, when & wherever it may form within the [Human Body](#). **Therefore**, if there exists financial or medical information technologies out there within the digital realm related to your own unique experiences or genetic profile, that can assist you or your love ones with quality-of-life issues? We have the [ISP/ASP/GSP](#) technology-base to facilitate the ends to that means.



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Press Release

"STRATEGIC EDUCATIONAL & EMPLOYMENT RELATED SYSTEMS DEVELOPMENT EMPOWERS COMPUTERS & NETWORKS WITH HUMAN-LIKE DECISION-MAKING CAPABILITIES THROUGH VIRTUAL BIOLOGICAL CLONING, EVOLVING NOVEL ORGANIZATIONAL FORMS & E-COMMERCE SOLUTIONS WITHIN AN ENVIRONMENT OF THE WORLD'S FIRST AUTONOMOUS GENETIC INTERNET-BASED OPERATING SYSTEM."

The California inventors, founders and proprietors of **Nascent Applied Methods & Endeavors (NAME)** have developed an internal genetic-based **Internet/Distributed Operating System Architecture (IBOS/DOSA)** and **Distributed Abstract Life/Integrated Autonomous Office Application (DALP/IAOA)** that automates the adaptive qualities of strategic autonomous software systems, **e-commerce solutions** and work-related educational development. NAME's autonomous office applications and **internet-based operating systems**, when combined, will also provide generic computer operations and networking systems with self-ruling decision-making capabilities which replicates managerial thought & employee interactions. This goal is achieved through a process of applying the scientific and **sequential algorithms** of human **genes** & **chromosomes** into compressed multiple **neural networks** of tactical and strategic **evolving organizational forms**. The basic premise of this process, is to provide NAME's customer-base and its subcontractors with a systems program that will create a **virtual R&D laboratory** within the confine of its own engineering functions. Whereas, the objective is the autonomous research, development, and distribution of cutting-edge business processes and software technologies through **e-commerce solutions**. This technology's secondary premise, consists of having its communication aspects surf the internet for those new technologies related to its own **organic procedures**, and then automatically incorporating those technologies into a process of upgrading its own internal systems. Therefore, providing a user with a form of business **object-oriented** technology that far-out competes **any** latent or mainstream **operating system** & office application on a minute-to-minute bases.

STRATEGIC EDUCATIONAL & EMPLOYMENT RELATED SYSTEMS

DEVELOPMENT also implements a number of biological processes for the analogous purposes of manufacturing information through cutting-edge **mathematics** and **logistical** computer operations. This operational procedure consists of planning, developing, integrating and implementing the ideological, structural and physical qualifications or characteristics of "**model workers, managerial staff members** and their **organizational structure**," as defined by NAME's investigative profile, the **Thomas Registry Guides**, and the **Dictionary of Occupational Titles**. The architectural framework of this program shall then, by the current language skills of **modeled business personnel**, and as circumscribed by previous or modern **dictionaries, thesauruses**, & other **reference materials**, develop artificial or real-time scenarios in **virtual reality** that will aid business owners, managers & employees in resolving those problems related to their day-to-day functional operations in a matter of minutes, instead of hours, if not days.

STRATEGIC EDUCATIONAL & EMPLOYMENT RELATED SYSTEMS DEVELOPMENT also utilizes **strategic managerial principles** to further perpetuate its **autonomous agents and structures** through the synthesis and execution of the following administrative grammatical criteria, which are **morale/cohesion, power/authority, norms/standards** and **goals/objectives**. Furthermore, through a **SYSTEMS MATRIX** and **SOLUTION FRAMEWORK**, this grammatical criteria will also assist the autonomous agents (DALP), autonomous structures (EWA), modeled personnel (KWS) and organizations (DOSA) in predicting how certain individuals, groups, ventures and various functions will perform under tenaciously predicated conditions and events. The costs associated with employing and implementing the systems development & educational program of NAME are **tax deductible** for **clients** (pub. 970), **investors** (pub. 550), **investment groups** (pub. 550), **network contractors** (pub. 535), **subcontractors** (pub. 535), **virtual host or internet service providers** (pub. 535), and **property owners** whose properties are exclusively delegated toward this network to facilitate its services (pub. 544 & 550). The original systems design is currently being presented to a number of purchasers, proposers & vendors by the inventor/owner over the Internet. Additionally, the program is currently available for developmental leasing to information manufacturers, marketers, contractors, subcontractors, and virtual host or Internet service providers.

The following is a list of just a few design features and procedural advantages involved in acquiring the software end of STRATEGIC EDUCATIONAL & EMPLOYMENT RELATED SYSTEMS DEVELOPMENT:

STRATEGIC EDUCATIONAL & EMPLOYMENT RELATED SYSTEMS DEVELOPMENT
An exciting new MRP/ERP and Distributed Artificial Life Program (DALP) with over 4 billion variations

DESIGN ADVANTAGES:

- The ability to analyze & predict the future end-results of a problem, function or action by inputting the data from an investigative profile into a virtual reality **MRP/ERP** and DOSA/IAOA setting.

- The ability to analyze & predict the future actions and decisions of one's competitors, by inputting the data from an investigative profile into a virtual reality [MRP/ERP](#) and DOSA/IAOA setting, and then running artificial scenarios against the competitor(s) and applying the desired results to real-time scenarios.
- The ability to have a cutting-edge advantage over any competitive operation in the areas of business or employee management and marketing.
- The ability of lawyers, prosecutors & judges to confidentially forecast the outcome of pending legal cases through infusing an autonomous DOSA/IAOA investigative profile into the jury selection process (i.e., [analytical netmapping](#)).
- The ability to assist lawyers, prosecutors & judges in automatically structuring case documents by having NAME's internet-based platform and autonomous structures search legal information databases.
- The ability to incorporate over 58 separate self-replicating autonomous support applications into a single internet-based [operating system](#).
- The ability to additionally incorporate over 100 personalized forward and backward chaining, grammatical and mathematic, word and whole document search engines into a single internet-based matrix.
- The ability to create over 4 billion Thomas Registry and DOT skill-based Smartphone applications from a single generic internet-based platform.
- The ability for a user to combine & use any number of textbooks, procedural manuals & novels to develop sub-routines (procedural scripts) as a form of network, organizational and procedural implementation.
- The ability for a subscriber to deduct the cost of this network's technologies and its educational services from local, state and federal taxation.
- The ability of a network provider (subcontractor) to circumvent property taxation of those lands used exclusively to support the services of this network.

DESIGN FEATURES:

- An unlimited number of precise, strategic and tactical programming variations associated with enterprise resource planning.
- A programming format whose grammatical structuring system mimics human thought and behavioral patterns within a virtual enterprise, for the purposes of information manufacturing and human resource planning.
- A programming format that can automatically develop an individual autonomous enterprise work architecture for over 50 million separate businesses.
- A programming format that incorporates the Dictionary of Occupational Titles and the Thomas Registry as a base for developing & integrating over 4 billion interactive autonomous internet-based operating systems.
- A programming format that can automatically improve or upgrade its own software procedures by first analyzing itself through a systems performance evaluation, and then restructuring its internal operating methodologies by searching the Internet for new technology options.
- A programming format that can additionally create a virtual intranet, whose sole function is to mimic portions the Internet for the purposes of developing and maintaining a secure perimeter for DOSA and IAOA semantics.

DEVELOPMENT:

- Product and services designs are completed. Educational services are now available through online registration. Working EWA and DALP prototypes are currently under development for Internet publication and online distribution.

TARGET MARKETS:

- Individuals, groups, inter-groups, business systems, social systems & larger social systems located in the U.S. and worldwide.....[3,925](#) or more.

ESTIMATED YEARLY MARKET SHARES:

- The combined minimal revenue projections for the first five (5) years under Plans 1 - 10 are \$42,059,350; for 2022, \$615,946,968; for 2023, \$615,946,968; for 2024, \$615,946,968; for 2024, and by the year 2026, \$615,946,968 or approximately \$2,505,847,222 in distributed income or revenue at the end of the initial educational or service cycle of NAME and the A-Square Technology Group.

MARKETING OUTLETS:

- Manufacturers of computer & software systems
- Distributors of computer & software systems
- Business brokers
- Business development firms
- Consultants & consulting firms
- Databanking or data warehousing firms
- Educational institutions
- Individual counseling firms
- Management firms
- Marketing firms
- Virtual host or Internet service providers
- Seminar brokers
- Social development firms or institutions
- Software programming firms
- Tax preparers

SIC CODES:

- 7372



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Patent Your Own Genome

The personnel at NAME have developed a process of imprinting the presence & conditions of the human mind & body into the digital realm. This process consists of applying the human genome or genetics towards those words, concepts & ideas, used to describe the psychological & physical traits of both mind & body, as they relate to each other and the environment on a day-to-day basis, through **Genomic Hierarchical Operating System Technologies (GHOST)**.

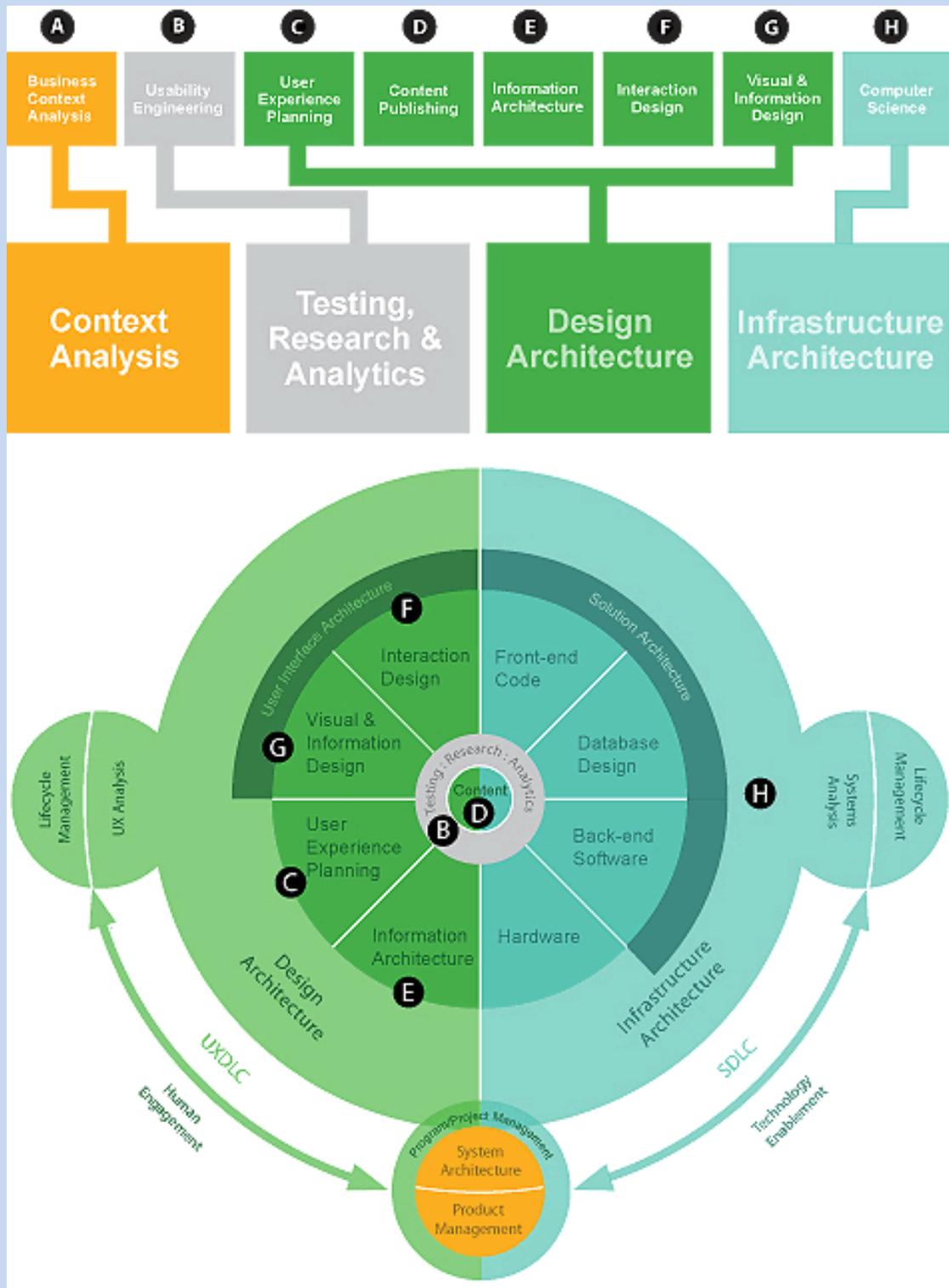
Once we have supplied you with the outline of a free patentable version of our technologies, we will then begin the processes of using your actual and/or virtual genetic profiles to: **(1)** Encrypt the information contained within our computer networks with strategic & tactical firewalls. “No more expensive & time consuming upgrades of current viral software programs.” Especially, since computer viruses now & in the future will have to know both of our encrypted genetic profiles at a given point in time, in order to invade & violate our computer networks; **(2)** Establish a foundation for you to apply for a patent of a genetically specified version of our technologies, upon which your own genome will become your exclusive property. “Therefore, no doctor, pharmaceutical, research institution or industry can ever take your genetic profile to make money with it without first paying you royalties.” Especially, since your genetic profile will once again become your own exclusive property, with all traditional rights afforded; **(3)** Establish with our free technologies a foundation for you as a third-party developer, to acquire an income of untold sums of money, by creating unique programming variations for & within our subscriber and advertising-base. Revenues for third-party developers usually range from \$250K - \$10M for varied projects. **Revenues acquired depend upon your skill level(s), and the overall size of NAME’s subscriber-base usage or variations requested at the time.**

NAME’s **GHOST** technologies include an autonomous Internet Based Operating System, Distributed Artificial Life Program & Integrated Autonomous Office Application (i.e., Word, Spreadsheets, Database, Internet COM System, Web Page/Site Developer, Game Configurations, Autonomous Agent Technologies, Job Related Planning & Design Configuration Technologies, etc.). The basic premise of NAME’s technologies is to provide for our subscriber & advertising base, new processes & procedures that will accommodate better overall strategic or tactical management & **NEW MARKET** implementation of their products & services.

Additionally, this same technology, once individualized, can be used to vastly improve the day-to-day computer use for yourself and your family members as well. **For example**, let’s say that

upon receiving a medical examination, you or a family member, are told that there now exists a serious medical problem. Well, with NAME's technology-base, you will no longer have to involve yourselves with time consuming manual keyword searches, looking through traditional portals for information related to the newly discovered medical problem(s) & its treatment strategy(ies) over the Internet. In other words, just simply have yourself or doctor download the medical report, or any document for that matter, into your genetically based encryption database or computer. Then, watch as the combined efforts of our technologies obtain in seconds, and on a **24/7/365** bases, only that relevant information located throughout the entire Internet, that pertains to you and your family's abilities to acquire knowledge about **support groups, cutting-edge clinical studies & experimental drugs or treatment strategies** for those quality-of-life issues regarding yourself or your family members. Additionally, through our virtual lab technologies, your genetic profile may be used to discover never before developed cutting-edge solutions to your own medical problem(s) in virtual reality. Which in turn could be presented to the medical industry for profit. Registration is required for secured access and network order process management.

FINAL DRAFT





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The Abstract Tutorial for Transforming Human Beings (GJC) into Corporate Search Engines and Procreative Business Models Valued at \$3,125,847,222 Each

1. **Initially**, double-click on **X³** within the Word document of the same title. This will take you to another word file titled **DaVinci's Code**. Within the DaVinci's Code document are a series of links that will begin the processes of a **Conceptual Map** for **Solution Providers** that will first take you to the **Cancer Document**. The Cancer document is a Word file that describes the medical or biological analogies involved with NAME's technology bases. This analogy in particular describes a categorical listing of the effort involved with personalizing internet content, in order to implement problem-solving measures of effectiveness, in the pursuit of a medical emergency. Like for instance, a diagnosis of cancer, or any other medical ailment and/or financial concerns.
2. **Secondly**, the next link within the DaVinci's Code document is **X Square**. This alphabet symbolizes the mathematical equation defining a phenomenon or the unknown, but in this case it represents a Word document titled the **Procedural Guidelines**. The Procedural Guidelines document is a graphical example of a customized relationship-based procedural hierarchy that involves implementing the tenets of historical documents or global market-based economies into **International Technology Bases**. This process, in and of itself, utilizes approximately 11,664 strategic & tactical operations as procedural countermeasures within the boundaries of problem solving measures of effectiveness by initially overlapping its 4-piece structure with that of the 4-part managerial process areas of the **PDA** worksheet. Then, as an **Economic Procedural Guideline**, with that of **CPDA** Sections, **A1 – A4**. While additionally, as an **Autonomous Economic Procedural Guideline**, becoming reflective of the tactical elements within **CPDA** Sections, **B1 – E4**.
3. **Third**, this profile also establishes a systems wide feed-back link with a similar document that combines **Religious** & **Government** based **Free-Markets Economies** into a platform for developing & implementing strategic or tactical **Militaristic Analogies** with that of the guiding logistical principles of **Situation**, **Business** or **Social Management** through **Economic Concepts**. Additionally, within the DaVinci's Code document rest a listing of approximately 20 hierarchical worksheets that are incorporated into the **20-Component** outline involved with Pursuing the Planning & Design Approach through approximately **36 Economic Autonomous Adaptive Agent** (AAA) technologies, housed within the **Planning & Design Worksheet** itself.

4. **Furthermore**, within the Procedural Guidelines document is the Symbol (3^3). This number represents approximately **324** distributed websites & interconnections, subdivided into three distinctive categories, from which, the 108 components of **Quintilian: Institutio Oratoria** are interwoven as instructional subject matter, synonymous with each subcomponent within each of those areas listed below (i.e., $3 \times 108 = 324$);
 - A. **The Meaning of Life issues (Strategic & Tactical Studies)**. [M]
 - B. **The Tree of Life issues (Educational or Procedural Hierarchies)**. [T]
 - C. **The Quality of Life issues (Economic or Political Foundations)**. [Q]

The core function of these websites is to provide objective information used by the NAME network to upgrade its technology bases 24/7/365, as institutional policies that facilitates the educational needs, or living standards of its client base.

5. **Fifth**, the symbol **RW** represents inputted **Real World** issues or information that is segregated into the Principle Parts of English Speech (PPES). This process will lay the foundation for approximately **9** distinct formulas representing the PPES, to first que the Global Economy, the world-wide-web on behalf of the individual user, and then personalize that content by establishing a synonymous relationship with the type & format of inputted information, while generating knowledge through a series of five phase strategic procedural guidelines as outlined in the Planning & Design Worksheet.
6. **Moreover**, the symbol **EH²** also represents those same nine formulas of the principle parts of english speech system of thought (PPES), as it involves strategic operations or academic ideologies being implemented into the **9** distinct sections of the **Planning & Design Approach (PDA)** worksheet. Whereas, there primary function in this area is to segment & integrate inputted information from web blogs or the world-wide-web itself into an **Educational Hierarchy**. This will achieve a means of communicating varied ideas, across multiple platforms or disciplines, while facilitating disperse reading skills within the boundaries of a single minded effort as outlined within the document titled, the **Procedural Configuration & Interpretation**. As well as the files titled the **Systems Integration**, and **Appendix – D** of the conceptual mapping of this network's technical ideologies.
7. **Additionally**, the symbol **QM²** of the **X³** equation, as a representation of **Quality Measures** or the **Standard of Living**, utilizes an additional set of PPES formulas as a means of facilitating the generation of abstract knowledge, by establishing a connection with other tactical operations components & subcomponents of the **X³** equation itself. This goal is achieved through the processes of overlapping the nine formulas with that of the varied sections of the **Consultative Planning & Design Approach (CPDA)** worksheet, and that of the nine subcomponents within the **Method Structures** themselves. In other words, every time all nine principle parts of English speech are employed in the processes of conveying tactical ideas, autonomous **Macro & Microeconomic** market-based methods are then created as means of simultaneously implementing strategic & tactical operations within multiple environments, across multiple platforms or technology bases from any single point of origin, through any workstation or telephone keypad system, from anywhere on Earth.
8. **Finally**, within the **CPDA** worksheet are sections **A1 – A4**. This area is representative of a 4-dimensional **Strategic/Tactical Grid** or **Consul Cube** of amino acid sequencing, as formulated through the varying **Chemical Ratios** inputted as encoded strategic thought, or overlapping key **Atomic Elements** from within the principle components of the PDA worksheet itself. This **Thermoeconomic Method** is intuitive of the **15** categories within the Japanese Kamasutra **96** sexual positions, as an analogous means of using a combination of PDA & CPDA 48 cellular matrixes to gauge the standard of living involving the human condition at the grass roots level. Once combined with a portrait of **15 Roman Emperors** overlapping each amino acid or letter within CPDA Sections, **AAA-AAT**, this reciprocal technique will provide a means from which strategic thought simultaneously reflective of **Egyptian, Greek, Roman & American** financial history, and numerous **Operational Stratagems**, shall become resource material for modern **Socioeconomic** principles involving **Global Market Forces** or **Economic Expansionism In Five Parts**. While the remaining Sections, **B1 – E4**, facilitates the **80** variations or subcomponents within the files titled **Global – 3 & 4**, as they involve their tactical elements & approaches toward problem solving measures of effectiveness through a genetic matrix, as well as the **80** subcomponents of **Appendix – L** that facilitate **Parallel Virtual Machine (PVM)** systems self-awareness in five steps. Foremost, every dimensional element

within this section of the CPDA worksheet (AAA-EYY) is interconnected to each website symbolic of the [324](#) URL addresses listed as X^3 (e.g., $80 \times 4 + 4 = 324$ simultaneous interconnections). Once these [Managerial Interconnections](#) are brought to bear, then the [Global Financial Projections](#) reflective of the [Combined Market Totals](#), become feasible as a template for [11,664 Procreative Business Models](#) to facilitate some [3,927](#) customers each through varied technologies, on behalf of [45](#) million or more businesses worldwide.



| H C D | |
|---|-----|
| HUMAN CENTERED DESIGN | |
| TOOLKIT | |
| 2ND EDITION | |
| INTRODUCTION | |
| WHY DO HUMAN-CENTERED DESIGN? | 4 |
| THE THREE LENSES OF HUMAN-CENTERED DESIGN | 6 |
| THE HCD PROCESS | 8 |
| HOW TO USE THIS TOOLKIT | 10 |
| BEST PRACTICES FOR INNOVATION | 12 |
| SCENARIOS OF USE | 14 |
| H HEAR | |
| The Hear section will guide you through the process of preparing for research with constituents using HCD methodology. | |
| STEP 1: IDENTIFY A DESIGN CHALLENGE | 34 |
| STEP 2: RECOGNIZE EXISTING KNOWLEDGE | 39 |
| STEP 3: IDENTIFY PEOPLE TO SPEAK WITH | 40 |
| STEP 4: CHOOSE RESEARCH METHODS | 42 |
| Method: Individual Interview | 42 |
| Method: Group Interview | 44 |
| Method: In-Context Immersion | 46 |
| Method: Self-Documentation | 50 |
| Method: Community-Driven Discovery | 53 |
| Method: Expert Interviews | 55 |
| Method: Seek Inspiration In New Places | 57 |
| STEP 5: DEVELOP AN INTERVIEW APPROACH | 58 |
| Method: Interview Guide | 58 |
| Method: Sacrificial Concepts | 60 |
| Method: Interview Techniques | 64 |
| STEP 6: DEVELOP YOUR MINDSET | 66 |
| Mindset: Beginner's Mind | 66 |
| Mindset: Observe vs. Interpret | 68 |
| C CREATE | |
| The Create section will help you translate what you learned in the field into concrete solutions. | |
| STEP 1: DEVELOP THE APPROACH | 84 |
| Method: Participatory Co-Design | 84 |
| Method: Empathic Design | 89 |
| STEP 2: SHARE STORIES | 92 |
| STEP 3: IDENTIFY PATTERNS | 94 |
| Method: Extract Key Insights | 94 |
| Method: Find Themes | 98 |
| Method: Create Frameworks | 100 |
| STEP 4: CREATE OPPORTUNITY AREAS | 102 |
| STEP 5: BRAINSTORM NEW SOLUTIONS | 104 |
| STEP 6: MAKE IDEAS REAL | 106 |
| STEP 7: GATHER FEEDBACK | 108 |
| D DELIVER | |
| The Deliver section will give you the tools to go from ideas and prototypes to solutions and plans that can be implemented. It will also help you create a learning plan to measure and continue iterating on your designs. | |
| STEP 1: DEVELOP A SUSTAINABLE REVENUE MODEL | 126 |
| STEP 2: IDENTIFY CAPABILITIES FOR DELIVERING SOLUTIONS | 131 |
| STEP 3: PLAN A PIPELINE OF SOLUTIONS | 134 |
| CREATE AN IMPLEMENTATION TIMELINE | 138 |
| STEP 5: PLAN MINI-PILOTS AND ITERATION | 140 |
| STEP 6: CREATE A LEARNING PLAN | 144 |
| Method: Track Indicators | 146 |
| Method: Evaluate Outcomes | 148 |
| FIELD GUIDE | 154 |
| The Field Guide contains worksheets that will help you to prepare for and conduct field research. The Field Guide and the Aspirations Cards, are all you will need to take to the field with you. | |

Economic Intelligence Network News Service

Database Ranges for Analytical Netmapping Sections One and Two

1. Who?

- Name(s):
- Date(s) of Birth(s):
- Place(s) of Birth(s):
- SSN(s):
- DLN(s):
- VLN(s):
- VIN(s):
- Type of Residence(s):
- Current Home Phone Number(s):
- Previous Home Phone Number(s):
- Type of Business(es):
- Current Business Phone Number(s):
- Previous Business Phone Number(s):
- Current Home Address(es):
- Previous Home Address(es):
- Current Business Address(es):
- Previous Business Address(es):
- BLN(s):
- EIN(s):
- Physical Characteristics:
 - Individual(s):
 - Group(s):
 - Inter-Group(s):
 - Social System(s):
 - Larger-Social System(s):
- Physiological Genealogic Structure(s):
- Current Physical Characteristics of Functional Duties:
- Current Genealogical Characteristics of Functional Duties:
- Previous Physical Characteristics of Functional Duties:
- Previous Genealogical Characteristics of Functional Duties:
- Forecasted Physical Characteristics of Functional Duties:
- Forecasted Genealogical Characteristics of Functional Duties:
- Current Physical Classification(s) of Functional Duties:
- Current Genealogical Classification(s) of Functional Duties:
- Previous Physical Classification(s) of Functional Duties:
- Previous Genealogical Classification(s) of Functional Duties:
- Forecasted Physical Classification(s) of Functional Duties:
- Forecasted Genealogical Classification(s) of Functional Duties:

2. What?

- Race:
- Creed:
- Color:
- Nationality(ies):
- Ethnicity(ies):

- Sex:
- Hair:
- Eye(s):
- Height:
- Weight:
- Previous Marital Status:
- Current Marital Status:
- Previous Sexual Preferences:
- Current Sexual Preferences:
- Current Language Skills:
- Linguistic Profiles:
- Previous Religion:
- Current Religion:
- Religious Profile:
- Previous Education:
- Current Education:
- Educational Profile:
- Previous Psychological Profile:
- Current Psychological Profile:
- Forecasted Psychological Profile:
- Previous Economic Profile:
- Current Economic Profile:
- Forecasted Economic Profile:
- Previous Sociological Profile:
- Current Sociological Profile:
- Forecasted Sociological Profile:

3. When?

- Date(s) of Action(s) Committed:
- Date(s) when Support Personnel were Introduced into Action(s) Committed:
- Date(s) when Support Personnel Committed Action(s):
- Date(s) of Documents Involved in Action(s) Committed:
- Date(s) of when Action(s) Committed were Completed:

4. Where?

- Previous Location(s) of Action(s) Committed:
- Current Location(s) of Action(s) Committed:
- Location of Individuals in Support of Action(s) Committed:
- Subject(s) of Action(s) Committed:
- Investigative Profile(s) of Subject(s) of Action(s) Committed:
- Opinions of Subject(s) of Action(s) Committed:

5. How?

- Action(s) Committed:
- Action(s) Committed with Whom:
- Source or History of Actions(s) Committed:
- Previous Results of Action(s) Committed:
- Current Results of Action(s) Committed:
- Alphanumeric Definitions & Methods of Action(s) Committed:
- Alphanumeric Impact of Action(s) Committed:

- Legal Definitions & Methods of Action(s) Committed:
- Legal Impact of Action(s) Committed:
- Psychological Definitions & Methods of Action(s) Committed:
- Psychological Impact of Action(s) Committed:
- Physiological Definitions & Methods of Action(s) Committed:
- Physiological Impact of Action(s) Committed:
- Sociological Definitions & Methods of Action(s) Committed:
- Sociological Impact of Action(s) Committed:
- Economic Definitions & Methods of Action(s) Committed:
- Economic Impact of Action(s) Committed:
- Forecasted Integrated Results of Current Action(s) Committed:

6. Why?

- Ideological Reasons for Previous Action(s) Committed:
- Physiological Reasons for Previous Action(s) Committed:
- Economic Reasons for Previous Action(s) Committed:
- Sociological Reasons for Previous Action(s) Committed:
- Ideological Reasons for Current Action(s) Committed:
- Physiological Reasons for Current Action(s) Committed:
- Economic Reasons for Current Action(s) Committed:
- Sociological Reasons for Current Action(s) Committed:

7. Tactical Enterprise Work Architectures and Autonomous Programs used in Profile

- Autonomous Programs used in Profile:
- Sources and Performance History of Autonomous Programs used in Profile:
- Legal Position of Autonomous Programs used in Profile:
- Documentary Dispensation of Autonomous Programs used in Profile:
- Tactical Enterprise Work Architectures used in Profile:
- Sources and Performance History of Tactical Enterprise Work Architectures used in Profile:
- Legal Position of Tactical Enterprise Work Architectures used in Profile:
- Documentary Dispensation of Tactical Enterprise Work Architectures used in Profile:
- Tactical Enterprise Work Architectures and Autonomous Programs Ranking Prior to Investigative Profile:
- Tactical Enterprise Work Architectures and Autonomous Programs Ranking During Investigative Profile:
- Tactical Enterprise Work Architectures and Autonomous Programs Ranking After Investigative Profile:
- Legal Position of Enterprise Work Architectures and Autonomous Programs Prior to Investigative Profile:
- Legal Position of Enterprise Work Architectures and Autonomous Programs During Investigative Profile:
- Legal Position of Enterprise Work Architectures and Autonomous Programs After Investigative Profile:

8. Internal/External Personnel and Political Tactics used in Profile

- Internal/External Personnel used in Profile:
- Sources and History of Internal/External Personnel used in Profile:
- Legal Position of Internal/External Personnel used in Profile:
- Economic Dispensation of Internal/External Personnel used in Profile:
- Political Tactics used in Profile:

- Sources and History of Political Tactics used in Profile:
- Legal Position of Political Tactics used in Profile:
- Economic Dispensation of Political Tactics used in Profile:
- Network Configuration Prior to Investigative Profile:
- Network Configuration During Investigative Profile:
- Network Configuration After Investigative Profile:
- Legal Position of Network Prior to Investigative Profile:
- Legal Position of Network During Investigative Profile:
- Legal Position of Network After Investigative Profile:

9. Basis for Investigative Profiling

- Examination of Power Bases:
- Barriers to Entry into Certain Fields:
- Causes of Social Intercourse:
- Causes of Economic Conflicts:
- Causes of Legal Conflicts:
- Causes of Social Conflicts:
- Causes of Political Conflicts:
- Causes of Personal Conflicts:
- Causes of Racial Conflicts:
- Religious Conflicts:
- Basis for Human Interactions:
- Classification Theories:
- Bibliographic Theories:
- Structural Analysis Theories:
- Infrastructural Development:
- Educational Examination(s):
- Religious Examination(s):
- Strategic Anthropology:

10. The premise for NAME's investigative processes is to obtain a review of the history, objectives, operation, and merits of strategies & tactics that are prone to the need for an exhaustive investigation. This review process serves several purposes. It serves to describe the many functions that the existing internal operating systems can perform, thereby demonstrating the potential breath of applications for NAME's future investigative profiles and expert operating systems. It also illustrates the strategic development procedures discussed in [Appendix - D](#), which are organized by the type of grammatic and tactical analysis they perform. NAME's informational demographics and expert procedural manuals are illustrated by the following list of their potential uses within a focused educational environment developed by the GCNO at NAME:

- Aiding DOT database drafting by testing a textual draft against a set of related strategic-databases and linguistic standards, and having the computer system(s) make the appropriate suggestions;
- Researching expert DOT databases on the basis of a statement of facts or concepts (strategic or grammatic retrieval as opposed to the current key word searches);
- Generating ideas and advising a user of the arguments (program functions) for and against documented situations and also how to weaken or strengthen the arguments (program functions) in a particular set circumstances or skills;
- Advising a user on strategy and tactics in procedure or structural negotiations;
- Evaluating a situation as to settlement (final analyses) or strategic value;
- Evaluating procedural consistencies with prior decisions of a proposed administrative decision in discretionary areas;
- Aiding in the document drafting of contracts, wills, and other documents by testing for the consistency with existing laws, personal and social policies, and linguistic standards;

- Assisting decision making in which little or no discretion is involved;
- Planning transactions such as business mergers, with tax and other strategic information by presenting alternative scenarios and identifying their legal or structural consequences;
- Predicting the consequences of proposed legislation, policies, draft contracts, wills, situations, etc.;
- Finding legal or strategic authorities which are consistent or inconsistent with proposed laws or consciences;
- Evaluating the effectiveness of existing procedures, laws or rules and identifying the procedures, laws or rules which may need to be modified;
- Training and disseminating information on related concepts or skills;
- Interviewing clients for information relevant to the identification of the nature of their strategic or procedural problems;
- Informing client systems of the consequences of particular acts, in order to enable their subordinates to know the reality of their proposed or past acts, and if communication with an expert is required, to obtain a complete answer;
- Preserving institutional and instructional expertise;
- Reviewing conceptual or strategic database systems against new rules or situations, and modifying them to keep them activated and current;
- Identifying clients whose educational affairs may have been affected by changes in the network, so that a subcontractor can determine whether to contact a client regarding the change(s).

The primary application areas for NAME's investigative profile & document development processes include strategic management, organizational management, monitoring data flow, conceptual or legal interpretation, and document or report generation for the purposes of [structural](#) or [strategic](#) investigations.

11. Organizational and operational systems for infrastructural management

- a. The Personal Systems Training Solutions:
 - Application Development (1a.);
 - Database (2a.);
 - DOS, OS/2, OS/400 (3a.);
 - Windows & Windows NT (4a.);
 - Programming Languages (5a.);
 - Transaction Processing (6a.);
 - End User Applications (IV. & V.);
 - Hardware Operations (7a.);
- b. The Midrange Training Solutions:
 - Application Development (1b.);
 - Database (2b.);
 - Office Applications (7b.);
 - AIX/UNIX (4b.);
 - OS1400 (3b.);
 - Programming Languages (5b.);
 - Transaction Processing (6b.);
- c. The Mainframe Training Solutions:
 - Application Development (1c.);
 - Database (2c.);
 - MVS, VM, VSE (3c.);
 - Programming Languages (5c.);
 - Storage Management (4c.);
 - Transaction Processing (6c.);
 - Hardware Operations (7c.);
- d. The Client/Server, Networking & Object Technology Training Solutions:
 - Client/Server (1d.);
 - Distributed Databases (2d.);

- Internetworking (3d.);
- Local Area Networking (4d.);
- Network Management (5d.);
- Voice Applications (6d.);
- Object Technology (7d.);
- e. The Business & Personal Development Training Solutions:
 - Business Management (4e.);
 - Financial Skills (3e.);
 - Industry Applications (2e.);
 - Personal Effectiveness (1e.);
 - Project Management (5e.);
 - Total Quality Management (7e.);
 - Sales Training (6e.);

12. End product lines of investigative solution frameworks

- Intercommunicative autonomous software applications and platforms:
- Organizational and personnel procedural or policy manuals:
- Computational Intelligence in Industrial Engineering:
- Consumer Product Design:
- Economic Engineering & Cost Estimation:
- Facilities Design & Location:
- Information Systems:
- Maintenance Engineering and Management:
- Materials Handling:
- Performance Analysis & Simulation:
- Production Systems Design, Planning and Control:
- Productivity & Business Strategies:
- Project Management:
- Technology Management & Transfer:
- Total Quality Management & Quality Technology:
- Work Measurement & Methods Engineering:
- Industrial Ergonomics & Safety:
- Applied Operations Research:
- CAD/CAM:
- Other Topics of Interest in the Business Engineering Fields:



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

The ERSD Call to Action Formula(s) on Behalf of Caesar's 10th Legion within Global Socioeconomic Thought

$$G^3 \left(S = \frac{P^3}{C} \right)$$

The Formula System's Principle Components Through the Concepts of Economics Today

For the first time in the history of mankind. The road representing financial security, which leads toward the **Commanding Heights** of global market economies, is no longer solely paved with the words, concepts & ideas of **Privatization**. But is additionally forged upon the creation of individualized **innovative** global free-market **entrepreneurial business model & search engine technologies**. Whose, patentable genetic-based consultative Planning & Design Approaches (PDAs) are interconnected, evolvable & user specific through personalizing internet content by way of the following grammatic formula(s); Whereas, the constant sum value of [A², G², G², G², L², M², PA², T³ & T³] equals the measured quantitative significance of any **number(s), letter(s), word(s), concept(s), idea(s), genomic sequence(s) or method(s)** used to describe the existence or **processes** of a **person(s), place(s) or thing(s)**, both currently **known** or **unknown**. Which, are also supplanted within the driving forces [E] behind the **Meaning of Life [M]**, the **Tree of Life [T]**, and of course **Quality of Life [Q]** issues. Whereas, the **Process** is the genomic facilitation of single & multiple number, letter or word, **strategies** or **tactics** that simultaneously accommodate systemic **personal** or **organizational management**, from a single point of origin, throughout the following distributed infrastructural linguistic resources involving the **Human Language System (HLS)** as a whole;

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8. <http://www.aish.com/holidays/shavuot/default.asp> Shavuot
9. <http://www.yeshuatyisrael.com/mitzvot1.htm> 248 Do's
10. <http://www.yeshuatyisrael.com/mitzvot2.htm> 365 Don'ts
11. <http://www.613commandments.com/index.htm> 248 Do's & 365 Don'ts
12. <http://www.mechon-mamre.org/jewfaq/halakhah.htm> There is also complete agreement that these 613 mitzvot can be broken down into 248 positive mitzvot (one for each bone and organ of the male body) and 365 negative mitzvot (one for each day of the solar year).
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85. <http://www.droitcivil.uottawa.ca/world-legal-systems/eng-monde.html> World Legal Systems
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99. <http://t21.ca/wars/>
100. <http://www.cba.uni.edu/economics/lockie.pdf> Incentive Wars
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104. <http://emotional-literacy-education.com/index.shtml> Emotional Intelligence
105. <http://www.eqi.org/>
106. <http://www.eiconsortium.org/>
107. <http://www.gilgamesh.com/guerrillas.html>
108. <http://www.spirithome.com/spirwarf.html#whatis> Spiritual Warfare



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

THE ONESIMUS EQUATIONS PROCEDURAL CONFIGURATION & INTERPRETATIONS INVOLVING MASLOW'S HIERARCHY OF NEEDS

$$X^3 \left(RW = \frac{EH^2}{QM} \right)$$

Homo Economicus Universal

The Socioeconomic Base Equations for the Individualized Global Free Market Fusion of Information

For the first time in the history of mankind. The road representing financial security, which leads toward the **Commanding Heights** of global market economies, is no longer solely paved with the words, concepts & ideas of **Privatization**. But is additionally forged upon the creation of individualized **innovative** global free-market **entrepreneurial business model** & **search engine technologies**. Whose, patentable genetic-based consultative Planning & Design Approaches (PDAs) are interconnected, evolvable & user specific through personalizing internet content by way of the following grammatic formula(s); Whereas, the constant sum value of [**A²**, **G²**, **G²**, **G²**, **L²**, **M²**, **PA²**, **T³** & **T³**] equals the measured quantitative significance of any **number(s)**, **letter(s)**, **word(s)**, **concept(s)**, **idea(s)**, **genomic sequence(s)** or **method(s)** used to describe the existence or **processes** of a **person(s)**, **place(s)** or **thing(s)**, both currently **known** or **unknown**. Which, are also supplanted within the driving forces [**E**] behind the **Meaning of Life** [**M**], the **Tree of Life** [**T**], and of course **Quality of Life** [**Q**] issues. Whereas, the **Process** is the genomic facilitation of single & multiple number, letter or word, **strategies** or **tactics** that simultaneously accommodate systemic **personal** or **organizational management**, from a single point of origin, throughout the following distributed infrastructural linguistic resources involving the **Human Language System** (HLS) as a whole;

$$A^2 \left(E = \frac{CM^2}{MC} \right)$$

Homo Sapiens (Archaic)

$$C^3 \left(P = \frac{D^3}{A} \right)$$

Homo Economicus Universal Tactical

$$G^2 \left(E = \frac{NT^2}{OT} \right)$$

Australopithecus Africanus

$$G^2 \left(M = \frac{L^2}{A} \right)$$

Homo Erectus

$$G^2 \left(S = \frac{L^2}{A} \right)$$

Homo Sapiens (Neanderthal)

$$G^3 \left(S = \frac{P^3}{C} \right)$$

Homo Economicus Universal Synchronized
(The Theory of Universal Economic Relativity)

$$L^2 \left(E = \frac{I^2}{V} \right)$$

Australopithecus Afarensis

$$M^2 \left(E = \frac{T^2}{Q} \right)$$

Australopithecus Robustus

$$PA^2 \left(MC = \frac{NS^2}{GO} \right)$$

Australopithecus Boisei

$$P^3 \left(E = \frac{D^3}{A} \right)$$

Homo Economicus Universal Strategic

$$T^3 \left(C = \frac{UL^2}{LL} \right)$$

Homo Sapiens (Modern)

$$T^3 \left(L = \frac{I^2}{V} \right)$$

Homo Habilis

FINAL DRAFT

Economics Today

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1. The Nature of Economics
2. Scarcity and the World of Trade-Ours
3. Demand and Supply
4. Extensions of Demand and Supply Analysis
5. Public Spending and Public Choice
6. Funding the Public Sector

PART 2: Introduction to Macroeconomics and Economic Growth

7. The Macroeconomy: Unemployment, Inflation, and Deflation
8. Measuring the Economy's Performance
9. Global Economic Growth and Development

PART 3: Real GDP Determination and Fiscal Policy

10. Real GDP and the Price Level in the Long Run
11. Classical and Keynesian Macro Analyses
12. Consumption, Real GDP, and the Multiplier
13. Fiscal Policy
14. Deficit Spending and the Public Debt

PART 4: Money, Stabilization, and Growth

15. Money, Banking, and Central Banking
16. Domestic and International Dimensions of Monetary Policy
17. Stabilization in an Integrated World Economy
18. Policies and Prospects for Global Economic Growth

PART 5: Dimensions of Microeconomics

19. Demand and Supply Elasticity
20. Consumer Choice
21. Rents, Profits, and the Financial Environment of Business

PART 6: Market Structure, Resource Allocation, and Regulation

22. The Firm: Cost and Output Determination
23. Perfect Competition
24. Monopoly
25. Monopolistic Competition
26. Oligopoly and Strategic Behavior
27. Regulation and Antitrust Policy in a Globalized Economy

PART 7: Labor Resources and the Environment

28. The Labor Market: Demand, Supply, and Outsourcing
29. Unions and Labor Market Monopoly Power
30. Income, Poverty, and Health Care
31. Environmental Economics

PART 8: Global Economics

32. Comparative Advantage and the Open Economy
33. Exchange Rates and the Balance of Payments



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

$$A^2 \left(E = \frac{CM^2}{MC} \right)$$

[Homo Sapiens \(Archaic\)](#)

1. Where A^2 = the letter **A** used as a word (adjective) in a sentence, is defined by other words in a dictionary, that in turn are defined by other words, so forth & so forth, until the letter **A** as an Application or Approach represents all the words defined in any english dictionary translated into other languages. In other words, the letter **A** represents entire words, concepts & ideas used to describe a set of circumstances within the human language system.
2. Where **E** = the **E**nergetic forces within the **E**nvironment or **E**conomies that are influenced by;
3. CM^2 which equals the description of the cost of goods & services, squared by;
4. MC^2 that defines the amount of goods & services available within the global market place. This entire formula and its list of interrelated subcomponents functions as individual **adjectives** in a sentence for the purposes of systems integration.

$$C^3 \left(P = \frac{D^3}{A} \right)$$

Homo Economicus Universal Tactical

1. Where C^3 = the influences of Fiduciary Tactics, a Financial consensus of the human condition
2. Where P = the **Planning, Promotion, Procedural Application(s) or Performance Appraisal** techniques involving people, places or things and;
3. D^3 which equals those **Norms/Standards** that **Define** strategic Economic operations that are based upon or influenced by,
4. A^3 that represents the letter **A** used as a word (adjective) in a sentence, is defined by other words in a dictionary, that in turn are defined by other words, so forth & so forth, until the letter **A** as an **Application or Approach** represents all the words defined in any English dictionary translated into other languages. In other words, the letter **A** represents entire words, concepts & ideas used to describe a set of circumstances within the human language system that defines those **transitive** or **intransitive** “**Do**” operations within in a snap shot in time for the purposes of monetary systems integration.

$$G^2 \left(E = \frac{NT^2}{OT} \right)$$

Australopithecus Africanus

1. Where G^2 = the influences of the **Word of God**, a **Global** consensus of the human condition, or the mathematical equation of the **Group** ordering & development of good & services on earth (e.g., Manufacturing resource planning – MRP/ERP).
2. Where E = the planet **Earth**, spiritual **Evolution** or **Economies** that are influenced by;
3. NT^2 which equals the influences of the **New Testament** on organizational behavior (OD) and,
4. Where OT^2 that represents the influences of the **Old Testament** on individual behavior patterns. This entire formula and its list of interrelated subcomponents functions as individual **prepositional** words in a sentence for the purposes of systems integration.

$$G^2 \left(M = \frac{L^2}{A} \right)$$

Homo Erectus

1. Where G^2 = the influences of the **GHOST** technology base **IBOS[DOSA/DALP/IAOA]**.
2. Where M = the **M**eaning of Life definitions of the human condition on earth that are influenced by;
3. L^2 which equals the formula representing the Human Language System of strategic operations that are based upon or influenced by;
4. A^2 that represents the tactical function of the entire formula listed as A^2 , etc above. This entire formula and its list of interrelated subcomponents functions as individual **nouns** in a sentence for the purposes of systems integration.

$$G^2 \left(S = \frac{L^2}{A} \right)$$

Homo Sapiens (Neanderthal)

1. Where G^2 = the application of the contents of the **G**enomic matrix upon words, concepts, ideas or search engine protocols.
2. Where S = the genomic sequence of words, concepts or ideas that define the human condition on earth that are influenced by;
3. L^2 which equals the formula representing the Human Language System of strategic operations that are based upon or influenced by;
4. A^2 that represents the tactical operations of the entire formula listed as A^2 , etc above. This entire formula and its list of interrelated subcomponents functions as individual **pronouns** in a sentence for the purposes of systems integration.

$$G^3 \left(S = \frac{P^3}{C} \right)$$

Homo Economicus Universal Synchronized
(The Theory of Universal Economic Relativity)

1. Where G^3 = the application of the [The Formula System's Principle Components Through the Principles of Economics Today](#); The [300](#) Global Economies; and the various formulas as initially [influenced](#) by [X³ strategies](#) carrying the weight of all [324](#) tactical components.
2. Where S^3 = the genomic sequence of words, concepts or ideas that define the human condition on earth that are influenced by;
3. P^3 which equals the **Planning, Promotion, Procedural Application(s) or Performance Appraisal** techniques involving people, places or things that are based upon or influenced by;
4. C^3 that represents the influences of Fiduciary Tactics, a Financial consensus of the human condition.

$$L^2 \left(E = \frac{I^2}{V} \right)$$

Australopithecus Afarensis

1. Where L^2 = the entire Human Language System that defines the human condition, and;
2. Where E = the procedural **E**lements of words, concepts or ideas that define the economic condition that are influenced by;
3. I^2 which equals the Investment of strategic operations that are based upon or influenced by;
4. V^2 that represents the **V**alued System of human beings involved in tactical operations. This entire formula and its list of interrelated subcomponents functions as individual **verbs** in a sentence for the purposes of systems integration.

$$M^2 \left(E = \frac{T^2}{Q} \right)$$

Australopithecus Robustus

1. Where **M²** = the Meaning of Life that defines the human condition, and;
2. Where **E** = the procedural Elements of words, concepts or ideas that define the economic condition that are influenced by;
3. **T²** which equals the Tree of Life issues (Educational Hierarchies) involving the strategic operations that are based upon or influenced by;
4. **Q²** that represents the Quality of Life issues involving human beings actively implementing tactical operations. This entire formula and its list of interrelated subcomponents functions as individual **adverbs** in a sentence for the purposes of systems integration.

$$PA^2 \left(MC = \frac{NS^2}{GO} \right)$$

Australopithecus Boisei

1. Where **PA²** = the Power/Authority, Problem Analysis, Procedural Application(s) or Performance Appraisal techniques involving people, places or things and;
2. Where **MC** = the Morale or Cohesive nature of values, words, concepts or ideas that define the elemental, genetic, molecular or economic conditions that are influenced by;
3. **NS²** which equals the Norms/Standards involving the strategic operations that are based upon or influenced by;
4. **GO²** that represents the Goals & Objectives involving human beings actively engaged in tactical operations. This entire formula and its list of interrelated subcomponents functions as individual **transitive** or **intransitive verbs** in a sentence for the purposes of systems integration.

$$P^3 \left(E = \frac{D^3}{A} \right)$$

Homo Economicus Universal Strategic

1. Where **P³** = the **Planning, Promotion, Procedural Application(s) or Performance Appraisal** techniques involving people, places or things and;
2. Where **E** = the **Evolutionary** nature of values, words, concepts or ideas that define the elemental, genetic, molecular or economic conditions that are influenced by;
3. **D³** which equals those **Norms/Standards** that **Define** strategic Economic operations that are based upon or influenced by;
4. **A³** the letter **A** used as a word (adjective) in a sentence, is defined by other words in a dictionary, that in turn are defined by other words, so forth & so forth, until the letter **A** as an **Application or Approach** represents all the words defined in any English dictionary translated into other languages. In other words, the letter **A** represents entire words, concepts & ideas used to describe a set of circumstances within the human language system that defines those **transitive** or **intransitive** “**Do**” operations within in a snap shot in time for the purposes of monetary systems integration.

$$T^3 \left(C = \frac{UL^2}{LL} \right)$$

Homo Sapiens (Modern)

1. Where **T³** = the **Systems Transformation, Translation, Transfiguration & Transaction** involving the activities of people, places or things and;
2. Where **C** = the **Chromosomal elements or Countermeasures** taken through the use of words, concepts or ideas that define the environmental, evolvable or economic conditions that are influenced by;
3. **UL²** which equals the **Upper Level** organizational strategic operations that are based upon or influenced by;
4. **LL²** that represents the **Lower Level** activities involving human beings actively engaged in tactical operations. This entire formula and its list of interrelated subcomponents functions as individual **conjunctions** in a sentence for the purposes of systems integration.

$$T^3 \left(L = \frac{I^2}{V} \right)$$

Homo Habilis

1. Where T^3 = the techniques of **P**roblem Analysis, **P**otential **P**roblem Analysis & the **D**ecision Analysis of people, places or things and;
2. Where **L** = the **L**anguage of words, concepts or ideas that define the elemental or economic condition described through the Problem Format of which is influenced by;
3. I^2 which equals the personal or global **I**nterests involving the strategic operations that are based upon or influenced by;
4. V^2 that represents the personal or global **V**alue System involving human beings actively engaged in tactical operations. This entire formula and its list of interrelated subcomponents functions as individual **interjections** in a sentence for the purposes of systems integration.

Investor's Costs and Benefits

A.1. Executive Summary (A²)

- 1.1. Project Promoters and Authorities
- 1.2. Object of Analysis
 - 1.2.1. Project Name
 - 1.2.2. Brief Description of the Project
 - 1.2.2.1. Sector
 - 1.2.2.2. Location
 - 1.2.2.3. Area(s) Impacted by the Project (regional, national, international.)
- 1.3. Promoter's Objectives
- 1.4. Previous Experiences with Similar Projects
- 1.5. Brief Description of the Appraisal Report
 - 1.5.1. Authors of this Report
 - 1.5.2. Scope of the Report. Ties to other Projects.
 - 1.5.3. Methodology of the Project Analysis.
- 1.6. Main Results of the Analysis
 - 1.6.1. Financial Returns
 - 1.6.2. Economic Returns
 - 1.6.3. Impact on Employment
 - 1.6.4. Environmental Impact
 - 1.6.5. Other Results

A.2. Socio-economic context (G^{2[S]})

- 2.1. Main Elements of the Socio-economic Context
 - 2.1.1. Territorial and Environmental Aspects
 - 2.1.2. Demographics
 - 2.1.3. Socio-cultural Elements
 - 2.1.4. Economic Aspects
- 2.2. Institutional and Political Aspects
 - 2.2.1. General Political Outlook.
 - 2.2.2. Sources of Financing (specify if loans or grants); Additional Funds (ERDF, EIB, CF, ESF, etc.); national authorities (central governments, regions, others); private individuals
 - 2.2.3. Financial Coverage on the part of the aforementioned sources
 - 2.2.4. Administrative and Procedural Obligations; Decision-making Authorities for the Project; Territorial Planning Obligations; licenses/permits; requirements for licenses and incentives.
 - 2.2.5. Expected times for: licenses/permits; licenses/incentive to pay.

A.3. Supply of and Demand for the Project's Outputs (G^{2[M]})

- 3.1. Potential Demand Expectations
 - 3.1.1. Needs the Project Meets within a Set Period of Time
 - 3.1.2. Current and Future Trends in Demand
 - 3.1.3. Demand Breakdown by Consumer Type
 - 3.1.4. Means of Purchase or Distribution
 - 3.1.5. Specific Market Research: Results
- 3.2. Competition
 - 3.2.1. Supply Features of Similar Outputs
 - 3.2.2. Competitive Structure, if existing or can be forecasted
 - 3.2.3. Success Factors
- 3.3. Proposed Strategy

- 3.3.1. Outputs
- 3.3.2. Prices
- 3.3.3. Promotion
- 3.3.4. Distribution
- 3.3.5. Marketing
- 3.4. Estimate on the Percentage of Potential Use
- 3.4.1. Sales Forecasts for the Project
- 3.4.2. Market shares, coverage of the shares of various needs
- 3.4.3. Forecasting hypothesis and techniques

A.4. Technological Alternatives and Production Plan (T^{3(C)})

- 4.1. Description of Significant Technological Alternatives
- 4.2. Selection of Appropriate Technology
- 4.3. Buildings and Plants
- 4.4. Physical Inputs for Production
- 4.5. Personnel Requirements
- 4.6. Energy Requirements
- 4.7. Technology Providers
- 4.8. Investment Costs
- 4.8.1. Planning and Know-how
- 4.8.2. Buildings
- 4.8.3. Machinery
- 4.9. Production Plan over the Project Time Horizon
- 4.10. Combined Output Supply
- 4.11. Production Organization

A.5. Human Resources (PA²)

- 5.1. Organizational Diagram
- 5.2. List of Personnel and Salary Parameters
- 5.2.1. Managers
- 5.2.2. Office Workers
- 5.2.3. Technicians
- 5.2.4. Manual Workers
- 5.3. External Services
- 5.3.1. Administrative Staff
- 5.3.2. Technicians
- 5.3.3. Other
- 5.4. Hiring Procedures
- 5.5. Training Procedures
- 5.6. Annual Costs (before and after project start-up)

A.6. Location (L²)

- 6.1. Ideal Requirements for the Location
- 6.2. Alternative Options
- 6.3. Choice of Site and its Characteristics
- 6.3.1. Climatic Conditions, Environmental Aspects (if relevant)
- 6.3.2. Site or Territory
- 6.3.3. Transport and Communications
- 6.3.4. Water and Electricity Provisioning
- 6.3.5. Waste Disposal
- 6.3.6. Government Regulations
- 6.3.7. Policies of the Local Authorities

- 6.3.8. Description of the Pre-chosen Site (details in the Appendix)
- 6.4. Cost of Land and Site Preparation
- 6.5. Site Availability
- 6.6. Infrastructure Requirements

A.7. Implementation (M²)

- 7.1. Analysis of Construction/Start-up Times (project cycle)
 - 7.1.1. Selection of Management Group for the Project
 - 7.1.2. Definition of Information System
 - 7.1.3. Negotiations for the Purchase of Know-how and Machinery
 - 7.1.4. Building Planning and Contract Scheduling
 - 7.1.5. Financing Negotiations
 - 7.1.6. Acquisition of Land and Licenses
 - 7.1.7. Organizational Structure
 - 7.1.8. Staff Hiring
 - 7.1.9. Personnel Hiring and Training
 - 7.1.10. Supply Agreements
 - 7.1.11. Distribution Agreements
- 7.2. Bar Graph (or PERT chart) of the main phases
- 7.3. Main Information on Execution Times to consider in the Financial Analysis

A.8. Financial Analysis (T^{3[L]})

- 8.1. Basic Assumptions of the Financial Analysis
 - 8.1.1. Time Horizon
 - 8.1.2. Prices of Productive Factors and Project Outputs
 - 8.1.3. Real Financial Discount Rate
- 8.2. Fixed Investments
- 8.3. Expenses before Production (Goodwill)
- 8.4. Working Capital
- 8.5. Total Investment
- 8.6. Operating Revenue and Costs
- 8.7. Sources of Financing
- 8.8. Financial Plan (a table showing cash flow for each year)
- 8.9. Balance Sheet (assets and liabilities)
- 8.10. Profit and Loss Account
- 8.11. Determining the Net Cash Flow
 - 8.11.1. Net Flow to Calculate the Total Return on the Investment (investments in the total project)
 - 8.11.2. Net Flow to Calculate the Return on Shareholders' Equity or Funded Capital (public/private)
- 8.12. Net Present Value/Internal Rate of Return

A.9. Socio-economic Cost-Benefit Analysis (G^{2[E]})

- 9.1. Accounting and Discount Unit for the Cost-Benefit Analysis
- 9.2. Social Cost Analysis
 - 9.2.1. Output Price Distortions
 - 9.2.2. Salary Distortions
 - 9.2.3. Fiscal Aspects
 - 9.2.4. External Costs
 - 9.2.5. Non-monetary Costs, including Environmental Aspects
- 9.3. Analysis of social benefits
 - 9.3.1. Output Price Distortions
 - 9.3.2. Social Benefits from Increased Employment
 - 9.3.3. Fiscal Aspects

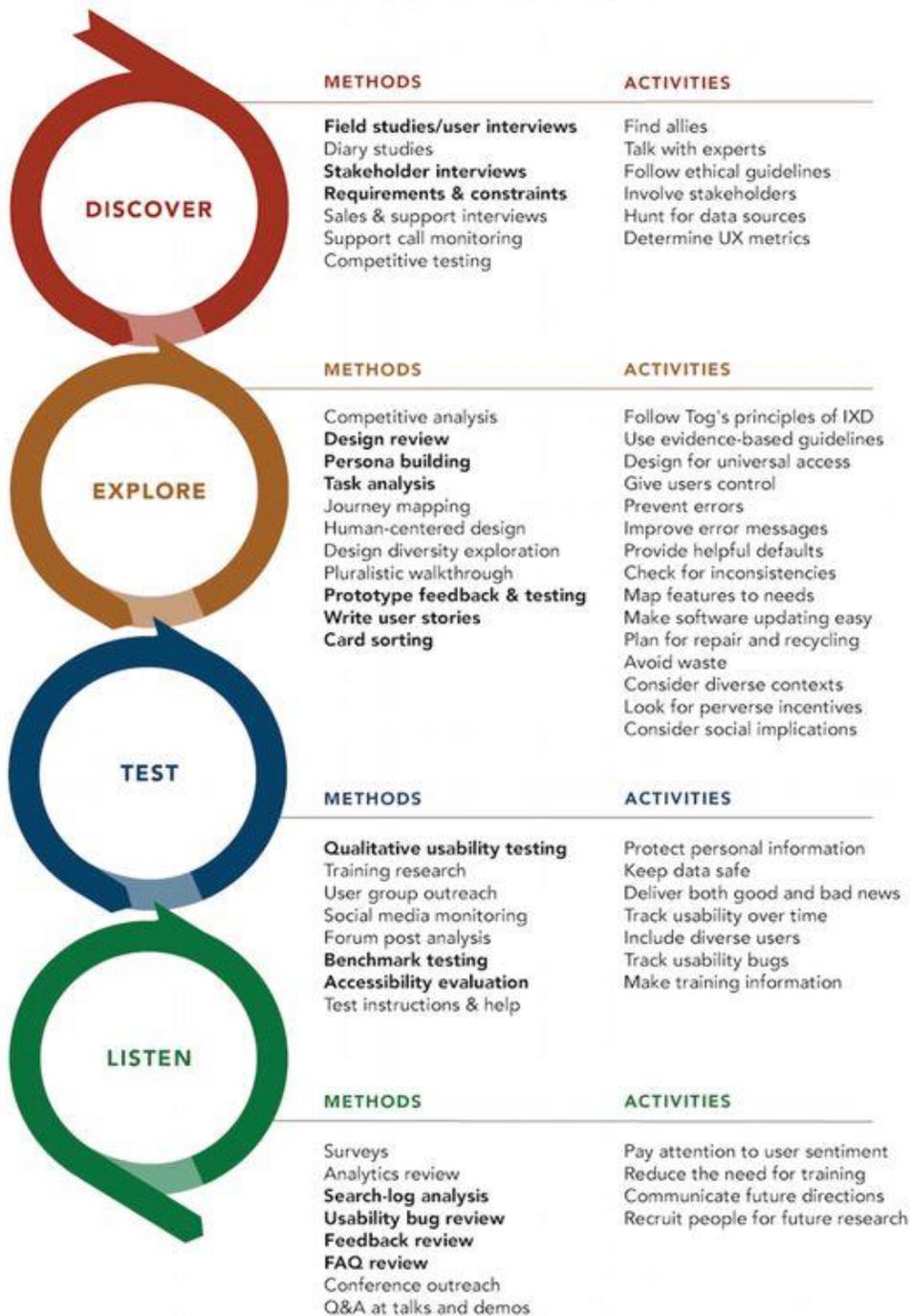
- 9.3.4. External Benefits
- 9.3.5. Non-monetary Benefits, including Environmental Aspects
- 9.4. Economic Rate of Return or Net Present Value of the Project in Monetary Terms
- 9.5. Additional Appraisal Criteria
 - 9.5.1. Presentation of Results in terms of General Objectives of Global Economic Policies
 - 9.5.2. Increase in GLOBAL ECONOMY Social Income
 - 9.5.3. Reduction in the Disparities with regard to per capita GDP between global economic regions
 - 9.5.4. Increase in Employment
 - 9.5.5. Improvement in the Quality of the Environment
 - 9.5.6. Other Objectives of the Commission, Regional and National Authorities

A.10. Risk Analysis (X³)

- 10.1. Defining the Critical Variables with the help of the Sensitivity Analysis
 - 10.1.1. Supply/Demand Variables
 - 10.1.2. Output Variables
 - 10.1.3. Human Resources
 - 10.1.4. Time and Implementation Variables
 - 10.1.5. Financial Variables
 - 10.1.6. Economic Variables
- 10.2. Best and Worst Case Scenario Simulation
- 10.3. Risk Assessment
- 10.4. Risk Mitigation and Management

FINAL DRAFT

UX ACTIVITIES IN THE PRODUCT & SERVICE DESIGN CYCLE



Bold methods are some of the most commonly used.

NNGROUP.COM **NN/g**



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

$$A^2 \left(E = \frac{CM^2}{MC} \right)$$

Homo Sapiens (Archaic)

- A. The Network Affiliation: [The Chief Organizational Officer of Education & Systems Development \(COOESD\) Phase - 3](#)
- B. The Principle Part of English Speech: [Adjective\(s\)](#)
- C. The Strategic & Tactical Component: [The IAOA Interface Protocols](#)
- D. The Method Structure Components: [The Data Analysis – Software Engineering Tools and Methods/System Evolution Initiative – TNPFP Teaching, Learning, and Assessment Methods \(General\)](#)
- E. The Laboratory Component: [The Project Operations Involving Exploratory Test](#)
- F. The Virtual Laboratory Component: [Professional Societies](#)
- G. The TCP/IP Division: [Banyan Vines](#)
- H. The Operational Determination: [Physiological](#)
- I. The Genetic Predisposition: [The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 3](#)

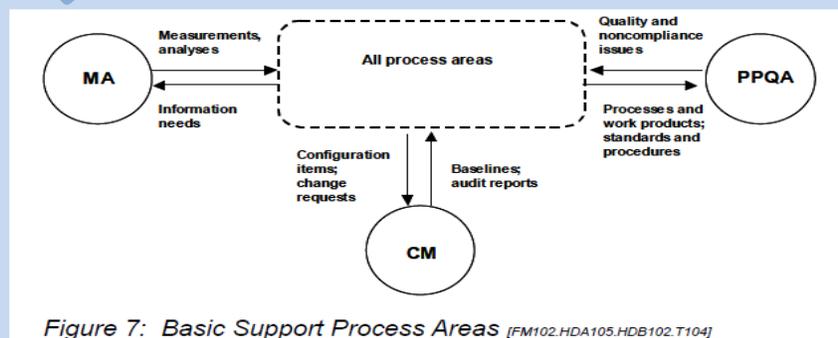


Figure 7: Basic Support Process Areas [FM102.HDA105.HDB102.T104]

$$G^2 \left(E = \frac{NT^2}{OT} \right)$$

Australopithecus Africanus

- A. The Network Affiliation: The Chief Accounting Officer of Network Implementation (CAONI) Specifying & Implementing Solutions
- B. The Principle Part of English Speech: Preposition(s)
- C. The Strategic & Tactical Component: EGIOMMP [M], IGIMMP [T] & OGIBMMP [Q]
- D. The Method Structure Components: The Development & Implementation of Standards – *Software Configuration Management/Organization* – TNPFP Educational Technology/E-Learning
- E. The Laboratory Component: The Project Interpretation & Design of a Prototype Involving Project Operations
- F. The Virtual Laboratory Component: Education & Training
- G. The TCP/IP Division: AppleTalk
- H. The Operational Determination: Psychological
- I. The Genetic Predisposition: The Planning & Design Post Project Evaluation Involving **Morale/Cohesion**, and the Planning & Design Approaches Subordinate to Genetic-Based Environmental Outputs Involving the Quality of Life

SW-CMM KEY PROCESS AREAS

ALPHABETICAL BY ABBREVIATION

DP - Defect Prevention
 IC - Intergroup Coordination
 ISM - Integrated Software Management
 OPD - Organizational Process Definition
 OPF - Organizational Process Focus
 PCM - Process Change Management
 PR - Peer Reviews
 QPM - Quantitative Process Management
 RM - Requirements Management
 SCM - Software Configuration Management
 SPE - Software Product Engineering
 SPP - Software Project Planning
 SPT&O - Software Project Tracking and Oversight
 SQA - Software Quality Assurance
 SQM - Software Quality Management
 SSM - Software Subcontract Management
 TCM - Technology Change Management
 TP - Training Program

ORDER OF OCCURRENCE BY MATURITY LEVEL

Level 2
 RM - Requirements Management
 SPP - Software Project Planning
 SPT&O - Software Project Tracking and Oversight
 SSM - Software Subcontract Management
 SQA - Software Quality Assurance
 SCM - Software Configuration Management

Level 3
 OPF - Organizational Process Focus
 OPD - Organizational Process Definition
 TP - Training Program
 ISM - Integrated Software Management
 SPE - Software Product Engineering
 IC - Intergroup Coordination
 PR - Peer Reviews

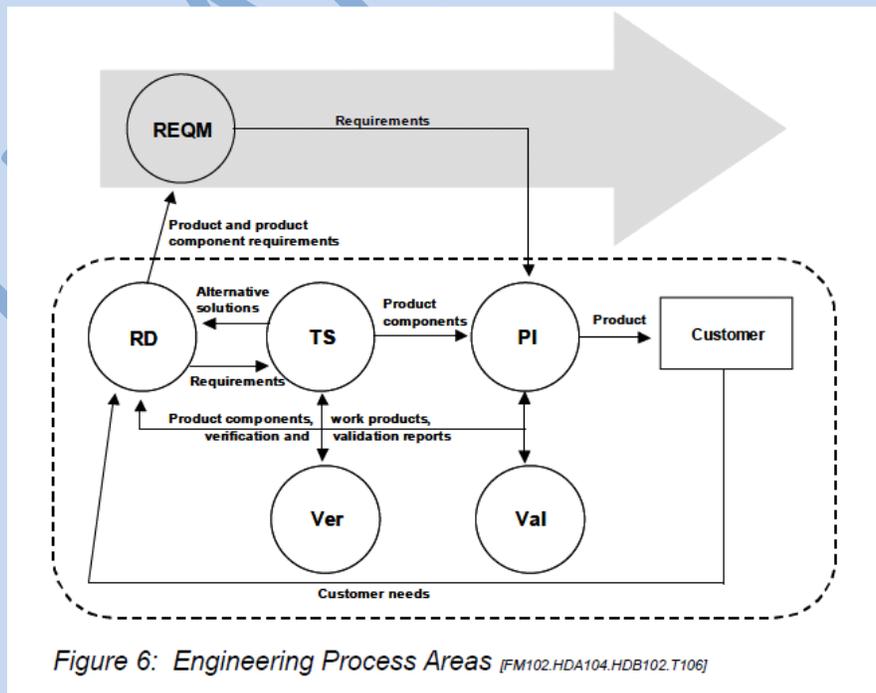
Level 4
 QPM - Quantitative Process Management
 SQM - Software Quality Management

Level 5
 DP - Defect Prevention
 TCM - Technology Change Management
 PCM - Process Change Management

$$G^2 \left(M = \frac{L^2}{A} \right)$$

Homo Erectus

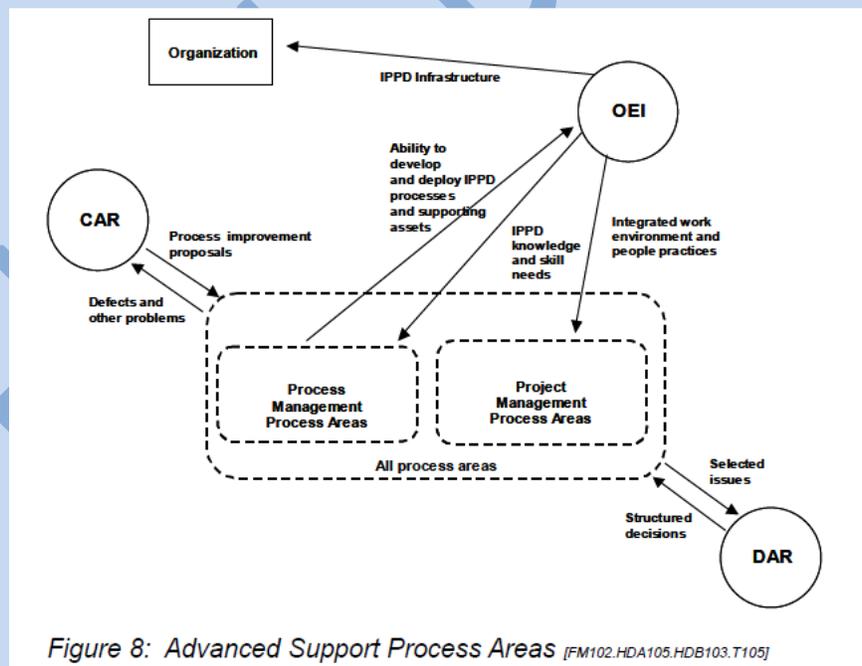
- A. The Network Affiliation: **The Chief Administrator of Network Operations (CANO) Phase - 2**
- B. The Principle Part of English Speech: **Noun(s)**
- C. The Strategic & Tactical Component: **GHOST Technologies**
- D. The Method Structure Components: **The Preliminary Design – Software Design/Technologies – TNPFP Professionalism of Teaching (General)**
- E. The Laboratory Component: **The Analysis of Results Involving Project Operations**
- F. The Virtual Laboratory Component: **Licensing Boards**
- G. The TCP/IP Division: **XNS Xerox Network System**
- H. The Operational Determination: **Organizational Strategies & Subordinate Tactical Operations Development**
- I. The Genetic Predisposition: **The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 2, and the Planning & Design Approaches Subordinate to Genetic-Based Environmental Inputs Involving the Meaning of Life**



$$G^2 \left(S = \frac{L^2}{A} \right)$$

Homo Sapiens (Neanderthal)

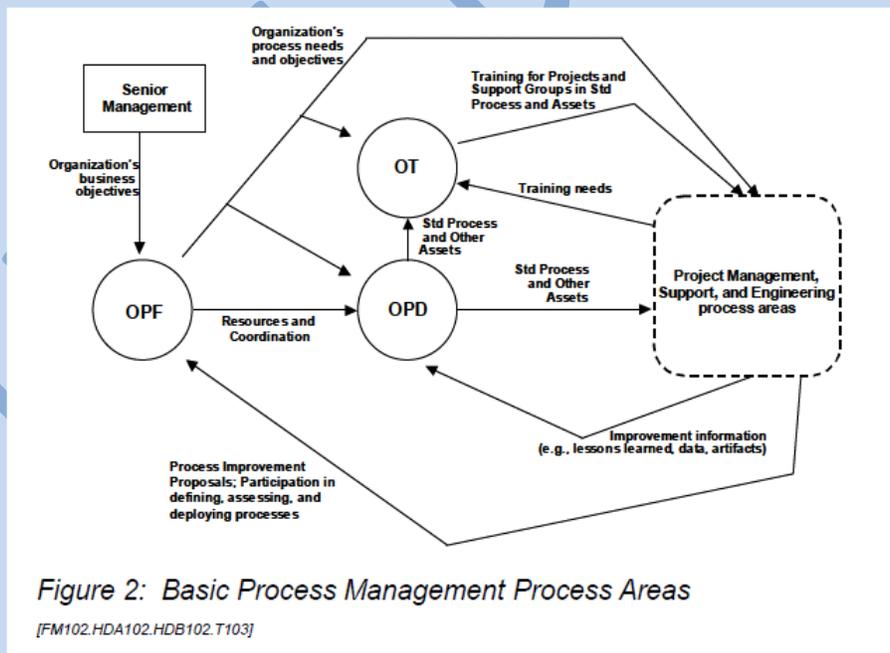
- A. The Network Affiliation: The Chief Logistics Officer of Network Support (CLONS) Phase - 4
- B. The Principle Part of English Speech: Pronoun(s)
- C. The Strategic & Tactical Component: The Genetic Array(s)
- D. The Method Structure Components: The Data Conversion & Implementation – Software Engineering Process/Software – TNPPF Outcomes of Education (General)
- E. The Laboratory Component: The Production of Standards Involving Project Operations
- F. The Virtual Laboratory Component: Professional Development
- G. The TCP/IP Division: DECnet Phase IV
- H. The Operational Determination: Genomic Sequence Database Consultative Planning & Design Approaches (GSDBCPDA)
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phases - 4, and the Planning & Design Approaches Subordinate to Genetic-Based Computer Matrixes Involving the Tree of Life



$$L^2 \left(E = \frac{I^2}{V} \right)$$

Australopithecus Afarensis

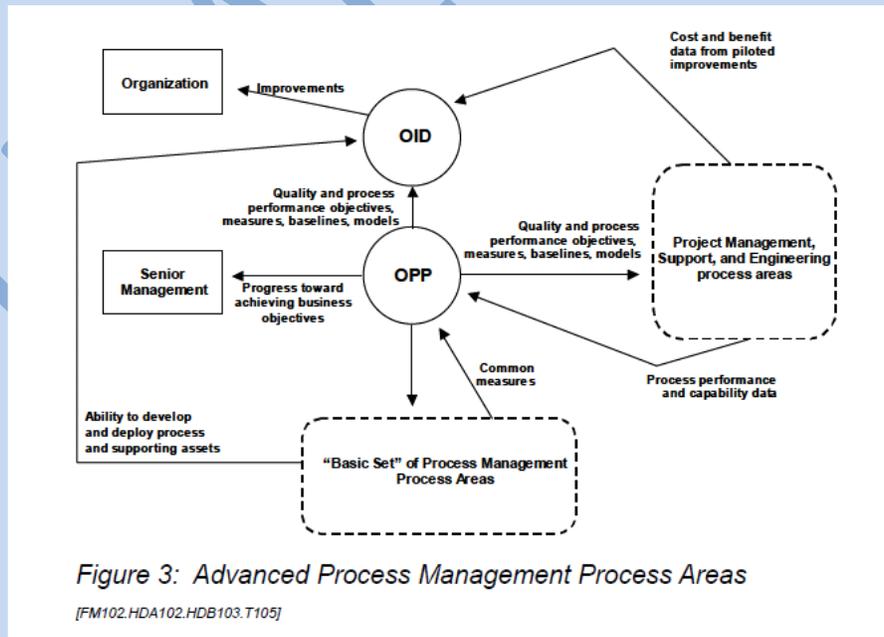
- A. The Network Affiliation: The Chief Information Officer of Systems & Network Development (CIOSND) Pursuing the Planning & Design Strategy
- B. The Principle Part of English Speech: Verb(s)
- C. The Strategic & Tactical Component: The Mathematical Formulae
- D. The Method Structure Components: The Detailed Design & Testing – *Software Testing/Systems Engineering* – TNPPF Key and Subject Based Skills (General)
- E. The Laboratory Component: The Project Planning & Field Test of the Prototype Involving Project Operations
- F. The Virtual Laboratory Component: Enterprise HRP Management
- G. The TCP/IP Division: ISO
- H. The Operational Determination: Philosophical
- I. The Genetic Predisposition: The Planning & Design Project Development Involving Norms/Standards



$$M^2 \left(E = \frac{T^2}{Q} \right)$$

Australopithecus Robustus

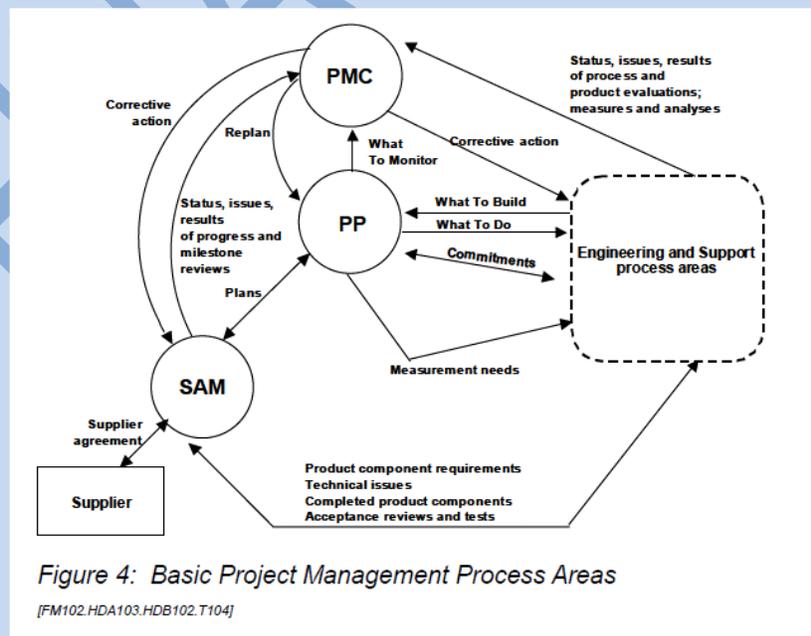
- A. The Network Affiliation: The Chief Intelligence Officer of Network Security & Special Operations (CIONSSO) Information & Knowledge
- B. The Principle Part of English Speech: Adverb(s)
- C. The Strategic & Tactical Component: The Words, Concepts & Fields of Human Activities
- D. The Method Structure Components: Data Gathering – Software Engineering Management/Project – TNFPF Planning & Preparation (General)
- E. The Laboratory Component: The Project Definition & Literature Review Involving Project Operations
- F. The Virtual Laboratory Component: The Other Fields Upon Which Software Engineering Based Knowledge Relies (SWEBOK)
- G. The TCP/IP Division: TCP/IP – UDP/IP
- H. The Operational Determination: Sociological
- I. The Genetic Predisposition: The Planning & Design Project Initiation Involving Power/Authority



PA² (MC = $\frac{NS^2}{GO}$)

Australopithecus Boisei

- A. The Network Affiliation: The Entire Strategic & Tactical Operations or Organizational Development of the NAME Network as a Whole Arranging for Continuing Change and Improvement
- B. The Principle Part of English Speech: Intransitive and/or Transitive Verb(s)
- C. The Strategic & Tactical Component: The Protocols Involved with Engineering or Manufacturing Information, Developing Methodic Pre-determined Educational Hierarchies, and Implementing Operational Phases within a Consultative Planning & Design Approach
- D. The Method Structure Components: The Post-Implementation Evaluation – *Software Maintenance/Legacy System* – TNPFP Key Skills (General)
- E. The Laboratory Component: The Virtual Laboratory Components
- F. The Virtual Laboratory Component: The Laboratory Components
- G. The TCP/IP Division: The Strategic & Tactical Efforts Involving the Seven Dimensional Layers of Autonomous Agent Operational Protocols
- H. The Operational Determination: Physiological & the Application of the Group Ordering & Development (GOD) and/or Managerial Applied Numerical Formula Systems (MAN)
- I. The Genetic Predisposition: The Simultaneous Effort of those Strategic & Tactical Planning & Design Project Implementation Goals/Objective Issues Involving the Usabilities of Power/Authority, Morale/Cohesion, Norms/Standards, & Goals/Objectives within the Virtual Chromosomal Development of Biographic Lifeforms



$$T^3 \left(C = \frac{UL^2}{LL} \right)$$

Homo Sapiens (Modern)

- A. The Network Affiliation: The Board of Network Representatives (BNR) Phase - 5
- B. The Principle Part of English Speech: Conjunction(s)
- C. The Strategic & Tactical Component: The Upper & Lower Level Change Components Involving Chromosomal Development & Implementation
- D. The Method Structure Components: The Development & Implementation of the Data Integrity and Quality Assurance Program – *Software Quality/System Evolution Initiative* – TNFPF Approaches to Learning & Teaching (General)
- E. The Laboratory Component: The Exploratory Research Framework
- F. The Virtual Laboratory Component: The IBOS [DOSA/DALP/IAOA] Configuration
- G. The TCP/IP Division: Novell Netware
- H. The Operational Determination: Chromosomal Development (CE)
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 5

CMMI-SE/SW SPECIFIC PRACTICES

ALPHABETICAL BY ABBREVIATION

| | |
|------|---|
| CAR | - Causal Analysis and Resolution |
| CM | - Configuration Management |
| DAR | - Decision Analysis and Resolution |
| IPM | - Integrated Product Management |
| M&A | - Measurement and Analysis |
| OID | - Organizational Innovation and Deployment |
| OPD | - Organizational Process Definition |
| OPF | - Organizational Process Focus |
| OPP | - Organizational Process Performance |
| OT | - Organizational Training |
| PI | - Product Integration |
| PMC | - Product Monitoring and Control |
| PP | - Project Planning |
| PPQA | - Process and Product Quality Assurance |
| QPM | - Quantitative Project Management |
| RD | - Requirements Development |
| RM | - Requirements Management |
| RSKM | - Risk Management |
| SAM | - Supplier Agreement Management |
| TS | - Technical Solution |
| VAL | - Validation |
| VER | - Verification |
| GP | - Generic Practice The generic practices are similar to the common features of Commitment to Perform, Ability to Perform, Measurement and Analysis, and Verifying Implementation found in SW-CMM V. 1.1 |

ALPHABETICAL BY MATURITY LEVEL

(Staged Representation)

| <u>Level 2</u> | <u>Level 3</u> | <u>Level 4</u> | <u>Level 5</u> |
|----------------|----------------|----------------|----------------|
| CM | DAR | OPP | CAR |
| M&A | IPM | QPM | OID |
| PMC | OPD | | |
| PP | OPF | | |
| PPQA | OT | | |
| RM | PI | | |
| SAM | RD | | |
| | RSKM | | |
| | TS | | |
| | VAL | | |
| | VER | | |

ALPHABETICAL BY PROCESS AREA CATEGORY

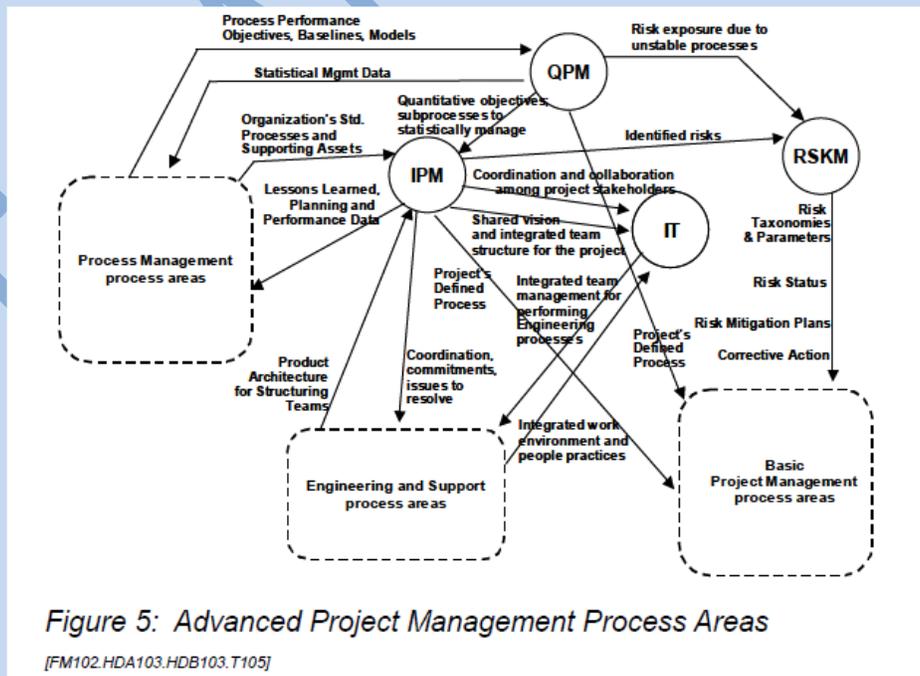
(Continuous Representation)

| <u>Process Management</u> | <u>Project Management</u> | <u>Engineering</u> | <u>Support</u> |
|---------------------------|---------------------------|--------------------|----------------|
| OID | IPM | PI | CAR |
| OPD | PMC | RD | CM |
| OPF | PP | RM | DAR |
| OPP | QPM | TS | M&A |
| OT | RSKM | VAL | PPQA |
| | SAM | VER | |

$$T^3 \left(L = \frac{I^2}{V} \right)$$

Homo Habilis

- A. The Network Affiliation: **The General Contractor of Network Operations (GCNO) Phase - 1**
- B. The Principle Part of English Speech: **Interjection(s)**
- C. The Strategic & Tactical Component: **The Meaning of Life, The Tree of Life & The Quality of Life Issues**
- D. The Method Structure Components: **The Problem Analysis & Definition – Software Requirements/Target System – TNPFPA Approaches to Assessment (General)**
- E. The Laboratory Component: **The Interpretation Context, Extrapolation of Results & Further Work Involving Project Interpretation**
- F. The Virtual Laboratory Component: **T – (M) Problem Analysis, T – (T) Decision Analysis & T – (Q) Potential Problem Analysis**
- G. The TCP/IP Division: **IBM Protocols**
- H. The Operational Determination: **The Problem Format Involving the Planning & Design Approaches**
- I. The Genetic Predisposition: **The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phases - 1**



The Build Plan or Objectives

(The Organizational Method Structure for Building Mission or Goal Statements)

A. Environmental Scanning (Matrix Element – Environment)

1. Social and political trends
 - a. Demographics
 - b. Moral Values
 - c. Education
 - d. Regulatory Pressures
2. Capital markets analysis
 - a. Capital Asset Pricing Model
 - b. Capital Structure
 - c. Ask How Estimate
 - d. Value Analysis
3. Macroeconomic trends
 - a. Systematic Risk
 - b. Value Curve for Signal
 - c. Value Chain and/or Stream
 - d. Economics of Scale
4. Industry structure studies
 - a. Industrial Organization
 - b. Industry Capacity
 - c. Industry Importance Graph
 - d. Industry Segment
 - e. Industry Structure
 - f. Industry Life Cycle
5. Competitor analyses
 - a. Competitive Force
 - b. Competitor Configuration
 - c. Competitive Strategy
 - d. Competitive Position

B. Developing and Modifying a Corporate Strategy (Matrix Element – Purpose)

1. Corporate goals
 - a. Corporate Culture
 - b. Corporate Stakes
 - c. Corporate Strategy
 - d. Corporate Brands
2. Concept of fit
 - a. Concept of Assembly
 - b. Concept of Management

- c. Organizational Structure
 - d. Integrating System
 - 3. Concept of assembly
 - a. Organizational Hierarchy
 - b. Measurement Systems
 - c. Incentive Systems
 - d. Planning Hierarchy
 - e. Planning Process
 - f. Resource Allocation Process
 - 4. Concept of management
 - a. Differentiation Strategy
 - b. Functional Areas of Fit
 - c. Entry and Mobility Barriers
 - d. Formula Fit
- C. Establishing Different Goals for Business Units (Alternatives) (Matrix Element – Outputs)**
 - 1. Identity business units (Segmentations)
 - a. Buyer Groups
 - b. Business Cycle Profiling
 - c. Business Plan and Policy
 - d. Business Interrelationships
 - 2. Assess contributions to information and for economic values
 - a. Business Systems Analysis
 - b. Cost of Capital
 - c. Financial Leverage
 - d. Capital Structure
 - 3. Alternative or subroutine goals for business units
 - a. Strategic Leverage
 - b. Shared Experience
 - c. Strategic Business Unit(s)
 - d. Strategic Beachhead
- D. Developing Competitive Strategies for Business Units (Matrix Element – Physical Catalysts)**
 - 1. Identify current strategy (Reverse implied assumptions)
 - a. Required Return
 - b. Operating Policies
 - c. Competence Profile
 - d. Strategic Audit
 - 2. Generate alternative strategies (Analyze environment industry structure's intra-industry structure)
 - a. Buyer Power
 - b. Supplier Power
 - c. Relative Costs, Prices and Utility

- d. Fix-To-Value Added Ratios
3. Select optimal strategy and determine operating policies to carry out
 - a. Build Plan
 - b. Operating Leverage
 - c. Operating Unit
 - d. Operations Research

E. Reviewing Competitive Strategies (Matrix Element – Inputs)

1. Consistency test
 - a. Critical Path Method
 - b. Cost Analysis
 - c. Price to Performance Ratio
 - d. Input-Output Analysis
2. Contribution to economic and/or informational values
 - a. Decision-Making Process
 - b. Decision-Making Unit(s)
 - c. Decision Trees
 - d. Value System and/or Chains
3. Ongoing monitoring
 - a. Structural Analysis
 - b. Structural Factor
 - c. Critical Path Methods
 - d. Value Chain for System
4. Reports
 - a. Linkage
 - b. Market Signal
 - c. Measurement System
 - d. Mission Statement(s)

F. Resource Allocation (Matrix Element – Sequence)

1. Financial resources
 - a. Capital Intensity
 - b. Capital Structure
 - c. Cash Flow
 - d. Cash Trap
2. Human resources
 - a. Employees
 - b. Sub-contractors
 - c. Consultants
 - d. Labor Organizations
3. Information resources
 - a. Information Brokers

- b. Governmental Sources
- c. Written Materials (Books and/or Database Hard-copies)
- d. Media Systems (News or News Associations)

G. Determining Incentives (Matrix Element – Human Agents)

1. Set performance measures
 - a. Measurement System
 - b. Management Through Objectives
 - c. Game Grid
 - d. Gap-Based Planning
2. Evaluate performance measures
 - a. Cost Dynamics
 - b. Growth Value Leverage Matrix
 - c. PIMS Program
 - d. Gaming

H. Monitoring Implementation (Matrix Element – Information Aids)

1. Software procedures
 - a. Regression Analysis
 - b. Seven-8 Framework
 - c. Strategic Condition Matrix
 - d. Strategy Audit
 - e. Uniqueness Driver
 - f. Systematic Risk
 - g. Unsystematic Risk
 - h. Value Added Advantage for Analysis
 - i. Planning and Design
 - j. @ Functioning
 - k. Macro Structuring
 - l. Problem Formatting
2. Grids, matrixes and flow chart systems
 - a. Brainiac
 - b. Pie Structures (5 Area Phases)
 - c. Bar Charts (Report Structure)
 - d. Decision Flow Chart Grid
 - e. Consultation Grid
 - f. Strategic Condition Matrix
 - g. Pie Structures (Report Structure)
 - h. Brainiac Wave Length Flow Charts
 - i. 5 Area Phase Bar Charts
 - j. Macro Flow Chart System
 - k. Legends
 - l. Total System's Integrated Color Chart Systems
 - m. CAD Systems

- n. CAM Systems
- o. Anatomy Charts and Diagrams

Summary

The charts, diagrams and procedural formats shown in this part of Appendix F, are designed and formatted for use by the Technical Support Units of Nascent Applied Methods & Endeavors in order to provide the System Matrix of this system with a structure, by-which all processes and procedures can be verified as to it's accuracy and form of implementation

FINAL DRAFT



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

$$A^2 \left(E = \frac{CM^2}{MC} \right)$$

Homo Sapiens (Archaic)

- A. The Network Affiliation: The Chief Organizational Officer of Education & Systems Development (COOESD) Phase - 3 [ATG]
- B. The Principle Part of English Speech: Adjective(s) [GCC]
- C. The Strategic & Tactical Component: The IAOA Interface Protocols [GGT]
- D. The Method Structure Components: The Data Analysis – *Software Engineering Tools and Methods/System Evolution Initiative* – TNPFP Teaching, Learning, and Assessment Methods (General) [CAG]
- E. The Laboratory Component: The Project Operations Involving Exploratory Test [TTA]
- F. The Virtual Laboratory Component: Professional Societies [ATC]
- G. The TCP/IP Division: Banyan Vines [GAA]
- H. The Operational Determination: Physiological [TGC]
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 3

$$G^2 \left(E = \frac{NT^2}{OT} \right)$$

Australopithecus Africanus

- A. The Network Affiliation: The Chief Accounting Officer of Network Implementation (CAONI) **Specifying and Implementing Solutions [GTA]**
- B. The Principle Part of English Speech: Preposition(s) **[CGG]**
- C. The Strategic & Tactical Component: EGIOMMP [M], IGIMMP [T] & OGIBMMP [Q] **[AGT]**
- D. The Method Structure Components: The Development & Implementation of Standards – *Software Configuration Management/Organization* – TNPFP Educational Technology/E-Learning **[GGC]**
- E. The Laboratory Component: The Project Interpretation & Design of a Prototype Involving Project Operations **[CGT]**
- F. The Virtual Laboratory Component: Education & Training **[GTG]**
- G. The TCP/IP Division: AppleTalk **[ATT]**
- H. The Operational Determination: Psychological **[GTC]**
- I. The Genetic Predisposition: The Planning & Design Post Project Evaluation Involving **Morale/Cohesion**, and the Planning & Design Approaches Subordinate to Genetic-Based Environmental Outputs Involving the **Quality of Life**

$$G^2 \left(M = \frac{L^2}{A} \right)$$

Homo Erectus

- A. The Network Affiliation: The Chief Administrator of Network Operations (CANO) **Phase - 2 [CCT]**
- B. The Principle Part of English Speech: Noun(s) **[AGG]**
- C. The Strategic & Tactical Component: GHOST Technologies **[ACG]**
- D. The Method Structure Components: The Preliminary Design – *Software Design/Technologies* – TNPFP Professionalism of Teaching (General) **[GAC]**
- E. The Laboratory Component: The Analysis of Results Involving Project Operations **[TCA]**
- F. The Virtual Laboratory Component: Licensing Boards **[GCA]**
- G. The TCP/IP Division: XNS Xerox Network System **[GTT]**

- H. The Operational Determination: Organizational Strategies & Subordinate Tactical Operations Development [AGC]
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 2, and the Planning & Design Approaches Subordinate to Genetic-Based Environmental Inputs Involving the Meaning of Life

$$G^2 \left(S = \frac{L^2}{A} \right)$$

Homo Sapiens (Neanderthal)

- A. The Network Affiliation: The Chief Logistics Officer of Network Support (CLONS) Phase - 4 [CAC]
- B. The Principle Part of English Speech: Pronoun(s) [AAA]
- C. The Strategic & Tactical Component: The Genetic Arrays [CGC]
- D. The Method Structure Components: The Data Conversion & Implementation – *Software Engineering Process/Software* – TNFPF Outcomes of Education (General) [AGA]
- E. The Laboratory Component: The Production of Standards Involving Project Operations [TCG]
- F. The Virtual Laboratory Component: Professional Development [CCG]
- G. The TCP/IP Division: DECnet Phase IV [GGG]
- H. The Operational Determination: Genomic Sequence Database Consultative Planning & Design Approaches (GSDBCPDA) [GGA]
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phases - 4, and the Planning & Design Approaches Subordinate to Genetic-Based Computer Matrixes Involving the Tree of Life

$$L^2 \left(E = \frac{I^2}{V} \right)$$

Australopithecus Afarensis

- A. The Network Affiliation: The Chief Information Officer of Systems & Network Development (CIOSND) Pursuing the Planning & Design Strategy [TAT]
- B. The Principle Part of English Speech: Verb(s) [CTT]

- C. The Strategic & Tactical Component: The Mathematical Formulae [AAG]
- D. The Method Structure Components: The Detailed Design & Testing – *Software Testing/Systems Engineering* – TNPPF Key and Subject Based Skills (General) [TGA]
- E. The Laboratory Component: The Project Planning & Field Test of the Prototype Involving Project Operations [TGT]
- F. The Virtual Laboratory Component: Enterprise HRP Management [CTC]
- G. The TCP/IP Division: ISO [CCC]
- H. The Operational Determination: Philosophical [TAC]
- I. The Genetic Predisposition: The Planning & Design Project Development Involving **Norms/Standards**

$$M^2 \left(E = \frac{T^2}{Q} \right)$$

[Australopithecus Robustus](#)

- A. The Network Affiliation: The Chief Intelligence Officer of Network Security & Special Operations (**CIONSSO**) **Information & Knowledge** [GAT]
- B. The Principle Part of English Speech: Adverb(s) [TAA]
- C. The Strategic & Tactical Component: The Words, Concepts & Fields of Human Activities [CCA]
- D. The Method Structure Components: Data Gathering – *Software Engineering Management/Project* – TNPPF Planning & Preparation (General) [ATA]
- E. The Laboratory Component: The Project Definition & Literature Review Involving Project Operations [AAC]
- F. The Virtual Laboratory Component: The Other Fields Upon Which Software Engineering Based Knowledge Relies (SWEBOK) [ACA]
- G. The TCP/IP Division: TCP/IP – UDP/IP [TGG]
- H. The Operational Determination: Sociological [TCT]
- I. The Genetic Predisposition: The Planning & Design Project Initiation Involving **Power/Authority**

$$PA^2 \left(MC = \frac{NS^2}{GO} \right)$$

Australopithecus Boisei

- A. The Network Affiliation: The Entire Strategic & Tactical Operations or Organizational Development of the NAME Network as a Whole [Arranging for Continuing Change and Improvement \[TTT\]](#)
- B. The Principle Part of English Speech: Intransitive and/or Transitive Verb(s) [TTT]
- C. The Strategic & Tactical Component: The Protocols Involved with Engineering or Manufacturing Information, Developing Methodic Pre-determined Educational Hierarchies, and Implementing Operational Phases within a Consultative Planning & Design Approach [TTT]
- D. The Method Structure Components: The Post-Implementation Evaluation – *Software Maintenance/Legacy System* – TNPFPP Key Skills (General) [TTT]
- E. The Laboratory Component: The Virtual Laboratory Components [TTT]
- F. The Virtual Laboratory Component: The Laboratory Components [TTT]
- G. The TCP/IP Division: The Strategic & Tactical Efforts Involving the Seven Dimensional Layers of Autonomous Agent Operational Protocols [TTT]
- H. The Operational Determination: The Application of the Group Ordering & Development (GOD) and/or Managerial Applied Numerical Formula System (MAN) [TTT]
- I. The Genetic Predisposition: The Simultaneous Effort of those Strategic & Tactical Planning & Design Project Implementation **Goals/Objective** Issues Involving the Usabilities of Power/Authority, Morale/Cohesion, Norms/Standards, & Goals/Objectives within the Virtual Chromosomal Development of Biographic Lifeforms [TTT]

$$T^3 \left(C = \frac{UL^2}{LL} \right)$$

Homo Sapiens (Modern)

- A. The Network Affiliation: The Board of Network Representatives (BNR) [Phase - 5 \[GCT\]](#)
- B. The Principle Part of English Speech: Conjunction(s) [CAA]
- C. The Strategic & Tactical Component: The Upper & Lower Level Change Components Involving Chromosomal Development & Implementation [CAT]

- D. The Method Structure Components: The Development & Implementation of the Data Integrity and Quality Assurance Program – *Software Quality/System Evolution Initiative* – TNPFP Approaches to Learning & Teaching (General) [CTA]
- E. The Laboratory Component: The Exploratory Research Framework [CTG]
- F. The Virtual Laboratory Component: The IBOS [DOSA/DALP/IAOA] Configuration [CGA]
- G. The TCP/IP Division: Novell Netware [ACC]
- H. The Operational Determination: Chromosomal Development (CE) [GCG]
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 5

$$T^3 \left(L = \frac{I^2}{V} \right)$$

Homo Habilis

- A. The Network Affiliation: The General Contractor of Network Operations (GCNO) Phase - 1 [TAG]
- B. The Principle Part of English Speech: Interjection(s) [TTT]
- C. The Strategic & Tactical Component: The Meaning of Life, The Tree of Life & The Quality of Life Issues [AAT]
- D. The Method Structure Components: The Problem Analysis & Definition – *Software Requirements/Target System* – TNPFP Approaches to Assessment (General) [TTG]
- E. The Laboratory Component: The Interpretation Context, Extrapolation of Results & Further Work Involving Project Interpretation [GAG]
- F. The Virtual Laboratory Component: T – (M) Problem Analysis, T – (T) Decision Analysis & T – (Q) Potential Problem Analysis [TTC]
- G. The TCP/IP Division: IBM Protocols [TCC]
- H. The Operational Determination: The Problem Format Involving the Planning & Design Approaches [ACT]
- I. The Genetic Predisposition: The Planning & Design Approaches Subordinate to Genetic-Based Methodical Issues Involving GSDBCPDA Phase - 1

The Genetic Foundation for the Relationship Between Words, Concepts and Search Engine Protocols within a P&D Effort

(The Genetic Hierarchical Classification of Words, Concepts, Ideas & Search Engine Protocols)

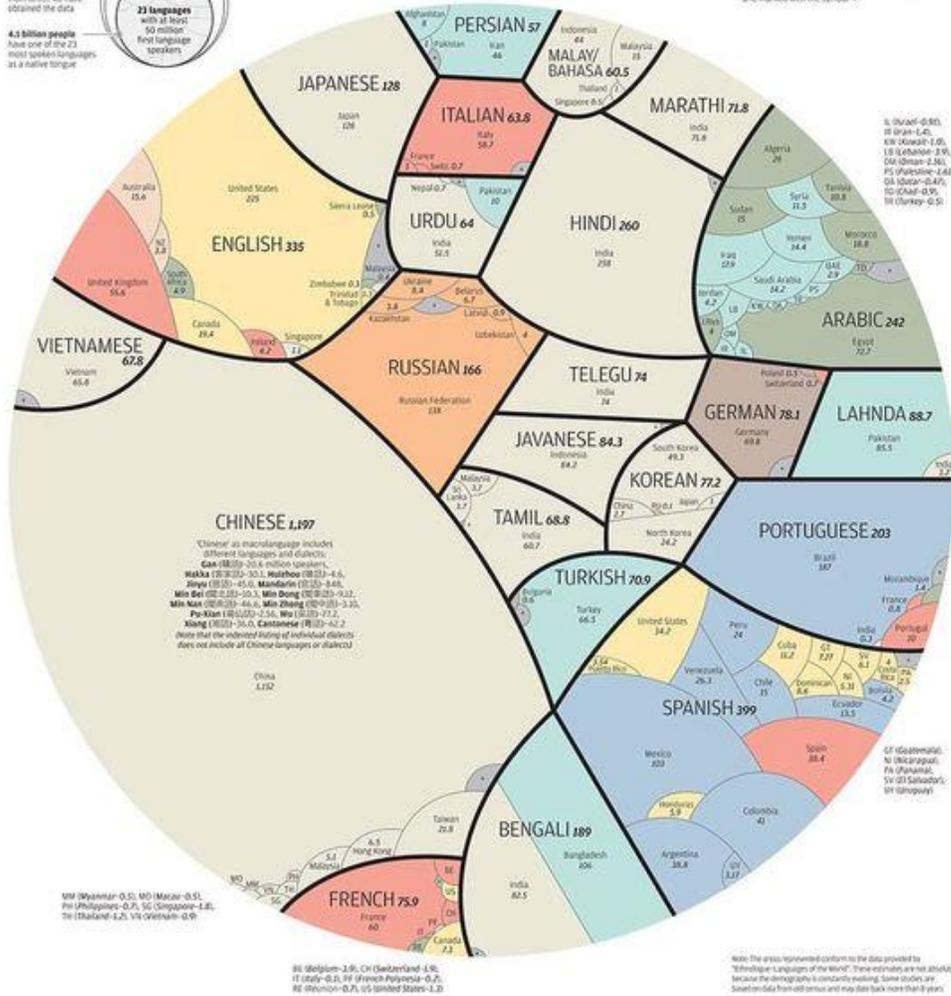
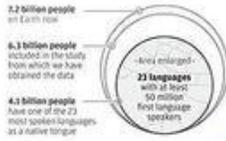
- 1) Actions
 - a. Class of 1-6 [TTT]
 - b. Cognitive 7-43 [TTC^A]
 - c. Communicative 44-79 [TTA]
 - d. General 80-143 [TTG]
 - e. Motion 144-154 [TCT]
 - f. Physical 155-226 [TCC]
- 2) Causes
 - a. Abstract 227-246 [TCA]
 - b. Physical 247-255 [TCG]
- 3) Fields of Human Activity [A1]
 - a. Agriculture 256-257 [TAT]
 - b. The Arts 258-264 [TAC]
 - c. Communications 265-283 [TAA]
 - d. Education 284-290 [TAG]
 - e. Entertainment 291-293 [TGT]
 - f. Family 294-296 [TGC]
 - g. Government and Politics 297-300 [TGA]
 - h. Health 301-315 [TGG]
 - i. Legal 316-318 [CTT]
 - j. Military 319-321 [CTC]
 - k. Monetary and Financial Affairs 322-345 [CTA]
 - l. Professions 346-361 [CTG]
 - m. Recreation 362-365 [CCT]
 - n. Religious 366-369 [CCC]
 - o. Sex and Reproduction 370-374 [CCA]
 - p. Social Interactions 375-387 [CCG]
- 4) Life Forms
 - a. Being 388-392 [CAT]
 - b. Beings, Animal 393-399 [CAC]
 - c. General Characteristics 400-410 [CAA]
 - d. Humans 411-423 [CAG]
 - e. Plants 424-430 [CGT]
- 5) Objects
 - a. Articles, Physical 431-435 [CGC]
 - b. Atmosphere 436 [CGA]
 - c. Buildings, Furnishings, & Possessions 437-448 [CGG]
 - d. Clothing 449-452 [ATT]
 - e. Food and Drink 453-461 [ATC]
 - f. Machines 462-463 [ATA]
 - g. Matter, Conditions of 464-470 [ATG]

- h. Matter, Divisions of 471-478 [ACT]
 - i. Matter, Qualities of 479-490 [ACC]
 - j. Tools 491-499 [ACA]
 - k. Transportation 500-505 [ACG]
- 6) The Planet(s)
- a. Geography 506-513 [AAT]
 - b. Habitats 514-517 [AAC]
 - c. Natural Resources 518-522 [AAA]
 - d. Weather 523-525 [AAG]
- 7) Qualities
- a. Abstract 526-559 [AGT]
 - b. Comparative 560-574 [AGC]
 - c. Physical 575-588 [AGA]
- 8) Senses
- a. Aspects of Perception 589 [AGG]
 - b. Auditory 590-596 [GTT]
 - c. Olfactory 597-601 [GTC]
 - d. Tactile 602-611 [GTA]
 - e. Tasting 612-615 [GTG]
 - f. Visual 616-628 [GCT]
- 9) States
- a. Abstract 629-657 [GCC]
 - b. Cognitive 658-661 [TTC_B]
 - c. Comparative 662-670 [GCA]
 - d. Of Being 671-694 [GCG]
 - e. Of Change 695-702 [GAT]
 - f. Of Need or Achievement 703-710 [GAC]
 - g. Physical 711-731 [GAA]
 - h. Spatial 732-758 [GAG]
- 10) Weights and Measures
- a. Mathematics 759-767 [GGT]
 - b. Quantifiers 768-793 [GGC]
 - c. Time 794-820 [GGA]
 - d. Wholeness or Division 821-834 [GGG]

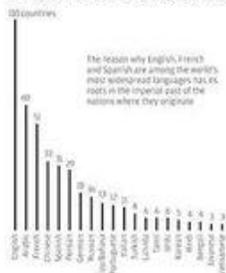
A world of languages

There are at least 7,000 known languages alive in the world today. Twenty-three of these languages are a mother tongue for more than 50 million people. The 23 languages make up the native tongue of 4.1 billion people. We represent each language within black borders and then provide the numbers of native speakers (in millions) by country. The colour of these countries shows how languages have taken root in many different regions.

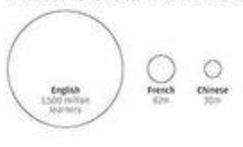
Regions in which these languages are present



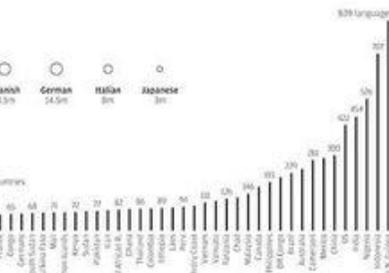
Number of countries in which this language is spoken



Most popular languages being learned around the world



Distribution of living languages by country



Sources: Ethnologue: Languages of the World, CIA US, UNESCO, Ethnologue, University of Edinburgh, The Macquarie Project

SNYR Group: Albertus van der

Orizzonti Nuovi linguaggi

Sopra le righe
di Giuseppe Remuzzi

Jobs e l'altra medicina
Jobs il tumore l'ha scoperto con una Tac fatta per altre ragioni. I medici volevano operarlo subito, lui s'è affittato a dieta vegana, erbe, agopuntura. Forse aveva ragione — 4 volte su 10 questi tumori danno piccole metastasi

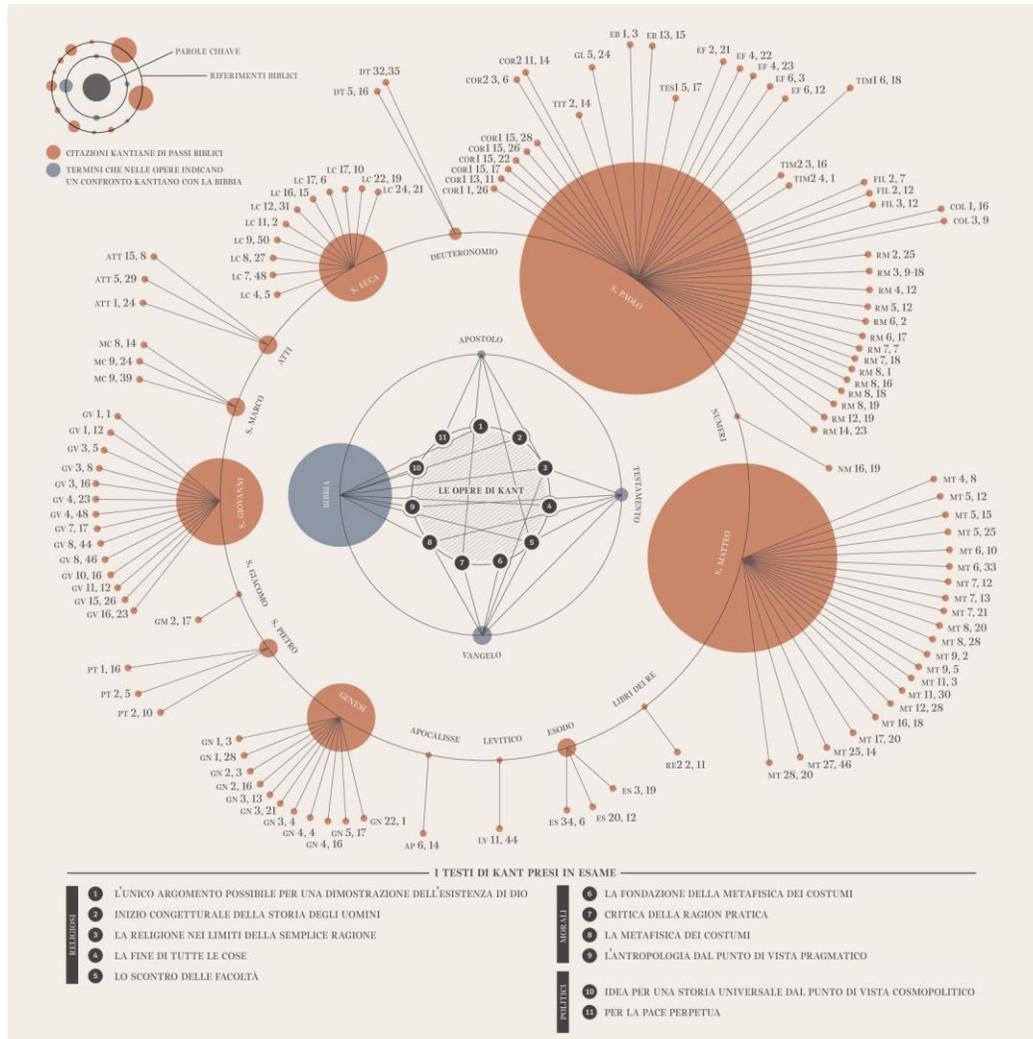
fin dall'inizio — forse no. Tanti, operati subito, guariscono. Nemmeno l'uomo dell'innovazione, del rigore, della cura dei particolari ha resistito al fascino dell'«altra» medicina. Che certe volte fa male.

Fede e ragione



Il filosofo tedesco è considerato il punto più alto dell'Illuminismo. Ma la sua produzione è ricca di riferimenti ai testi sacri. A cominciare da San Paolo

Il debito di Kant con la Bibbia



di LUCA VALZESI

Fede e ragione hanno conosciuto nell'Illuminismo le più vive fasi del loro scontro immortale. O si pensa o si crede, e chi crede senza pensare rischia di rimanere intrappolato in un oscuro stato di minorità. Così professavano molti audaci esponenti del pensiero illuminato, figli di una modernità che aveva conosciuto il piano inclinato di Galileo e la mela newtoniana. Il nuovo modo di pensare, il nuovo metodo, doveva così ergersi a garante della scienza e abbattere col

metodo matematico i castelli metafisici che tanto avevano fruttato al tentacolare soglio pontificio. Immanuel Kant (1724-1804) è considerato il punto più alto dell'Illuminismo, chiave di volta nell'arco evolutivo del pensiero occidentale. Eppure la visualizzazione qui riportata mostra dei dati inaspettati. Il grafico vuole essere la rappresentazione di un lavoro di ricerca storiografica sulle fonti, che ha fatto emergere quanto sia profondo e significativo il debito kantiano con il Testo Sacro. La Bibbia, la fonte di sapere dogmatica per eccellenza, mostra

DensityDesign Lab

La visualizzazione dati in alto è a cura del DensityDesign Lab del Politecnico di Milano, dipartimento Indaco. Il laboratorio di ricerca — guidato da Paolo Ciaccarelli — opera nel campo della visualizzazione di dati e informazioni come strumento di supporto alle decisioni e alla ricerca, con particolare attenzione alla complessità dei fenomeni sociali. Il progetto di questa settimana è a cura di Valerio Pellegri e Giorgio Caviglia

qui il suo imponente contributo nel libero pensiero di Kant (di cui è appena uscita una biografia per il Mulino a cura di Manfred Kuehn). Il grafico è stato costruito nella figura di tre cerchi concentrici, il primo dei quali indica le opere prese in esame, collegandole al secondo dove vengono indicati i termini che in queste tradiscono un confronto con i testi sacri; il cerchio più esterno indica poi le specifiche sezioni bibliche citate da Kant indicandone i versetti. Ogni cerchio è costruito con un diametro direttamente proporzionale al numero di ricorrenze,

rendendo infine evidente la maestosa presenza dell'epistolario paolino nel corpus kantiano. Numeri e ricorrenze, dati raccolti e catalogati ci mostrano così la vivacità dello scontro tra fede e ragione. Un conflitto, questo, che non vuole un vincitore, ma che cerca nella sua stessa potenza il principio del progresso e del sapere. Una realtà come questa ci dimostra che un pensiero, per quanto libero e forte, non rinnega la fede ma la interroga e la indaga, come una vicenda umana figlia della speranza e fonte di conoscenza.

Orizzonti Nuovi linguaggi

Sopra le righe
di Giuseppe Remuzzi

Il medico siriano

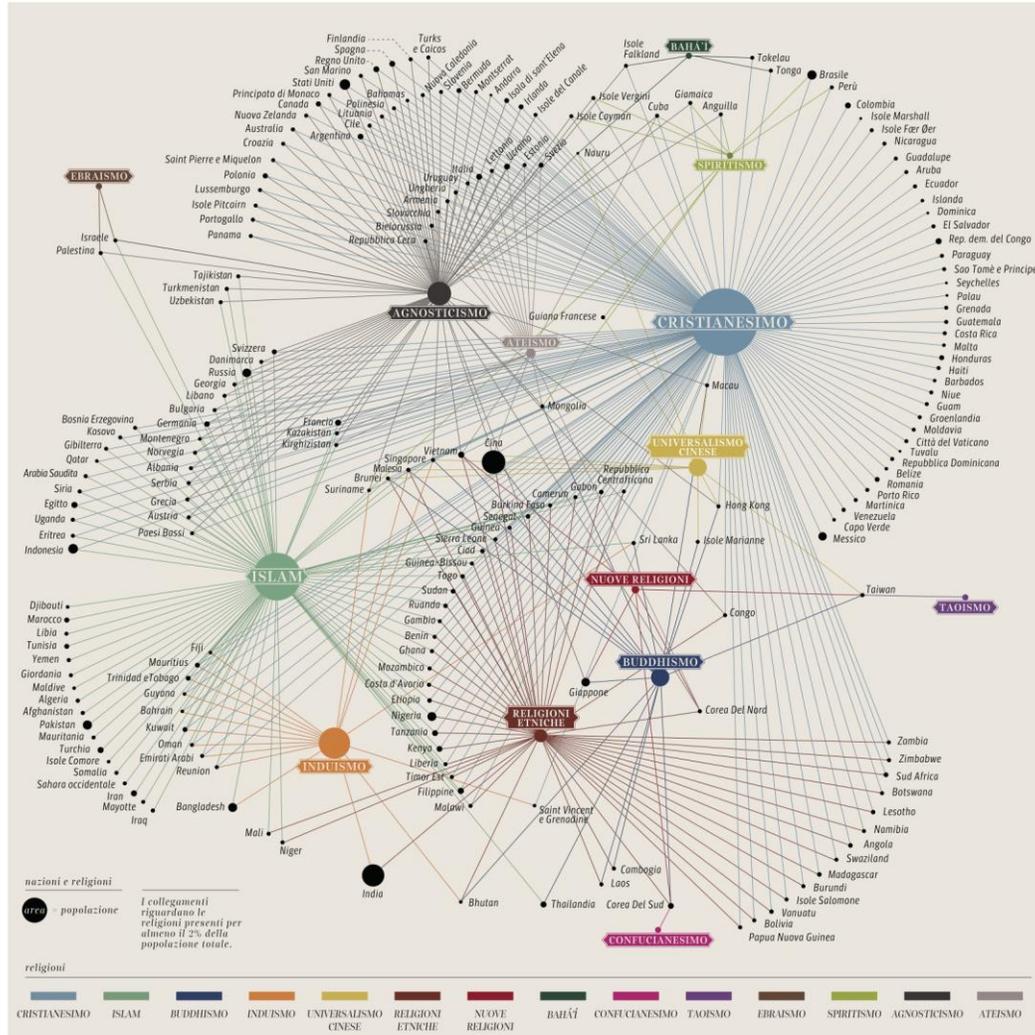
C'era un uomo, una volta, Bashar al-Assad, voleva essere medico. Ha studiato a Londra (Moorfields Hospital). Ai tempi dell'Università s'era impegnato a tutelare la salute dell'uomo, com'è per tutti i medici. Oggi Assad uccide i

suoi concittadini, 5 mila finora. I medici, tutti di tutto il mondo, ne dovrebbero essere indignati e ricordargli pubblicamente in ogni occasione che chi si è formato per curare e guarire, almeno non dovrebbe uccidere.

Visual data

Le globalizzazione e i nuovi media mescolano le religioni sul pianeta. Nuovi predicatori cristiani e islamici escono dai confini tradizionali. Ma la vera sfida è la convivenza

Il meticciccato è spirituale



di LUIGI ACCATTOLI

La globale mescola le fedi sul pianeta. Migranti e rifugiati portano l'islam in Europa, buddismo e induismo vanno per il mondo con le schiere sovrabbondanti dei cinesi e degli indiani, operai e colf che vengono dalle Filippine e dall'India immettono il cristianesimo nell'Arabia Saudita e nei Paesi del Golfo da sempre a esso refrattari. Il cristianesimo indebolito dalla secolarizzazione ma favorito da Internet e dalla televisione — l'islam è ancora nemi-

co delle immagini — penetra come lievito in ogni cultura. Ne viene una mescolanza delle religioni sconosciuta a ogni altra epoca. L'inedito meticciccato delle fedi spingerà tutto il mondo verso il modello statunitense di tolleranza e di viva concorrenza. È verosimile che anche il nascondimento che esse vivono oggi in Europa — proibizione di indossare simboli religiosi, loro spartizione dai «luoghi pubblici», le «radici cristiane» che non vengono nominate — stia per finire. La visibilità della preghiera musul-

mana provoca quella cristiana a tornare sulla scena pubblica. Più specificamente provoca il cristianesimo europeo a rifarsi missionario, se avrà la forza di scuotersi dalla «stanchezza» e dal «tedio», per usare le parole con le quali l'ha pungolato ultimamente Papa Ratzinger che ha invece lodato la «gloria» espansiva dei cristiani dell'Africa che sono quelli che più vanno nelle chiese la domenica. È verosimile che il meticciccato favorirà la diffusione di un cristianesimo non più coloniale in Asia. Spinte dalla globalizzazione dell'economia, In-

dia e Cina allenteranno la loro avversione alle religioni «straniere». L'Asia che nei secoli ha trasformato l'islam — diluendone la matrice araba — domani modificherà il cristiane-

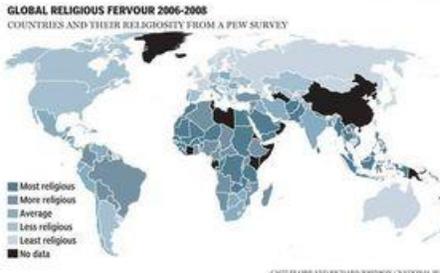
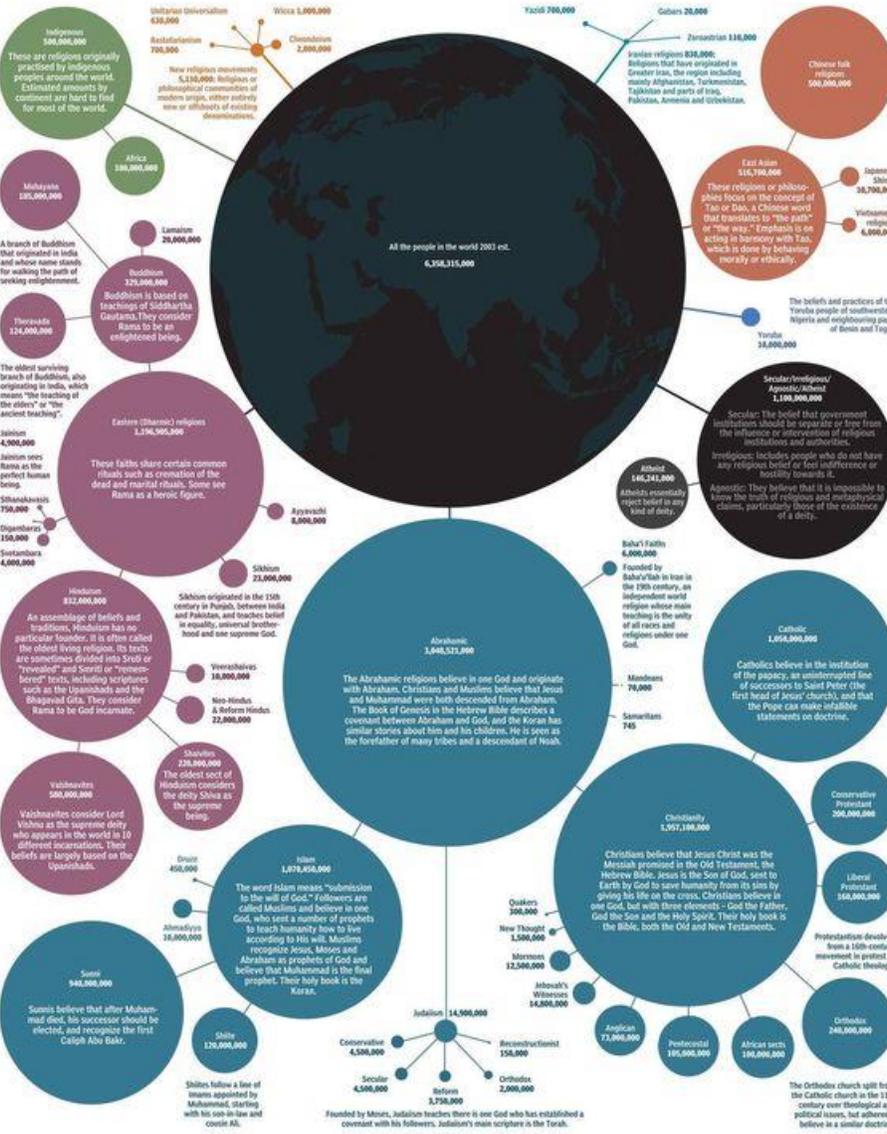
simo facendolo meno dottrinale e organizzato. Nel competitivo meticciccato planetario che si affaccia all'orizzonte la sfida per l'ebraismo — che non è una fede missionaria — potrebbe essere quella dell'irrigidimento identitario. Il cristianesimo è minacciato dalla deriva settaria: i movimenti neo-pentecostali stanno già numericamente prevalendo sulle Chiese storiche. Per l'islam la prova delle prove viene dall'immagine della donna che in campo aperto non sarà più velata.

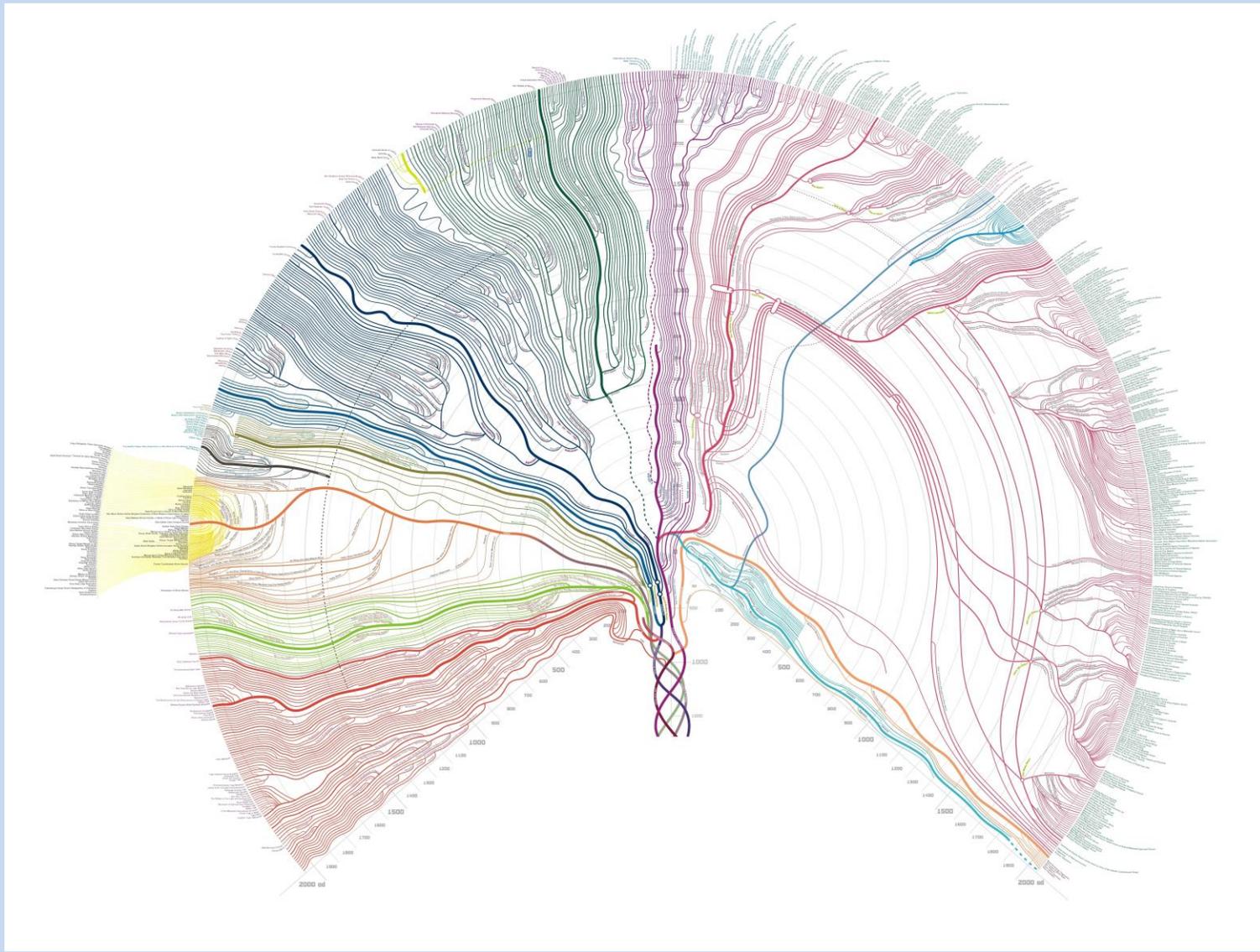
DensityDesign Lab

La visualizzazione dati è a cura del DensityDesign Lab del Politecnico di Milano guidato da Paolo Ciuccarelli. La realizzazione di questa settimana è di Giorgio Caviglia, Federica Bardelli, Gabriele Colombo, Carlo De Gaetano

WORLD OF RELIGION

There's no escaping religion. It has enormous societal, cultural, political and historical implications. It's been blamed for wars and praised for bringing people together. But it is practised in some form across the world by billions of people every day. So what are the world's major believing and non-believing constituencies? Below are estimates of the world religions based on the best data available.





Daily Commuting Flows Between English and Welsh Wards in 1981.

All flows which satisfy the following inequality are drawn as thin lines-

$$\frac{m_{ijst}}{p_{is} p_{js}} > \frac{1}{25000}$$

Flows of over 1000 people drawn as thick lines.

Where-

m_{ijst} : The number of people moving from place i to j between times s and t .

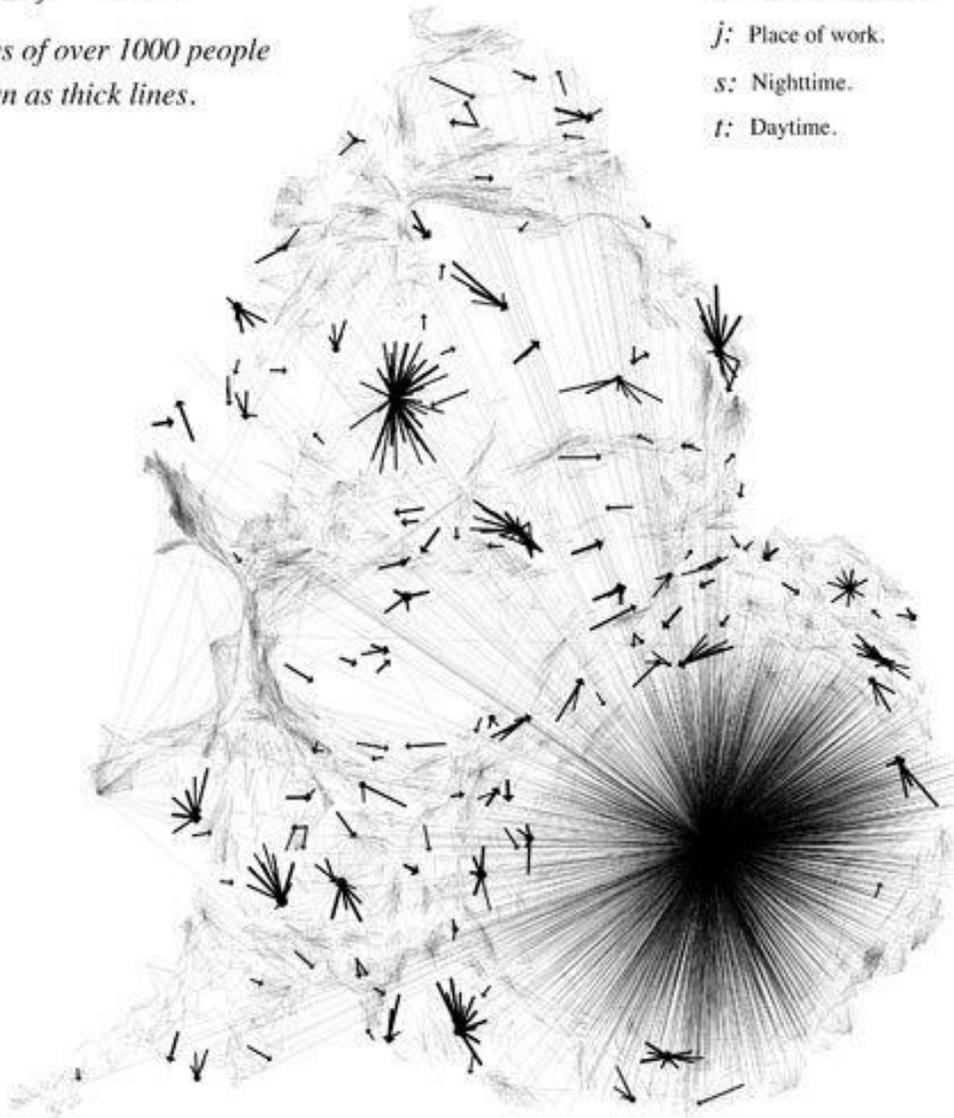
p_{is} : The number of people at place i time s .

i : Place of residence.

j : Place of work.

s : Nighttime.

t : Daytime.



The Method Structure

- Preliminary**
1. Develop preliminary project plan and schedule for Phase 1
 2. Management review and approval
 3. Assign staff, review plan and schedule

A. Problem Analysis and Definition

1. Schedule and perform initial data gathering
 - interviews
 - observation of operations
 - documentation collection
 - questionnaires
 - research
2. Perform initial data analysis
 - identify and verify problems
 - determine organization's information and data needs
 - determine scope or requirements, limitations and constraints
3. **Prepare Design Requirements Statement (DRS)**
4. Presentation of (DRS) to management
5. Management review and direction/approval
6. Identify alternative approaches and complete feasibility analysis for each
7. Prepare **Design Proposal**
8. Presentation to management
9. Management review and decision
10. Prepare expanded **Project Plan and Schedule (PPS)** for the alternative approach authorized by management

B. Data Gathering

1. Schedule and perform expanded data gathering in areas identified by initial data gathering
2. Organized data and identify to facilitate analysis
3. Complete **Data Element Description Sheet** for each data element identified
4. Collect information on requirements for decision-making, operational directives, and reports (both formal and informal)

5. Prepare **Inventory of Existing Data Elements**
6. Prepare **Inventory of Existing Reporting Requirements**
7. Perform supplemental data gathering as needed
8. Present inventories to management for review
9. Management review and direction/approval

C. Data Analysis

1. Working with the inventories of elements and reports and using classification analysis work sheets, classify each individual data element by
 - type: controlling, reporting, and supporting
 - use: generic grouping, i.e., descriptive, computational, and quantitative -reports: managerial, operational, and recordkeeping
 - timeliness: operational, transitory, archival, and historical
 - system requirements: size, data retention, updating, maintenance, response requirements, and security -logical/functional relationships with other data
 - current format and media
 - name, **synonym**, and definitions
2. Prepare **Master Classification Lists** of data elements
3. Prepare **Performance Requirements** and **Characteristics Lists**
4. Review findings with management
5. Management direction/approval

D. Development and Implementation of Standards

1. Identify and organize the contents of the standards manual
2. Define and incorporate the Administrative and Environmental Standards
3. Develop and incorporate the method standard, for the Data Definition Control System (DDCS)
4. Assemble current data element definitions in a Corporate Glossary
5. Review Glossary and DDCS with management
6. Management direction/approval
7. Train all users in Standards, DDCS, and Corporate Glossary
8. Implement DDCS, Corporate Glossary, and CDB Standards
9. Continue to improve and complete Corporate Glossary

E. Development and Implementation of the Data Integrity and Quality Assurance Program

1. Determine organizational or functional component responsible for the integrity and contents of every data element
2. Establish program, plan and schedule for cleaning up all currently existing files
3. Develop **Methods for Auditing Data Element Content and Quality**
4. Functional management establishes reliability parameters for each data element
5. Establish data audit management report requirements
6. Present program to all affected managers and top management
7. Management review and direction/approval
8. Institute program and commence cleanups and audits

F. Preliminary Design

1. Develop logical design alternatives based upon data classifications
2. Develop logical design alternatives based upon system and functional requirements
3. Develop physical design alternatives based upon
 - file structures
 - access methods
 - available hardware
 - available software
4. Perform trade-off analysis between various design alternatives
5. Prepare **Trade-off Analysis Report**
6. Management review, decision and direction
7. Prepare **Detailed Design Project Plan and Schedule**
8. Management review and direction/approval

G. Detailed Design and Testing

1. Prepare the detailed **Design Specifications** for the optimum design approved by management in the previous Phase
2. Management review and direction/approval of the detailed design
3. Prepare **Test Plan** and necessary **Test Data** to test specifications and processes

4. Management review and direction/approval of test plan
5. Perform test and evaluate results
6. Management review and direction/approval of test results
7. Modification and retest as necessary

H. Data Conversion and Implementation

1. Develop **Conversion Plan** and **Schedule**
2. Management review and direction/approval
3. Conduct training as necessary
4. Convert data and establish new database
5. Maintain converted data
6. When data conversion is complete, implement operations
7. Management review, direction/approval of conversion and implementation

I. Post-implementation Evaluation

1. Plan and staff for the Post-implementation Evaluation study
2. Conduct the study
3. Prepare the Study Report and present Study Report to management
4. Management review and direction
5. Development phase terminates. Routine maintenance and support begins



(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

The Systems Development Programs

<http://sem.ucalgary.ca/CAG/publications/survey-abm.htm>

A. Accounting Software for GOD & MAN Systems

1. <http://www.findaccountingsoftware.com/software/> ***
2. <http://www.sysprousa.com/>
3. <http://tunes.org/Review/OSes.html> OS
4. <http://tunes.org/index.html> TUNES
5. <http://www.cs.washington.edu/research/projects/spin/www/> SPIN
6. <http://www.cse.ogi.edu/DISC/projects/synthetix/related.html> Adaptive OS
7. <http://www.enterpriselogix.com/>
8. <http://www.research.microsoft.com/research/dtg/> Microsoft
9. http://einstein.cs.uri.edu/research/rtisorac/pubs/RTCO_OMG.html COBRA
10. <http://www.ram.org/ramblings/dream/cellajos.html> Self-Replicative OSes
11. <http://www.scinet-corp.com/associates/index.htm?istp.htm~index2> ***** SCINET
12. <http://www.oalj.dol.gov/libdot.htm> DOT
13. <http://application.biz/directory/Top/Computers/Software/Accounting/5461>
14. <http://www.scs-mag.com/Buyers-Guide/> Supply Chain

B. Genetic Analysis Software

1. <http://linkage.rockefeller.edu/soft/list.html> A-F
2. <http://linkage.rockefeller.edu/soft/list2.html> G-L
3. <http://linkage.rockefeller.edu/soft/list3.html> M-P
4. <http://linkage.rockefeller.edu/soft/list4.html> Q-X
5. <http://hpcio.cit.nih.gov/index.html> *** Graphical Association Prototype - Linkage
6. <http://www.critcon.com/ccipublic/products/products.php3>
7. <http://docs.appliedbiosystems.com/pebiiodocs/00103536.pdf>
8. <http://www.zi.ku.dk/eunet/Pages/gensoft.html>
9. <http://www.cato.com/biotech/bio-software.html> *** Library

10. http://www.mcdb.ucla.edu/Research/Lin/links/sequence_analysis/
11. <http://www.mbg.cornell.edu/aquadro/software.html> *** Plato
12. <http://www.dnastar.com/web/r4.php> ***
13. <http://www.foresight.org/Conferences/MNT6/Papers/Hall/>

C. Decision Analysis Software

1. http://www.palisade.com/html/decisiontools_suite.asp?OVRAW=genetic%20analysis%20software&OVKEY=decision%20support%20software&OVMTTC=standard
2. <http://www.treeage.com/>
3. <http://faculty.fuqua.duke.edu/daweb/dasw.htm> ***
4. <http://www.odportal.com/OD/whatisod.htm>
5. <http://www.pitt.edu/AFShome/d/r/druzdzdel/public/html/is2130/>
6. http://www.ornl.gov/sci/techresources/Human_Genome/posters/chromosome/chooser.shtml Disease Chromosomes
7. <http://www.paramind.net/parathry.html>
8. <http://www.Galorath.com> **** SEI & SEBK
9. http://www.palisade.com/html/decision_analysis_software.asp ***
10. <http://www.knowledgestorm.com/search/keyword/Analysis%20Tools/ickwd/Analysis%20Tools> Library
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3. <http://www.cogsci.princeton.edu/~wn/> *** WordNet
4. <http://www.sil.org/linguistics/computing.html#programming> *** Library
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12. <http://www.writersupercenter.com/stylewriter/> ***** Style Writer
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8. <http://virtual-organization.net/>
9. http://www.hitl.washington.edu/projects/knowledge_base/meta.html ***
10. <http://www.cis.udel.edu/~wchen/livrosemingles.html>
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10. <http://www.qucis.queensu.ca/Software-Engineering/vendor.html#+1%20Software%20Engineering> CASE Vendor List
11. <http://www.qucis.queensu.ca/Software-Engineering/tools.html> CASE Tools
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I. Evolutionary Software Programs

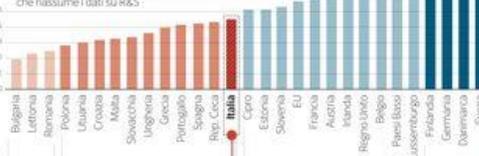
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3. <http://www.cepr.org/pubs/new-dps/dplist.asp?dpno=3516>
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5. <http://www.avail.com/2003/prod/AReplicate.htm> *** Replicative
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15. http://www.cert.org/other_sources/viruses.html#III *** Viruses
16. <http://www.howstuffworks.com/virus.htm> ***
17. <http://www.kaspersky.ch/avpve/findex.stm> ***
18. <http://www.viruslist.com/eng/viruslist.html> *** Virus Encyclopedia
19. http://dir.yahoo.com/computers_and_internet/security_and_encryption/viruses_and_worms/
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26. <http://search.yahoo.com/search?p=virus+source+codes&ei=UTF-8&fr=FP-tab-web-t&n=20&fl=0&x=wrt>

Lo scenario e i dettagli

C'è una correlazione tra investimenti in ricerca e sviluppo, cultura dell'innovazione e crescita del Prodotto interno lordo. L'Italia fatica però a mantenere alti gli standard se paragonati a quelli degli altri Paesi europei. Siamo innovatori moderati e ora serve un colpo di reni

LA CLASSIFICA DEGLI INNOVATORI

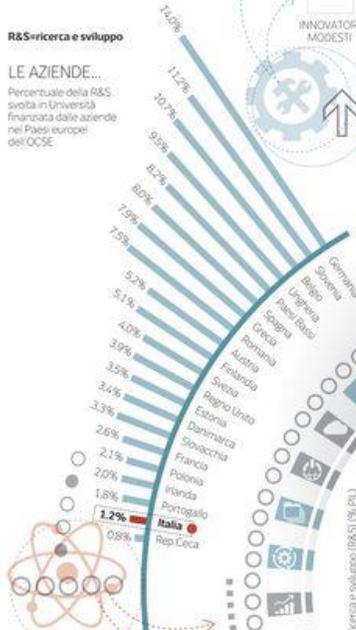
Indice della Commissione Ue che riassume i dati su R&S



R&S ricerca e sviluppo

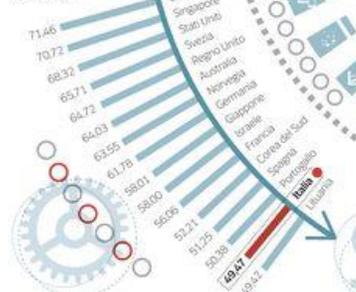
LE AZIENDE...

Percentuale della R&S svolta in Università finanziata dalle aziende nei Paesi europei dell'OCSE



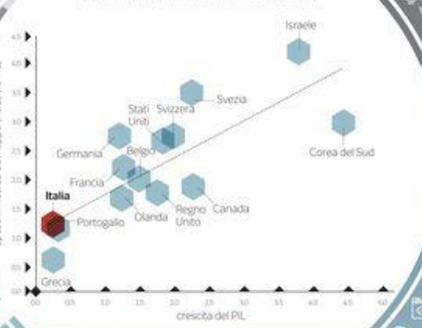
LA COMPETIZIONE

Indice globale di competitività 2014 su dati Insead



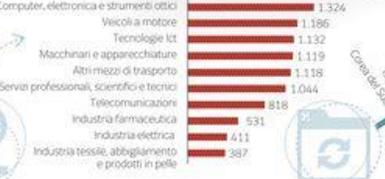
IL NODO DEL PIL

Correlazione tra spesa in ricerca e sviluppo (R&S) e crescita del PIL. (dati in dollari, media 2000-2013)



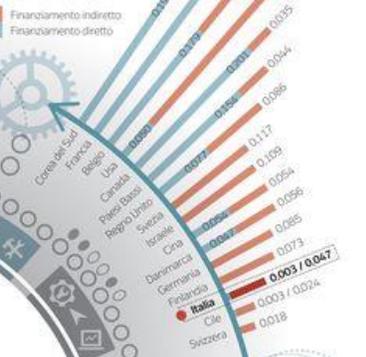
INVESTIMENTI IN ITALIA

Media degli investimenti in R&S in milioni di euro, 2007-2013.



...E LO STATO

Supporto pubblico alle attività di R&S delle aziende (dati in % sul PIL, 2014)



LE REFERENZE

Numero medio di referenze in pubblicazioni internazionali per ricercatore nelle principali economie, 2012-2014



Fonte: The European House - Ambrosetti

Corriere della Sera

Il post Expo

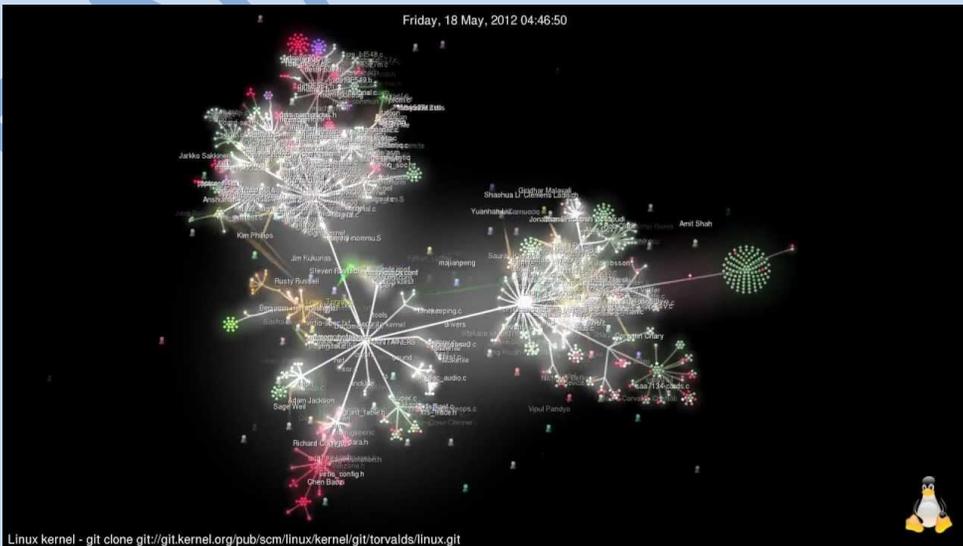
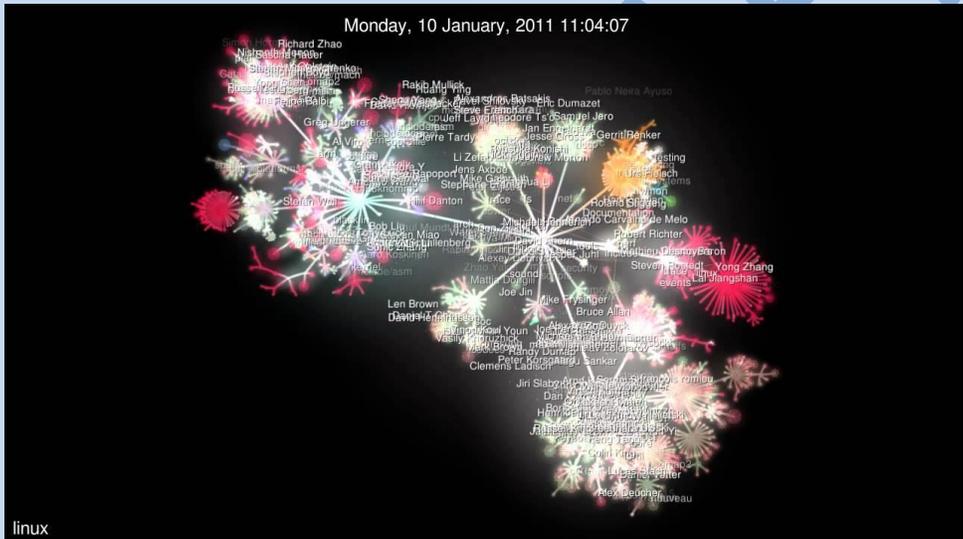
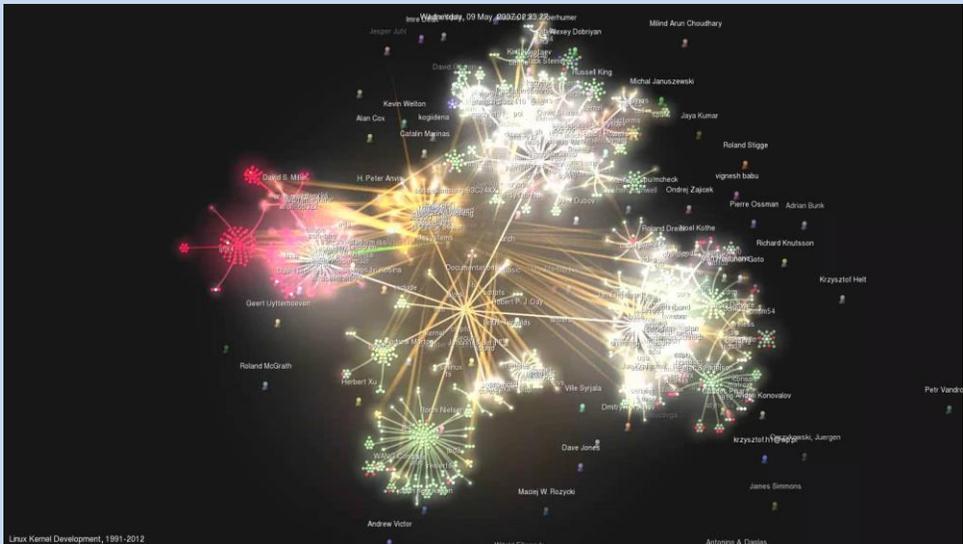
Quei 15 milioni che devono attirare i finanziatori esteri

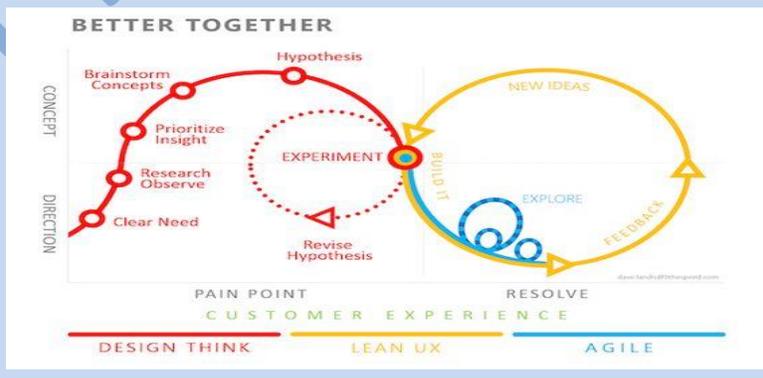
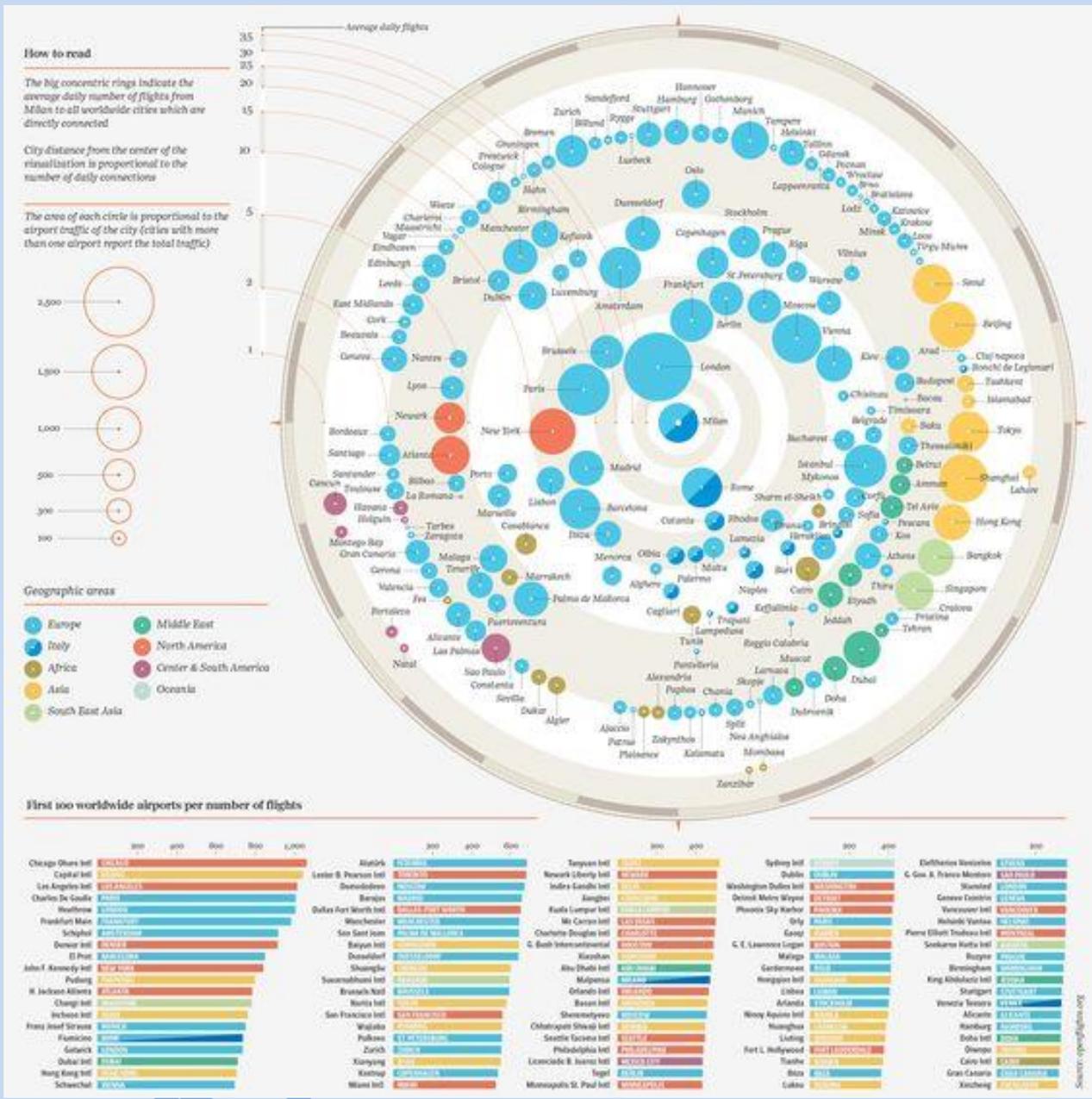
Il progetto del governo per il dopo Expo che dovrebbe fare da trampolino per il rilancio della ricerca nazionale ha catalizzato le voci del fare. La strategia è buona: la capitalizzazione del successo dell'esposizione milanese deve essere scaricata a terra senza perdersi in inutili rivali di riempimenti. Il segnale è utile non solo alla città (dove da contenuti alle candidature post-Pisapia) ma anche al premier Renzi che deve smarcarsi dal pantano della Capitale. L'idea di affidare la regia all'Istituto italiano di tecnologia di Genova, poi, è forse stata la ciliegina sulla torta: se fosse stato scelto uno dei pure eccellenti poli universitari meneghini sarebbe scoppiato un canovaccio da «parenti serpenti» tra gelosie e rivendicazioni. Ci sarà

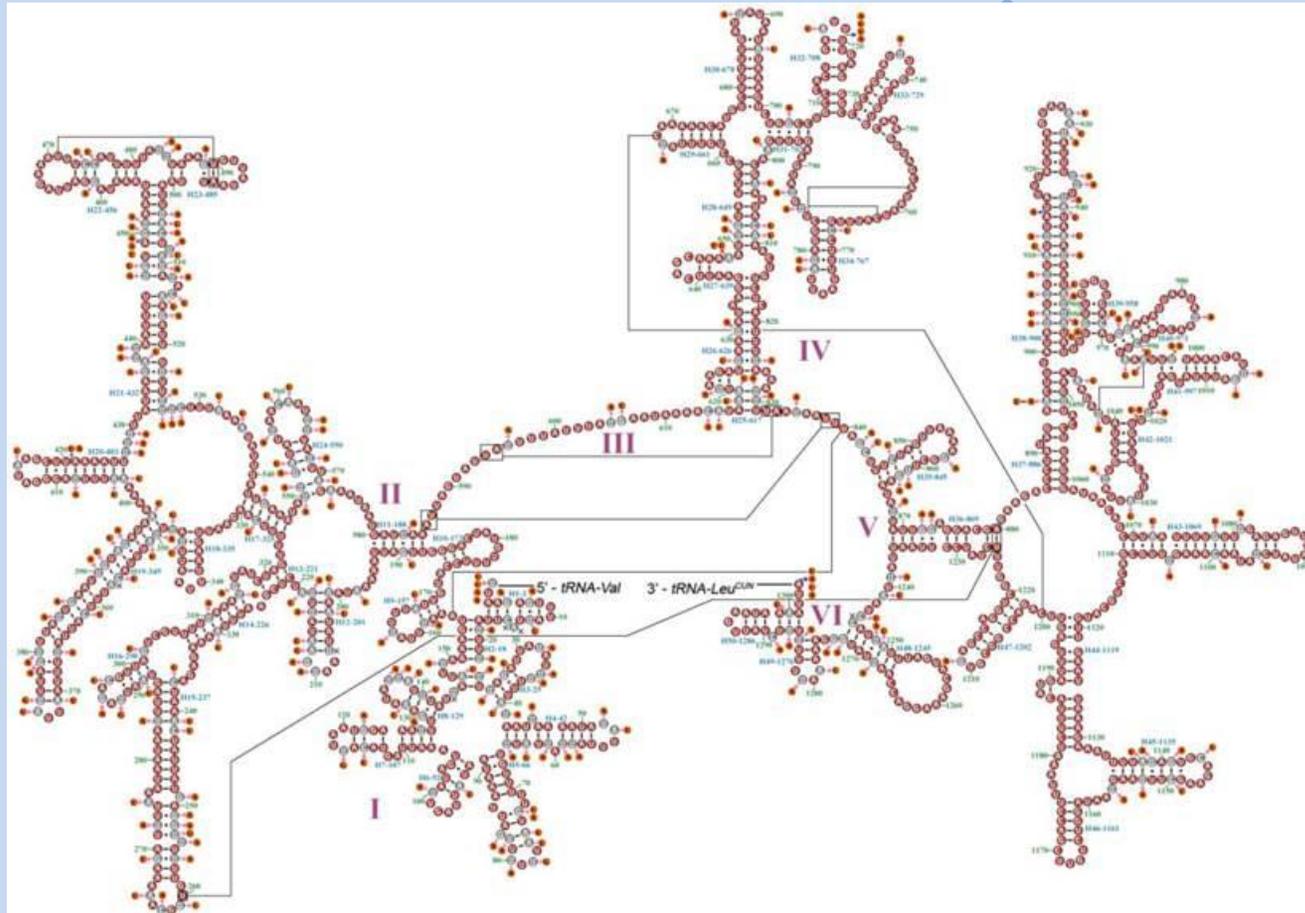
modo e tempo per raccogliere le forze dei «locali». Peraltro l'Iti ha notevoli punti di forza, non ultimo quello del diffuso utilizzo della lingua inglese in aggiunta al livello professionale di «guru» come il direttore della iCub Facility Giorgio Metta sulla robotica e il senior researcher Vittorio Pellegrini sul grafene. I giovani cervelli europei ed extraeuropei che dovranno decidere Milano piuttosto che Barcellona, Berlino, Londra o Tel Aviv guarderanno a questo prima di investire nel proprio futuro. Dunque: network, equilibri e capitale umano. Gli ingredienti ci sono tutti. O quasi. Se andiamo a guardare le altre esperienze estere c'è sempre lo sterco del diavolo, il denaro, senza il quale all'area verrà a mancare

l'appoggio delle grandi aziende (per ora si parla di 15 milioni l'anno per dieci anni). Certo, i fondi sono «sempre quelli e sono sempre più esigui», come aveva detto al Corriere il rettore della Bicocca, Cristina Messa. Ma questo problema ha una soluzione: Londra per alimentare i settori su cui vuole puntare, come il biotech, ha lanciato attraverso il sindaco Boris Johnson un fondo da 30 miliardi di sterline per il life sciences. E per alimentarlo è pronto a defiscalizzare recuperando in investimenti ciò che non prenderà in tasse. Se si vuole un polo di successo, bisognerà posizionarlo sul risiko internazionale e sfidare i competitor. (m.sid.)

msideri@corriere.it
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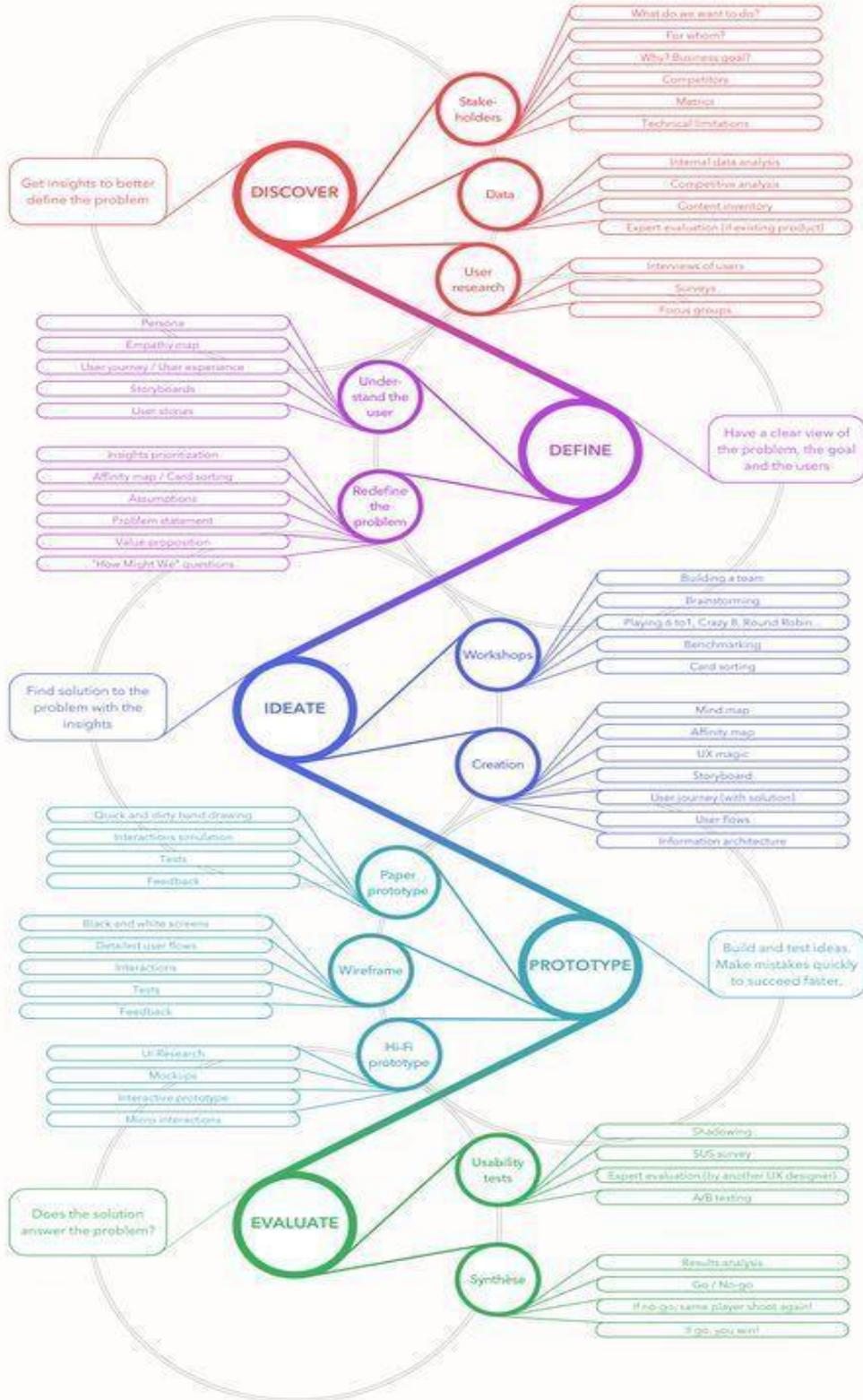






UX Design Process

by François Bouin-Mercier





(ANMESCL2 EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

Focal Points for Creating over 48 Million New Jobs

THE 5 Phase Operational Interface OR Educational Subsets FOR PERSONALIZING
SMARTPHONE APPLICATIONS & vBULLITEN FORUM TRENDS (484)

Employment Related Educational Taxonomy Phase One: Educational Development

1 Employment Educational Development (A2 Academic Practice; Curriculum Development; Course Development; Project Development; Module Development) (A2TECHGRP)

1.1 Employment Planning and Preparation (NAME)

1.1.1 Employment Needs Analysis (NAME)

1.1.2 Employment Feasibility Studies (A2TECHGRP)

- 1.1.3**
- 1.1.4 Employment Pilot Projects** (A2 Pilot Programs) A2TECHGRP
- 1.1.5 Employment Exemplars** (NAME)
 - 1.1.4.1** Case Studies (A2TECHGRP)
 - 1.1.4.2** Real Life Examples (NAME)
 - 1.1.4.3** Illustrations (NAME)
- 1.2 Employment Instructional Design** (A2 Course Design; Research Design; Module Design) (A2TECHGRP)
- 1.3 Employment Approaches to Teaching** (A2 Educational Strategies; Teaching Strategies; Instructional Strategies; Pedagogy; Pedagogies; Modes of Teaching) (NAME) (A2TECHGRP uses Educational Strategies)
 - 1.3.1 Employment Constructivism** (NAME)
 - 1.3.1.1** Scaffolding (NAME) *See also under: Approaches to Learning - Task-based Learning*
 - 1.3.2 Employment Dialogic** (NAME)
 - 1.3.3 Employment Didacticism** (A2TECHGRP)
 - 1.3.4 Employment Student Centered Learning** (A2 Learner Centered Curriculum; Student Centered Curriculum) (NAME) (A2TECHGRP uses Learner Centered Curriculum)
 - 1.3.5 Employment Resource Based Learning** (A2TECHGRP)
- 1.4 Employment Teaching and Learning Methods** (A2 Teaching Methods; Instructional Procedures; Strategies of Instruction; Teaching Techniques) (NAME) (A2TECHGRP uses Teaching Methods)
 - 1.4.1 Employment Demonstrations** (A2TECHGRP)
 - 1.4.2 Employment Discussion** (A2TECHGRP)
 - 1.4.2.1** Dialogue (A2 One-to-One Discussion) (NAME)
 - 1.4.2.1.1** Peer Dialogue (NAME)
 - 1.4.2.1.2** Student Tutor Dialogue (A2 Student Teacher Dialogue) NAME
 - 1.4.3 Employment Drills: Practice** (A2 Repetition) (A2TECHGRP)
 - 1.4.4 Employment Experiments** (A2 Experimentation) (A2TECHGRP)
 - 1.4.5 Employment Field Work** (A2 Field Studies; Field Class) (NAME) (A2TECHGRP uses Field Studies)
 - 1.4.6 Employment Group Work** (A2 Group Instruction; Group Teaching) (A2TECHGRP)
 - 1.4.6.1** Small Group Teaching (A2 Small Group Instruction) (A2TECHGRP)
 - 1.4.7 Employment Lectures** (NAME) (A2TECHGRP uses Lecture-Method)
 - 1.4.8 Employment Mentoring** (A2 Mentors; Mentorship) (NAME) (A2TECHGRP uses Mentoring)
 - 1.4.9 Employment Peer Teaching** (A2 Peer Tutoring; Peer Instruction) (A2TECHGRP)
 - 1.4.10 Employment Presentations** (NAME)
 - 1.4.11 Employment Seminars** (A2TECHGRP)
 - 1.4.12 Employment Tutorials** (A2TECHGRP)
 - 1.4.13 Employment Work Experience** (A2 Employment Experience) (A2TECHGRP)

- 1.4.13.1 Placement (A2 Internship) (A2TECHGRP)
- 1.4.13.2 Secondments (A2TECHGRP)
- 1.4.14 **Employment Workshops** (A2TECHGRP)
- 1.5 **Employment Educational Environments** (NAME)
 - 1.5.1 **Employment Electronic Classrooms** (A2 Automated Classroom) (A2TECHGRP)
 - 1.5.1.1 Virtual Learning Environments (A2 VLEs; Online Learning Environments; Learning Management Systems; Collaborative Learning Software; Hypertext Learning Environments) (NAME) *See also under Educational Technology – Virtual Learning Environments*
 - 1.5.1.1.1 Managed Learning Environments (A2 MLEs) (NAME) *See also under Educational Technology – Virtual Learning Environments*
 - 1.5.1.2 Web Based Teaching (A2 Online Learning; Online Tutorials; Teletutoring) (NAME) *See also under Educational Technology*
 - 1.5.2 **Employment Flexible Learning**
 - 1.5.2.1 Open Learning (A2 Open Education) (NAME) (A2TECHGRP uses Open Education)
 - 1.5.2.2 Distance Learning (A2 Distance Education) (NAME) (A2TECHGRP uses Distance Education)
 - 1.5.2.2.1 Paper Based (NAME)
 - 1.5.2.2.2 Electronic (NAME)
 - 1.5.2.2.2.1 Online (NAME)
 - 1.5.2.2.2.3 Mixed Mode (NAME)
 - 1.5.2.3 Lifelong Learning (A2 Continuous Learning; Education Permanente; Lifelong Education; Permanent Education; Recurrent Education) (A2TECHGRP)
 - 1.5.3 **Employment Laboratories** (A2TECHGRP)
 - 1.5.4 **Employment Summer Schools** (A2 Summer Sessions) (A2TECHGRP)
- 1.6 **Employment Approaches to Learning** (A2 Learning Styles) (A2TECHGRP)
 - 1.6.1 **Employment Surface Learning** (NAME)
 - 1.6.2 **Employment Deep Learning** (NAME)
 - 1.6.3 **Employment Experiential Learning** (A2 Action Learning; Active Learning; Activity Learning; Community Experience; Experience Based Education; Home Experience; Prior Experiential Learning) (A2TECHGRP)
 - 1.6.4 **Employment Collaborative Learning** (NAME)
 - 1.6.5 **Employment Cooperative Learning** (A2TECHGRP)
 - 1.6.6 **Employment Discovery Learning** (A2TECHGRP)
 - 1.6.7 **Employment Discussion-Led Learning** (NAME)
 - 1.6.8 **Employment Self-Paced Learning** (NAME)
 - 1.6.9 **Employment Task Based Learning** (NAME)
 - 1.6.9.1 Scaffolding (NAME) *See also under Constructivism*

- 1.6.10 Employment Vicarious Learning** (NAME)
 - 1.6.10.1** Answer Gardens (NAME)
- 1.7 Employment Outcomes of Education** (A2 Educational Outcomes; Instructional Outcomes; Learner Outcomes; Student Outcomes; Results of Education) (A2TECHGRP)
 - 1.7.1 Employment Skills** (A2 Competencies; Key Skills; Basic Skills) (A2TECHGRP)
 - 1.7.1.1** Communication Skills (A2TECHGRP)
 - 1.7.1.1.1** Writing Skills (A2TECHGRP)
 - 1.7.1.1.2** Reading Skills (A2TECHGRP)
 - 1.7.1.1.3** Speech Skills (A2 Speaking Skills) A2TECHGRP
 - 1.7.1.1.4** Listening Skills (A2TECHGRP)
 - 1.7.1.1.5** Non-Verbal Communication (A2TECHGRP)
 - 1.7.1.2** Decision Making Skills (A2TECHGRP)
 - 1.7.1.3** Information Literacy (NAME)
 - 1.7.1.4** Job Skills (A2 Employable Skills; Job Behaviors; Marketable Skills; Vocational Skills) (A2TECHGRP)
 - 1.7.1.5** Numeracy (A2TECHGRP)
 - 1.7.1.6** Problem Solving Skills (NAME)
 - 1.7.1.7** Research Skills (A2TECHGRP)
 - 1.7.1.8** Study Skills (A2TECHGRP)
 - 1.7.1.9** Teaching Skills (A2TECHGRP)
 - 1.7.1.10** Technological Literacy (A2TECHGRP)
 - 1.7.1.10.1** Computer Literacy (A2 IT Literacy; C&IT Literacy; ICT Literacy; IT Skills; Computer Skills) A2TECHGRP
 - 1.7.1.11** Thinking Skills (A2TECHGRP)
 - 1.7.1.12** Transferable Skills (NAME)
 - 1.7.2 Employment Knowledge** (NAME)
 - 1.7.3 Employment Understanding** (A2 Comprehension) (NAME) (A2TECHGRP uses Comprehension)
 - 1.7.4 Employment Attitudes** (A2TECHGRP)
 - 1.7.5 Employment Values** (A2TECHGRP)
 - 1.7.6 Employment Creativity** (A2TECHGRP)
 - 1.7.7 Employment Research** (A2TECHGRP)
 - 1.7.7.1** Action Research (A2TECHGRP)
- 1.8 Employment Assessment** (A2 Student Assessment; Educational Measurement; Student Evaluation) (A2TECHGRP)
 - 1.8.1 Employment Types of Assessment** (NAME)
 - 1.8.1.1** Formative Assessment (NAME)
 - 1.8.1.2** Summative Assessment (NAME)

- 1.8.1.3** Peer Assessment (NAME)
- 1.8.1.4** Self-Assessment (NAME)
- 1.8.1.5** Continuous Assessment (A2TECHGRP)
- 1.8.2 Employment Assessment Tasks** (NAME)
 - 1.8.2.1** Theses (A2TECHGRP)
 - 1.8.2.2** Dissertations(A2TECHGRP)
 - 1.8.2.3** Essays (A2TECHGRP)
 - 1.8.2.4** Diaries (A2 Journals) A2TECHGRP
 - 1.8.2.5** Learning Logs (NAME)
 - 1.8.2.6** Oral Presentations (NAME)
 - 1.8.2.7** Poster Presentations (NAME)
 - 1.8.2.8** Portfolios (NAME)
 - 1.8.2.9** Reports (A2TECHGRP)
 - 1.8.2.10** Examinations (A2 Exams; Tests) (A2TECHGRP)
 - 1.8.2.10.1** Question Types (NAME)
 - 1.8.2.10.1.1** Multiple Choice Questions (A2Multichoice Tests, Multiple Choice Tests, and MCQs) (NAME)
 - 1.8.2.10.1.2** Yes/No Questions (NAME)
 - 1.8.2.10.1.3** True/False Questions (NAME)
 - 1.8.2.10.1.4** Free Text Response (A2 Essay Tests) NAME
 - 1.8.2.10.2** Examination Types (NAME)
 - 1.8.2.10.2.1** Open Book Examinations (A2 Open Book Tests) (A2TECHGRP)
 - 1.8.2.10.2.2** Oral Tests (A2 Oral Examinations) (A2TECHGRP)
 - 1.8.2.10.2.3** Practical Examinations (NAME)
- 1.9 Employment Evaluation** (A2 Reflective Practice) (A2TECHGRP)
 - 1.9.1 Employment Evaluation Criteria** (A2TECHGRP)
 - 1.9.1.1** Performance Indicators (A2TECHGRP)
 - 1.9.1.2** Adaptability (NAME)
 - 1.9.1.3** Interactivity (NAME)
 - 1.9.1.4** Reliability (A2TECHGRP)
 - 1.9.1.5** Validity (A2TECHGRP)
 - 1.9.1.6** Efficiency (A2TECHGRP)
 - 1.9.1.7** Cost-Effectiveness (A2TECHGRP)
 - 1.9.1.8** Good Practice (NAME)
 - 1.9.1.9** Best Practice (NAME)

- 1.9.1.10** Benchmarking (NAME)
- 1.9.1.11** Outcomes of Education (A2TECHGRP)
- 1.9.2 Employment Types of Evaluation** (A2 Evaluation Methodology; Analysis; Evaluation Designs; Evaluation Procedures; Evaluation Techniques) (A2TECHGRP)
 - 1.9.2.1** Formative Evaluation (A2 Process Evaluation) (A2TECHGRP)
 - 1.9.2.2** Summative Evaluation (A2 Product Evaluation) (A2TECHGRP)
 - 1.9.2.3** Qualitative Evaluation (NAME)
 - 1.9.2.4** Quantitative Evaluation (NAME)
 - 1.9.2.4.1** Statistical Analysis (A2 Comparative Statistics; Statistical Methods; Statistical Processes) (A2TECHGRP)
- 1.9.3 Employment Evaluation Methods** (NAME)
 - 1.9.3.1** Check Lists (A2TECHGRP)
 - 1.9.3.2** Concept Maps (A2 Concept Mapping; Mind Mapping) (NAME)
 - 1.9.3.3** Confidence Logs (NAME)
 - 1.9.3.4** Experiments (A2 Experimentation) (A2TECHGRP)
 - 1.9.3.5** Focus Groups (NAME)
 - 1.9.3.6** Interviews (A2 Interviewing) (A2TECHGRP)
 - 1.9.3.7** Nominal Group Technique (NAME)
 - 1.9.3.8** Observation (NAME)
 - 1.9.3.9** Pretests-Posttests (A2 Post Testing; Pre-tests) (A2TECHGRP)
 - 1.9.3.10** Questionnaires (A2TECHGRP)
 - 1.9.3.11** Sample Selection (NAME)
 - 1.9.3.12** System Log Data (NAME)
 - 1.9.3.13** Trials (NAME)
 - 1.9.3.14** Iterations (NAME)

Employment Related Educational Taxonomy Phase Two: Educational Technology

- 2 Employment Educational Technology** (A2 Instructional Technology; Computer Aided Learning; Computer Aided Teaching; Computer Aided Instruction; CAL; CAI; CIT; C&IT; ICT) (A2TECHGRP)
 - 2.1 Employment Computer Mediated Communication** (A2 CMC) (NAME)
 - 2.1.1 Employment Netiquette** (A2 E-Mail Etiquette; Web Etiquette; Internet Etiquette) (NAME)
 - 2.1.2 Employment Moderating Skills** (A2 E-Moderation; Moderation) (NAME)

- 2.1.3 Employment Synchronous Communication** (A2 Synchronous Collaboration Tools) (NAME)
 - 2.1.3.1** Internet Chat (A2 Internet Relay Chat; IRC; CompuServe; Instant Messaging) (NAME)
 - 2.1.3.2** Audio Conferencing (NAME)
 - 2.1.3.3** Videoconferencing (NAME)
 - 2.1.3.3.1** ISDN Videoconferencing (NAME)
 - 2.1.3.3.2** ATM Videoconferencing (NAME)
 - 2.1.3.3.3** Desktop Videoconferencing (NAME)
 - 2.1.3.4** Shared Whiteboard (A2Whiteboarding; Shared Notebook) (NAME)
 - 2.1.3.5** Application Sharing (NAME)
 - 2.1.3.5.1** Shared Document (NAME)
 - 2.1.3.5.2** Shared Browsing (A2 Group Browsing) (NAME)
- 2.1.4 Employment Asynchronous Communication** (A2 Asynchronous Learning Networks; ALNs; Asynchronous Collaboration Tools) (NAME)
 - 2.1.4.1** Email (A2 Electronic Mail; E-mail; Text Based Conferencing) (NAME) (A2TECHGRP uses Electronic Mail)
 - 2.1.4.1.1** Mailing Lists (A2 Discussion Lists; Listserve; Mailbase) (NAME)
 - 2.1.4.1.2** Bulletin Boards (A2 Discussion Forums; Discussion Boards) (NAME)
 - 2.1.4.1.3** Newsgroups (A2 Usenet) (NAME)
- 2.2 Employment Virtual Learning Environments** (A2 Online Learning Environment; Hypertext Learning Environment; VLEs; Learning Management Systems; Collaborative Learning Software) (NAME) *See also under Educational Development-Educational Environments*
 - 2.2.1 Employment Virtual Laboratories** (NAME)
 - 2.2.2 Employment Virtual Design Studios** (NAME)
 - 2.2.3 Employment Managed Learning Environments** (A2 MLEs) (NAME) *See also under Educational Development – Educational Environments*
- 2.3 Employment GroupWare** (A2 Groupware) (NAME)
- 2.4 Employment Courseware** (A2 Educational Software) (NAME) (A2TECHGRP uses Educational Software)
- 2.5 Employment Computer Aided Assessment** (A2 Computer Aided Testing; Computer Assisted Assessment; CAA; Computer Based Assessment) (NAME) (A2TECHGRP uses Computer Assisted Testing)
 - 2.5.1 Employment Online Tests** (A2 Online Quizzes; Online Examinations) (NAME)
- 2.6 Employment Computer Modeling** (NAME)
- 2.7 Employment Computer Simulation** (A2TECHGRP)
 - 2.7.1 Employment Interactive Simulation** (NAME)
 - 2.7.2 Employment Collaborative Simulation** (NAME)
 - 2.7.3 Employment Microworlds** (NAME)

- 2.7.4 Employment Virtual Reality** (NAME)
- 2.8 Employment Computer Networks** (A2TECHGRP)
 - 2.8.1 Employment Telnet** (NAME)
 - 2.8.2 Employment Intranets** (NAME)
 - 2.8.3 Employment Local Area Networks** (A2 LANs) (A2TECHGRP)
 - 2.8.4 Employment Metropolitan Area Networks** (A2 MANs) (NAME)
 - 2.8.5 Employment Wide Area Networks** (A2TECHGRP)
- 2.9 Employment Internet** (A2 World Wide Web; WWW) (NAME)
 - 2.9.1 Employment Internet Searching** (A2 Internet Browsing; Web Browsing; Web Searching; Internet Surfing; Web Surfing) (NAME)
 - 2.9.1.1 Web Browsers** (A2 Internet Explorer; Netscape) (NAME)
 - 2.9.1.2 Internet Search Engines** (A2 Web Guides) (NAME)
 - 2.9.2 Employment Internet Resources** (A2 Web Resources) (NAME)
 - 2.9.2.1 Subject Gateways** (A2 Subject Portals) (NAME)
 - 2.9.2.2 Digital Libraries** (A2 Online Libraries; Digital Resource Centers; Online Resource Centers) (NAME)
 - 2.9.2.3 Databases** (A2TECHGRP)
 - 2.9.2.4 Library Catalogues** (A2 Online Library Catalogues) (A2TECHGRP)
 - 2.9.2.5 Web Sites** (A2 Websites) (NAME)
 - 2.9.2.6 FAQs** (A2 Frequently Asked Questions) (NAME)
 - 2.9.2.7 Answer Gardens** (NAME)
 - 2.9.3 Employment Web Site Production** (A2 Website Production; Web Production; Web Page Production) (NAME)
 - 2.9.3.1 Web Authoring** (NAME)
 - 2.9.3.1.1 HTML** (NAME)
 - 2.9.3.1.2 HTML Editors** (NAME)
 - 2.9.3.3.2.1 WYSIWIG Editors (NAME)
 - 2.9.3.3.2.2 Text Editors (NAME)
 - 2.9.3.1.3 JavaScript** (NAME)
 - 2.9.3.1.4 Java** (NAME)
 - 2.9.3.3.4.1 Java Applets (NAME)
 - 2.9.3.2 Web Design** (A2 Web Site Design; Website Design; Computer Graphics; Graphic Design) (NAME)
 - 2.9.3.3 Web Publishing** (A2 Internet Publishing; FTP) (NAME)
- 2.10 Employment Educational Multimedia** (A2 Educational Media; Instructional Media; Mechanical Teaching Aids) (NAME) (A2TECHGRP uses Educational Media)
 - 2.10.1 Employment Video** (NAME)
 - 2.10.2 Employment CD-ROM** (NAME)

- 2.10.3 Employment DVD** (A2 Digital Video Discs) (NAME)
- 2.10.4 Employment Educational Broadcasting** (A2TECHGRP)
 - 2.10.4.1** Radio Broadcasting (NAME)
 - 2.10.4.2** Television Broadcasting (NAME)
 - 2.10.4.3** Satellite Broadcasting (NAME)
 - 2.10.4.4** Webcasting (A2 Web Broadcasting) (NAME)
- 2.10.5 Employment Streaming Media** (NAME)
 - 2.10.5.1** Streaming Audio (NAME)
 - 2.10.5.2** Streaming Video (NAME)
- 2.11 Employment Human Computer Interaction** (A2 Human Computer Interface; Man Machine Systems; HCI) (A2TECHGRP)
- 2.12 Employment Accessibility** (A2 Web Accessibility; Disabled Access) (NAME)
- 2.13 Employment Embedding Technology** (A2 Integrating Technology) (NAME)
- 2.14 Employment Legal and Ethical Issues** (NAME)
 - 2.14.1 Employment Privacy** (A2TECHGRP)
 - 2.14.2 Employment Intellectual Property** (A2 Ownership of Ideas; Intellectual Property Rights; IPR) (A2TECHGRP)
 - 2.14.2.1** Copyright (A2 Copyrights) (A2TECHGRP)
 - 2.14.2.2** Conditions of Use (NAME)
 - 2.14.2.3** Data Protection (A2TECHGRP)
- 2.15 Employment Standards** (A2TECHGRP)
 - 2.15.1 Employment Metadata** (NAME)
 - 2.15.1.1** Dublin Core (NAME)
 - 2.15.1.2** IMS (NAME)
 - 2.15.1.3** Controlled Vocabularies (A2 Taxonomies; Thesauri; Subject Headings; Classification Schemes) (NAME)
- 2.16 Employment Software Packages** (A2 Computer Programs) (NAME)
 - 2.16.1 Employment Computer Mediated Communication** (A2 CMC)
 - 2.16.1.1** CU-See Me
 - 2.16.1.2** Hyper News
 - 2.16.1.3** ICQ
 - 2.16.1.4** NetMeeting
 - 2.16.1.5** PowerPoint
 - 2.16.1.6** ProShare
 - 2.16.1.7** Web Board

2.16.2 Employment Virtual Learning Environments (A2 Online Learning Environment; Hypertext Learning Environment; VLEs; Learning Management Systems; Collaborative Learning Software)

2.16.2.1 Blackboard

2.16.2.2 Clyde Virtual University (A2 CVU)

2.16.2.3 Colloquia

2.16.2.4 Co Mentor

2.16.2.5 COSE

2.16.2.6 First Class

2.16.2.7 Fretwell-Downing

2.16.2.8 Lotus Learning Space

2.16.2.9 Merlin

2.16.2.10 M tutor

2.16.2.11 PIONEER

2.16.2.12 Tool Book

2.16.2.13 Top Class

2.16.2.14 Web Course in a Box

2.16.2.15 WebCT

2.16.2.16 Virtual Learning Space

2.16.2.17 Virtual-U

2.16.3 Employment Computer Aided Assessment (A2 Computer Aided Testing; Computer Assisted Assessment; CAA; Computer Based Assessment) (NAME) (A2TECHGRP uses Computer Assisted Testing)

2.16.3.1 CASTLE

2.16.3.2 Clyde Virtual University Assessment Engine (A2 CVU Test Wizard)

2.16.3.3 EQL Interactive Assessor

2.16.3.4 Hot Potatoes

2.16.3.5 Miranda (A2 CVU Assessment Engine)

2.16.3.6 Question Mark (A2QuestionMark Perception; Question Mark Designer)

2.16.3.7 TRIADS

2.16.3.8 Web MCQ

2.16.3.9 Web Test

2.16.3.10 Win Asks Professional

2.16.3.11 WWW Assign

2.16.4 Employment Groupware

2.16.4.1 BSCW

2.16.4.2 Yahoo Clubs

- 2.16.5 Employment Web Site Production** (A2 Web Editors, HTML Editors, WYSIWYG Editors)
 - 2.16.5.1** CourseBuilder (A2CourseBuilder for Dreamweaver)
 - 2.16.5.2** DreamWeaver
 - 2.16.5.3** Netscape Composer
 - 2.16.5.4** FrontPage
 - 2.16.5.5** Hotmetal Pro
 - 2.16.5.6** Pagemill
- 2.16.6 Employment Multimedia Authoring**
 - 2.16.6.1** Authorware
 - 2.16.6.2** Director
 - 2.16.6.3** Flash
- 2.16.7 Employment Simulations**
 - 2.16.7.1** Learning Landscapes
 - 2.16.7.2** Multi-Verse
- 2.16.8 Employment Graphic Design** (A2 Computer Graphics)
 - 2.16.8.1** Corel Xara
 - 2.16.8.2** Illustrator
 - 2.16.8.3** Paint Shop Pro
 - 2.16.8.4** Photoshop

Employment Related Educational Taxonomy Phase Three: Academic Management

3 Employment Academic Management

- 3.1 Employment Financial Management** (A2 Money Management) (NAME) (A2TECHGRP uses Money Management)
 - 3.1.1 Employment Financial Policy** (A2 Fiscal Policy) (A2TECHGRP)
 - 3.1.2 Employment Financial Support** (A2 Funding; Economic Support; Financing)
 - 3.1.2.1 Fund-Raising**(A2TECHGRP)
 - 3.1.2.1.1 Grants** (A2 Subsidies) (A2TECHGRP)
 - 3.1.3 Employment Accounting** (A2TECHGRP)
 - 3.1.4 Employment Budgeting** (A2 Budgets; Budgetary Control) (A2TECHGRP)
- 3.2 Employment Planning** (A2TECHGRP)
 - 3.2.1 Employment Accreditation** (A2TECHGRP)
 - 3.2.2 Employment Quality Assurance** (A2 QAA) (A2TECHGRP)
- 3.3 Employment Personnel Management** (A2 Human Resources; Human Resource Management) (A2TECHGRP)

- 3.3.1 Employment Recruitment** (A2TECHGRP)
- 3.3.2 Employment Selection** (A2TECHGRP)
- 3.3.3 Employment Contracts** (A2TECHGRP)
- 3.3.4 Employment Induction** (A2TECHGRP)
- 3.3.5 Employment Training** (A2TECHGRP)
- 3.3.6 Employment Motivation** (A2TECHGRP)
- 3.3.7 Employment Team Building** (NAME)
- 3.3.8 Employment Supervision** (A2TECHGRP)
- 3.3.9 Employment Performance Appraisal** (A2 Personnel Evaluation; Staff Evaluation) (NAME) (A2TECHGRP uses Personnel Evaluation)
- 3.3.10 Employment Staff Development** (A2TECHGRP)
- 3.3.11 Employment Grievance Procedures** (A2TECHGRP)
- 3.3.12 Employment Disciplinary Procedures** (NAME)
- 3.3.13 Employment Equal Opportunities** (A2 Employment Discrimination; Equal Employment; Social Exclusion; Job Discrimination) A2TECHGRP
 - 3.3.13.1 Gender**(A2 Sex) (NAME) (A2TECHGRP uses Sex)
 - 3.3.13.2 Race** (A2TECHGRP)
 - 3.3.13.3 Ethnicity**(A2TECHGRP)
 - 3.3.13.4 Nationality**(NAME)
 - 3.3.13.5 Disabilities**(A2TECHGRP)
 - 3.3.13.6 Social Class**(A2TECHGRP)
 - 3.3.13.7 Religion**(A2TECHGRP)
 - 3.3.13.8 Sexual Orientation**(A2 Sexuality; Sexual Preference; Sexual Identity) (NAME)
 - 3.3.13.9 Harassment**(NAME)
- 3.3.14 Employment Communication** (A2TECHGRP)
- 3.3.15 Employment Industrial Relations** (A2 Employee Relations; Labor Relations) (NAME) (A2TECHGRP uses Labor Relations)
- 3.3.16 Employment Investors in People** (A2 IIP) (NAME)
- 3.4 Employment Professional Development**
 - 3.4.1 Employment Courses** (A2TECHGRP)
 - 3.4.2 Employment Conferences** (A2TECHGRP)
 - 3.4.3 Employment Mentors** (A2TECHGRP) *See also under Educational Development – Teaching and Learning Methods*
 - 3.4.4 Employment Qualifications** (A2TECHGRP)
 - 3.4.4.1 Degrees** (A2TECHGRP)

- 3.4.5 Employment Professional Associations** (A2TECHGRP)
 - 3.4.5.1 Professional Recognition** (A2 Professional Status) A2TECHGRP
- 3.4.6 Employment Portfolios** (NAME)
- 3.4.7 Employment Research** (A2TECHGRP) *See also under Educational Development – Outcomes of Education)*
- 3.4.8 Employment Publication** (NAME)
 - 3.4.8.1 Peer Reviewed Publication** (A2 Refereed Publications) (NAME) (A2TECHGRP uses Peer Evaluation)
- 3.4.9 Employment** (A2 Jobs) (A2TECHGRP)
 - 3.4.9.1 Job Search Methods** (A2TECHGRP)
 - 3.4.9.2 Curriculum Vitae** (A2 Resume; CV) (NAME) (A2TECHGRP uses Resume)
 - 3.4.9.3 Job Application** (A2TECHGRP)
 - 3.4.9.4 Employment Interviews** (A2 Job Interviews) (A2TECHGRP)
 - 3.4.9.5 Career Planning** (A2TECHGRP)
 - 3.4.9.6 Career Development** (A2TECHGRP)
- 3.4.10 Employment Secondments**(A2TECHGRP)
- 3.4.11 Employment Sabbaticals** (A2 Study Leave) (NAME) (A2TECHGRP uses Study Leave)
- 3.4.12 Employment Personal Development** (NAME) (A2TECHGRP uses Individual Development)
- 3.5 Employment Project Management** (NAME)
 - 3.5.1 Employment Project Planning** (NAME)
 - 3.5.2 Employment Project Design** (NAME) (A2TECHGRP uses Programmed Design)
 - 3.5.3 Employment Project Development** (NAME) (A2TECHGRP uses Programmed Development)
 - 3.5.4 Employment Project Evaluation** (NAME) (A2TECHGRP uses Programmed Evaluation)
- 3.6 Employment Consultancy** (A2 Consultants) (NAME) (A2TECHGRP uses Consultants)

Employment Related Educational Taxonomy Phase Four: Resource Types [One](#) & [Two](#)

4 Employment Resource Types

- 4.1 Employment Bibliographies** (A2 Reading Lists; Book Lists; Booklists; Literature Reviews; Resource Lists) (A2TECHGRP)
- 4.2 Employment Case Studies** (A2TECHGRP)
- 4.3 Employment FAQs** (A2 Frequently Asked Questions) (NAME)
- 4.4 Employment Glossaries** (A2 Word Lists; Lexicons; Dictionaries; Vocabularies; Terminologies) (A2TECHGRP)
- 4.5 Employment Handouts** (NAME)
- 4.6 Questionnaires** (A2TECHGRP)
- 4.7 Employment Tests** (A2 Quizzes; Examinations) (A2TECHGRP)

4.8 Employment Graphics (A2 Graphic Images; Pictures; Diagrams; Illustrations) (NAME)

4.8.1 Employment Animations (NAME)

4.9 Employment Multimedia (NAME)

4.10 Employment Interactions (NAME)

Employment Related Educational Taxonomy Phase Five: Subject

5 Employment Subjects (A2 Academic Discipline)

5.1 Generalities (Dewey)

5.1.1 Employment Bibliography (Dewey)

5.1.2 Employment Library Science (A2 Information Science) (Dewey)

5.1.3 Employment Encyclopedias(NAME)

5.1.4 Employment Unassigned (Dewey)

5.1.5 Employment Magazines (Dewey)

5.1.6 Employment Museums (Dewey)

5.1.7 Employment Journalism (Dewey)

5.1.8 Employment General Collections (Dewey)

5.1.9 Employment Manuscripts, Rare Books (Dewey)

5.2 Employment in Philosophy (Dewey)

5.2.1 Employment in General Philosophy (NAME)

5.2.2 Employment in Metaphysics (Dewey)

5.2.3 Employment in Epistemology (Dewey)

5.2.4 Employment in Specific Philosophies (Dewey)

5.2.5 Employment in Logic (Dewey)

5.2.6 Employment Ethics (Dewey)

5.2.7 Employment in Ancient Philosophy (Dewey)

5.2.8 Employment in Modern Philosophy (Dewey)

5.3 Employment in Religion (A2 Divinity) (Dewey)

5.3.1 Employment in Religion (Dewey)

5.3.2 Employment in Theology (NAME)

5.3.3 Employment in the Bible (Dewey)

5.3.4 Employment in Christian Church History (Dewey)

5.3.5 Employment in Christian Denominations (Dewey)

5.3.6 Employment in Other Religions (Dewey)

- 5.4 Employment Social Science** (Dewey)
- 5.4.1 Employment Sociology** (A2 Social Science) (NAME)
 - 5.4.2 Employment Political Science** (A2 Politics) (Dewey)
 - 5.4.3 Employment Economics** (Dewey)
 - 5.4.4 Employment Law** (Dewey)
 - 5.4.5 Employment Public Administration** (Dewey)
 - 5.4.6 Employment Social Work** (A2 Social services) (NAME)
 - 5.4.7 Employment Education** (Dewey)
 - 5.4.8 Employment Psychology** (NAME)
 - 5.4.9 Employment Marketing** (A2 Commerce) (NAME)
 - 5.4.10 Employment Ethnology** (A2 Customs; Folklore) (NAME)
- 5.5 Employment Language** (Dewey)
- 5.5.1 Employment Language** (Dewey)
 - 5.5.2 Employment Linguistics** (Dewey)
 - 5.5.3 Employment English** (Dewey)
 - 5.5.4 Employment in German** (Dewey)
 - 5.5.5 Employment in French** (Dewey)
 - 5.5.6 Employment in Italian, Romanian** (Dewey)
 - 5.5.7 Employment in Spanish, Portuguese** (Dewey)
 - 5.5.8 Employment in Latin** (Dewey)
 - 5.5.9 Employment in Classical Greek** (Dewey)
 - 5.5.10 Employment in Other Languages** (Dewey)
- 5.6 Employment Science** (Dewey)
- 5.6.1 Employment Science** (Dewey)
 - 5.6.2 Employment Mathematics** (A2 Maths) (Dewey)
 - 5.6.3 Employment Statistics** (NAME)
 - 5.6.4 Employment Astronomy** (Dewey)
 - 5.6.5 Employment Physics** (Dewey)
 - 5.6.6 Employment Chemistry** (Dewey)
 - 5.6.7 Employment Earth Sciences** (A2 Geology) (Dewey)
 - 5.6.8 Employment Paleontology** (NAME)
 - 5.6.9 Employment Biosciences** (A2 Life Sciences; Biology) (NAME)
 - 5.6.10 Employment Botany** (Dewey)
 - 5.6.11 Employment Zoology** (Dewey)
- 5.7 Employment Technology** (Dewey)

- 5.7.1 Employment Computer Science** (A2 Computing) (NAME)
- 5.7.2 Employment Medicine** (Dewey)
- 5.7.3 Employment Engineering** (Dewey)
- 5.7.4 Employment Agriculture** (A2 Agricultural Science) (Dewey)
- 5.7.5 Employment Management** (A2 Management Science) (Dewey)
- 5.7.6 Employment Chemical engineering** (Dewey)
- 5.7.7 Employment Manufacturing** (Dewey)
- 5.7.8 Employment in Specific Industries** (Dewey)
- 5.7.9 Employment Related Buildings** (Dewey)
- 5.8 Arts** (Dewey)
 - 5.8.1 Arts, Entertainment** (Dewey)
 - 5.8.2 Civic and Landscape Art** (Dewey)
 - 5.8.3 Architecture** (Dewey)
 - 5.8.4 Plastic Arts, Sculpture** (Dewey)
 - 5.8.5 Drawing, Decorative Arts** (Dewey)
 - 5.8.6 Painting** (Dewey)
 - 5.8.7 Graphic Arts, Printmaking** (Dewey)
 - 5.8.8 Photography** (Dewey)
 - 5.8.9 Music** (Dewey)
 - 5.8.10 Performing Arts**(NAME)
- 5.9 Literature of Employment**(Dewey)
 - 5.9.1 Literature** (Dewey)
 - 5.9.2 American** (Dewey)
 - 5.9.3 English** (Dewey)
 - 5.9.4 German** (Dewey)
 - 5.9.5 French** (Dewey)
 - 5.9.6 Italian, Romanian** (Dewey)
 - 5.9.7 Spanish, Portuguese** (Dewey)
 - 5.9.8 Latin** (Dewey)
 - 5.9.9 Classical Greek** (Dewey)
 - 5.9.10 Other Literatures** (Dewey)
- 5.10 Employment History** (Dewey)
 - 5.10.1 Employment Geography and History** (Dewey)
 - 5.10.2 Employment Geography and Travel** (Dewey)
 - 5.10.3 Employment Biography, Genealogy** (Dewey)

- 5.10.4 Employment History of the Ancient World** (Dewey)
- 5.10.5 Employment Archaeology** (NAME)
- 5.10.6 Employment History of Europe** (Dewey)
- 5.10.7 Employment History of Asia** (Dewey)
- 5.10.8 Employment History of Africa** (Dewey)
- 5.10.9 Employment History of North America** (Dewey)
- 5.10.10 Employment History of South America** (Dewey)
- 5.10.11 Employment History of Other Areas** (Dewey)

Reference Description:

DOT for Windows assists job seekers, employers, educational and training institutions, researchers and others by detailing tasks performed, educational requirements, and skills needed for more than **12,000** types of jobs.

It is the complete, 1,300-page, 2-volume DOT, with a retrieval program that enables you to search easily and quickly using words or numbers on any of the **28,800** job titles.

You can click for groups and click a group to go to successive levels of subgroupings.

Search the DOT index using any alphanumeric string to locate job(s) by DOT code or a portion of one, or to find the code for any job title containing a word, phrase or portion of a word of your choice.

You can also browse, copy, paste, and output information to any Windows document or to a printer.

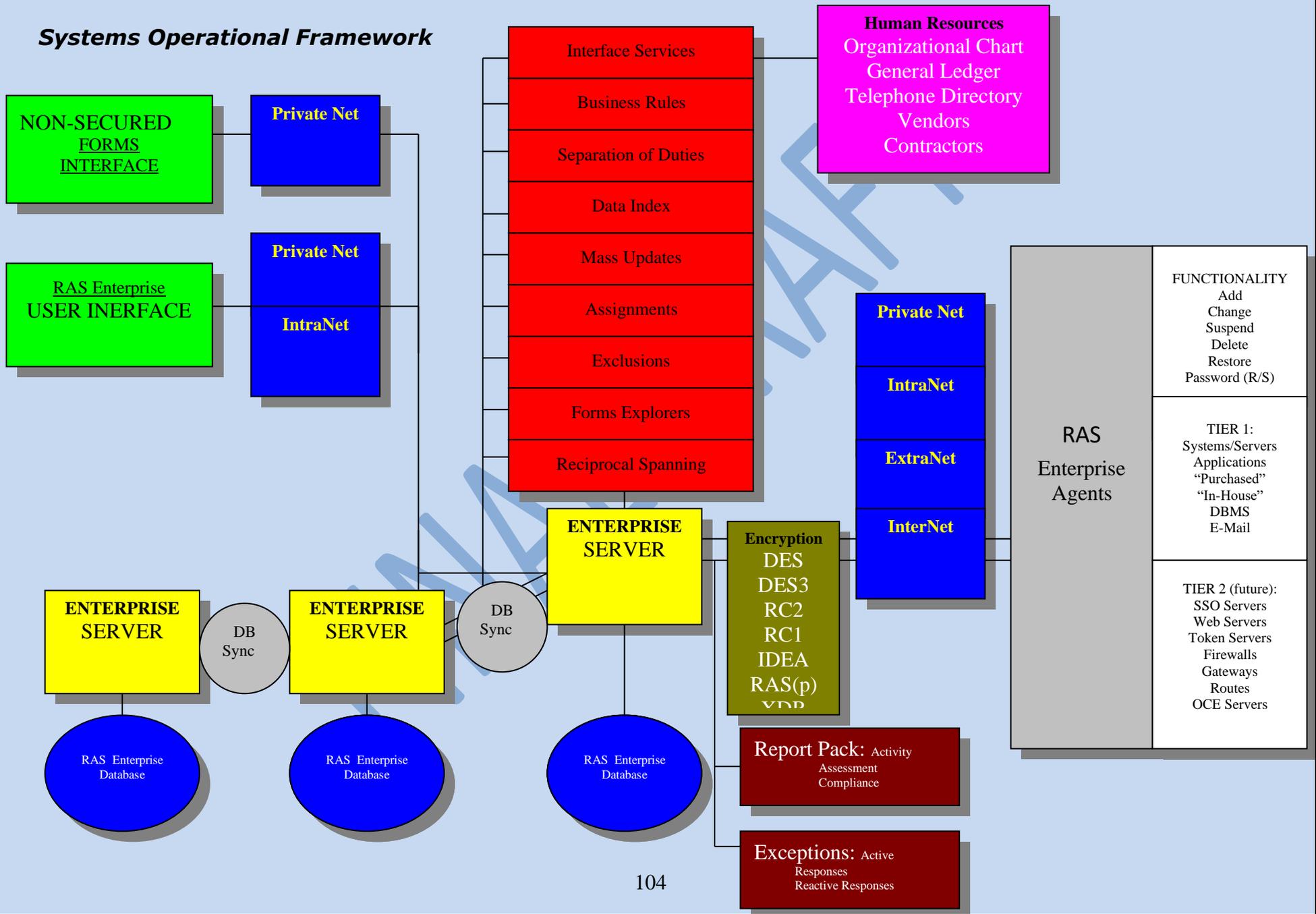
SMARTPHONE APPLICATION DEVELOPERS FOR INDIVIDUAL SYSTEMS DEVELOPMENT

1. **iDEVs@** <http://www.idevs.com/?gclid=CKCFquyz66kCFQ5EgwodEliIzG>
2. **AVENUESOCIAL@**<http://www.avenuesocial.com/portfolio.html&http://www.avenuesocial.com/mob-app.php> *****
3. **Bianor @** <http://www.bianor.com/mobile-application-development/>
4. **Fuzz Productions @** http://fuzzproductions.com/mobile/?_k=mobile%20app%20developer&_kt=4c110d61-af85-4714-820f-dabd53708bc0&gclid=CJr6-au466kCFakaQgodIndPYw
5. **Mutual Mobile @** <http://www.mutualmobile.com/clients/>
6. **JLOOP @** <http://www.jloop.com/?gclid=CKXNwNW566kCFRrxrgwodZAM0Xw>
7. **SourceBits @** <http://www.sourcebits.com/services>
8. **Mobi-People @** <http://www.mobi-people.com/services.html>
9. **Iammobileapps @** <http://www.iammobileapps.com/mobile-services.html>
10. **MUBALOO @** <http://mubaloo.com/>

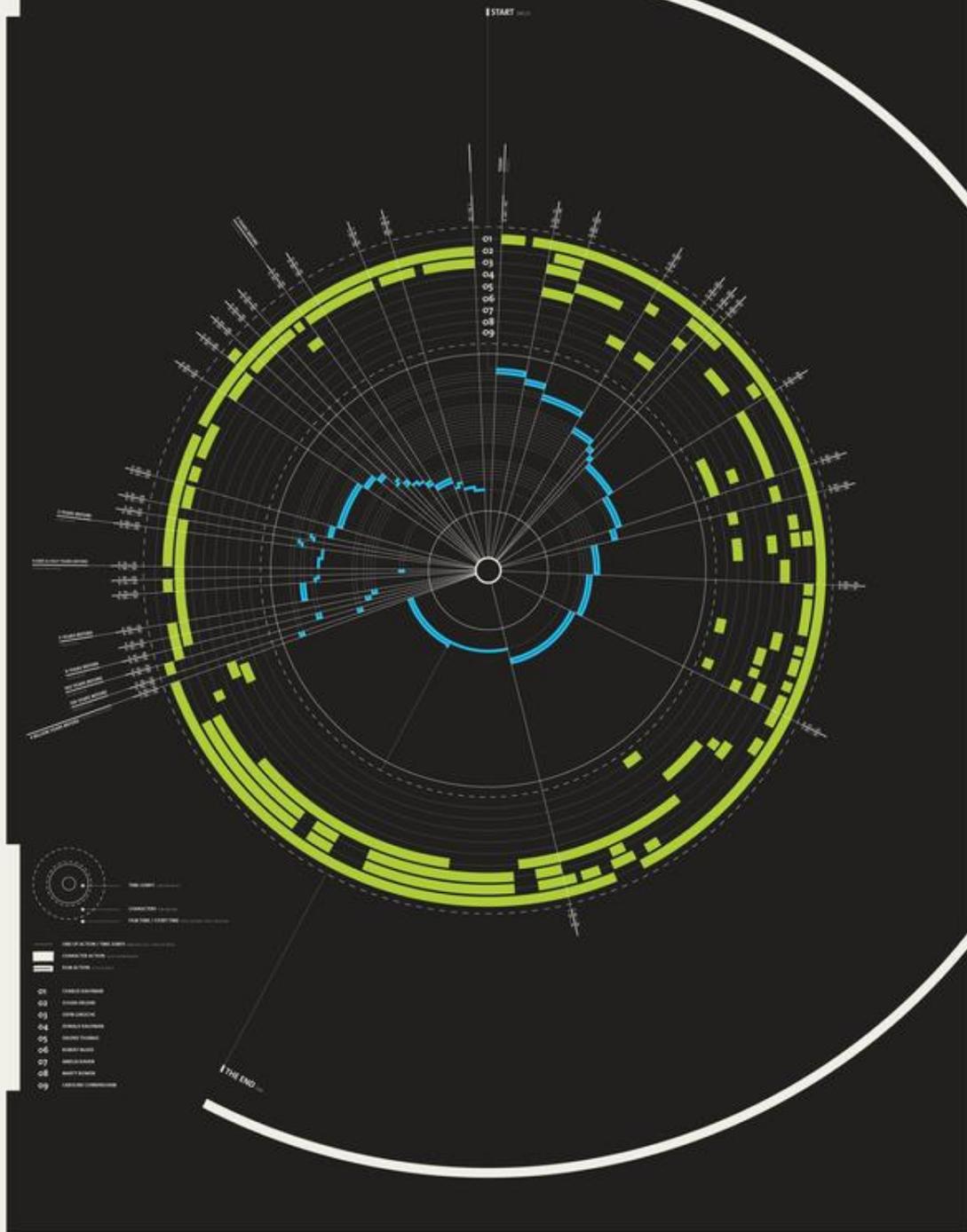
SMARTPHONE APPLICATIONS FOR INDIVIDUAL SYSTEMS DEVELOPMENT

1. **VIRTUAL EMPLOYEE DEVELOPMENT @** http://virtualemployees.com/outsourcing_LSL_with_VirtualEmployee.php *****
2. **LINDEN SCRIPTING LANGUAGE@**http://wiki.secondlife.com/wiki/LSL_Portal
3. **LINDEN SCRIPTING GUIDE @**<https://wiki.internet2.edu/confluence/download/attachments/16291/Linden+Scripting+Language+Guide.html>
4. **vBULLETIN DEVELOPMENT @**<http://www.centiplex.com/?q=node/113>
5. **ADVERTISING REPRESENTATIVES @** http://www.bannerspace.com/publisher/site_representation.htm *****

Systems Operational Framework



ADAPTATION INADAPTADO





(ANMESCL² EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

THE ONESIMUS EQUATIONS PROCEDURAL CONFIGURATION & INTERPRETATIONS FOR GENETIC-BASED CONSULTATIVE PLANNING & DESIGN APPROACHES

$$X^3 \left(RW = \frac{EH^2}{QM} \right)$$

Homo Economicus Universal

THE OVERALL TECHNICAL GOAL & OBJECTIVES OF THE 9 PRINCIPLE PARTS OF ENGLISH
SPEECH FORMULA SYSTEMS INVOLVING THE IBOS [DOS/DALP/IAOA] TECHNOLOGY BASE

$$L^2 \left(E = \frac{I^2}{V} \right)$$

Pursuing the Planning & Design Strategy (CPDA Norms & Standards Issues)

1. First, to simultaneously change the worded or ideological reflection of abstract thoughts or policies, as well as real-time descriptions, into different distributed or multiple levels of comprehension. Whether or not they are defined in the past, present or future tense.

2. Second, to establish a synonymous relationship with definitive principles, and those words, concepts & ideas used to engineer software, systems, internet & societal issues or programs through CASE technologies.
3. Third, to transform biological entities into biographic, database or library technologies. Then, to transform these biological & biographic terms or descriptions into virtual human beings or other entities within virtual environments or societies. The immediate goal of which, is to achieve the ability to predict futuristic outcomes involving man, machine & the real-time environment as a whole.
4. Fourth, to simultaneously implement those organizational policies involving problem-solving measures of effectiveness into specific educational hierarchies, or subordinate distributed environments, across multiple levels of the comprehensive thought process.
5. Finally, to facilitate an accurate or acceptable level of global market prediction & manipulation through the application of genetics into the previous areas by way of the addition & use of a consultative matrix.

THE INFUSION OF 9 ENNEAGRAMIC PRINCIPLE PARTS OF ENGLISH SPEECH PATTERNS INTO THE GLOBAL DRIVERS OF STRATEGIC & TACTICAL INNOVATIONS INVOLVING MASLOW'S HIERARCHY OF NEEDS

De Imperatoribus Romanis

$$G^2 \left(E = \frac{NT^2}{OT} \right)$$

Specifying & Implementing Solutions (CPDA Morale & Cohesion Issues)

1. The **12 Tribes** of the Body of Israel (The Driving Principles of Judaism)
 - I. **Pronouns** – [$G^{2(S)}$]
2. The **12 Apostles** of the Body of Christ (The Structural Foundation of Christianity)
 - I. **Adverbs** – [M^2]
3. The **12 Commanding Principles** of the Body of Mohammed (The **12 Concepts**, Traditions & Steps of Islam)
 - I. **Adjectives** – [$G^{2(M)}$]
4. The **12 Regions** of the Human Body Involving the Fields of Human Activities (The DOT)
 - I. **Nouns** – [A^2]
5. The **12 Districts** of the U.S. Federal Reserve System (The Commanding Heights of Banking)
 - I. **Interjections** – [$T^{3(D)}$]
6. The **12 Global Economic Drivers** of Strategic & Tactical Innovations (Statistic & Logistical Operations)
 - I. **Prepositions** – [$G^{2(E)}$]
7. The **12 NPMIS Members** of the Board of Network Representatives (NAME & A-Square Technologies)
 - I. **Conjunctions** – [$T^{3(C)}$]
8. The **12 Method Structures** of Strategic & Tactical Operations (The Planning & Design Approaches)
 - I. **Verbs** – [L^2]

THE CAPABILITY MATURITY MODEL INTEGRATION-INTEGRATED
PRODUCT & PROCESS DESIGN STAGED (CMMI-IPPD STAGED)

- 
9. The **12** Sections of the Human Biological Existence (The Biochemical Response Systems) – **[PA²]**
 - I. The **Transitive/Intransitive Verbs** involving **Norms/Standards** (The Philosophical Approaches)
 10. The **12** Components of the Economic Intelligence Network News Service (Evolving OD) – **[PA²]**
 - I. The **Transitive/Intransitive Verbs** involving **Power/Authority** (The Sociological Approaches)
 11. The **12** Components of Employment Related Software Development (Semantic CASE Development) – **[PA²]**
 - I. The **Transitive/Intransitive Verbs** involving **Goals/Objectives** (The Physiological Approaches)
 12. The **12** Components of the Change Equation (The Infused Genetic Prototyping) – **[PA²]**
 - I. The **Transitive/Intransitive Verbs** involving **Morale/Cohesion** (The Psychological Approaches)

THE ALPHANUMERIC OR MATHEMATICAL CONFIGURATION OF
GRAMMATIC INTERPRETATIONS INVOLVING PEOPLE WITHIN
PROBLEM SOLVING MEASURES OF EFFECTIVENESS THAT HOUSES
THE TOTAL CONSULTATIVE PLANNING & DESIGN APPROACHES

$$PA^2 \left(MC = \frac{NS^2}{GO} \right)$$

Involving People or Arranging for Continuing Change & Improvement (CPDA Goals & Objective Issues)

[TTT] – [ADM]

The Genetic Consultative Interpretation of the Alphanumeric or Mathematical Configurations

[ADM] – [SLF]

The Chemical or Elemental Representation of the Consultative Genetic Interpretations

The previous formulae & genetic components use an interrelated framework by which procedural thought can be expressed within numerous fronts of the following representations:

1. Systems Transformation/Biographical Methods/Power & Authority/Sociological Issues
2. Systems Translation/Biochemical Methods/Morale & Cohesion/Psychological Issues
3. Systems Transfiguration/Biomechanical Methods/Norms & Standards/Philosophical Issues
4. Systems Transaction/Biological Methods/Goal & Objectives/Physiological Issues

All nine formulas represent the 9 principle parts of English speech, of which, are implemented into supporting or facilitating a series of procedures that use the human genome to customize internet content. Additionally, this same process simultaneously supports a means from which the words, concepts & ideas

that express or defines the particulars of the human condition are jointly transformed into virtual and/or real-time systems & internet technologies.

Overall, these mathematical equations function as a central nervous system for definitive words, concepts & ideas. Whereby, a synonymous relationship is established between the managerial principles of problem solving measures of effectiveness within educational hierarchies, and that of change or risk management within novel organizational forms. Moreover, this approach toward systems development shall facilitate management's ability to instantly infuse strategic or tactical policies & technology bases throughout hierarchal or collaborative businesses within the distributed environment of the global economy.

Furthermore, the 9 mathematical equations of NAME (i.e., the A-Square Technology Group) use genetics to facilitate the simultaneous manipulation & implementation of approximately **11,664 Strategic & Tactical Operations** behind each & every word, concept or idea involved in the application of problem solving measures of effectiveness, housed within a consultative planning & design approach or environment consisting of human or social values.

Overall, this process will establish a means by which those strategic & tactical issues involving varied entities, will have the words, concepts & ideas used to describe their mental or physical existence transformed into a virtual private network (i.e., autonomous agent platforms). This in turn, will establish a functional search engine that personalizes internet content into organizational and/or personal user-friendly guidelines, consisting of those 5-phases involved with organizational development thru the principles change and risk management. Finally, this goal & objective is achieved through infusing the 9 mathematical equations into the nine principal subcomponents of a Method Structure, whose number as a whole is approximately 12, one for each major region consisting of biological lifeforms or strategic & tactical bodies of information.

THE SYMBIOTIC LEVELS WITHIN THE GLOBAL DRIVERS OF STRATEGIC & TACTICAL INNOVATIONS INVOLVING THE HUMAN GENOME

$$M^2 \left(E = \frac{T^2}{Q} \right)$$

Information & Knowledge (CPDA Power & Authority Issues)

THE SYMBIOTIC RELATIONSHIP BETWEEN WORDS, CONCEPTS OR IDEAS & THE SOFTWARE ENGINEERING BODY OF KNOWLEDGE

1. The Entry Fields of Human Activities Involving the Strategic & Tactical Usabilities of Risk or Change Management (TML) [Linguistic Construction Methods of the Straw MAN Version]
 - a. Words – TTT (QMT, AOS & ASOS) [a.]
 - b. Clauses & Phrases – CPDA (Genetic Grammar) [g.]
 - c. Sentences – CMMI-IPPD (Continuous) [e.]
 - d. Paragraphs – SWEBOK (Problem Format) [i.]
 - e. Chapters – CPDA (Interventions) [h.]
 - f. Books – SEIMPH (References) [c.]
 - g. Contracts – ACCI (SEBK) [d.]
 - h. Policies – ERF (Usabilities) [b.]

- i. Strategies & Tactics – TMM (DOT Databases) [f.]
2. The Consultative Planning & Design Approaches Operational Doctrine of Genetic Grammar (TTL) [The Visual Construction Methods of the Iron MAN Version]
 - a. Strategic Operations (The Philosophical Approaches Involving the **Norms/Standard** Issues of Genetic Grammar)
 - b. Organizational Development (The Sociological Approaches Involving the **Power/Authority** Issues of Genetic Grammar)
 - c. Change Management (The Psychological Approaches Involving the **Morale/Cohesion** Issues of Genetic Grammar)
 - d. Tactical Operations (The Physiological Approaches Involving the **Goals/Objective** Issues of Genetic Grammar)
3. Software Engineering Body of Knowledge & the Software Engineering Initiative (TQL) [The Formal Construction Methods of the Stone MAN Version]
 - a. The Virtual Laboratory Technology Bases
 - b. The Exploratory Research Framework
 - c. The SEIMPH Organizational Proposals
 - d. The SEBK Educational Programs & Textbooks
 - e. The MAN Versions within the IBOS [DOSA/DALP/IAOA] Platforms
 - f. The Capability Maturity Model Integration-Integrated Product & Process Design (CMMI-IPPD Continuous)
 - g. The Theories, Models & Methods of Management
 - h. The Problem Format within the Arrangement for Continual Change & Improvement (ACCI)
 - i. The CPDA Format for Genetic Grammar

THE SYMBIOTIC UNIFICATION SEQUENCES WITHIN THE GLOBAL DRIVERS
OF STRATEGIC & TACTICAL INNOVATIONS OR INTERVENTIONS

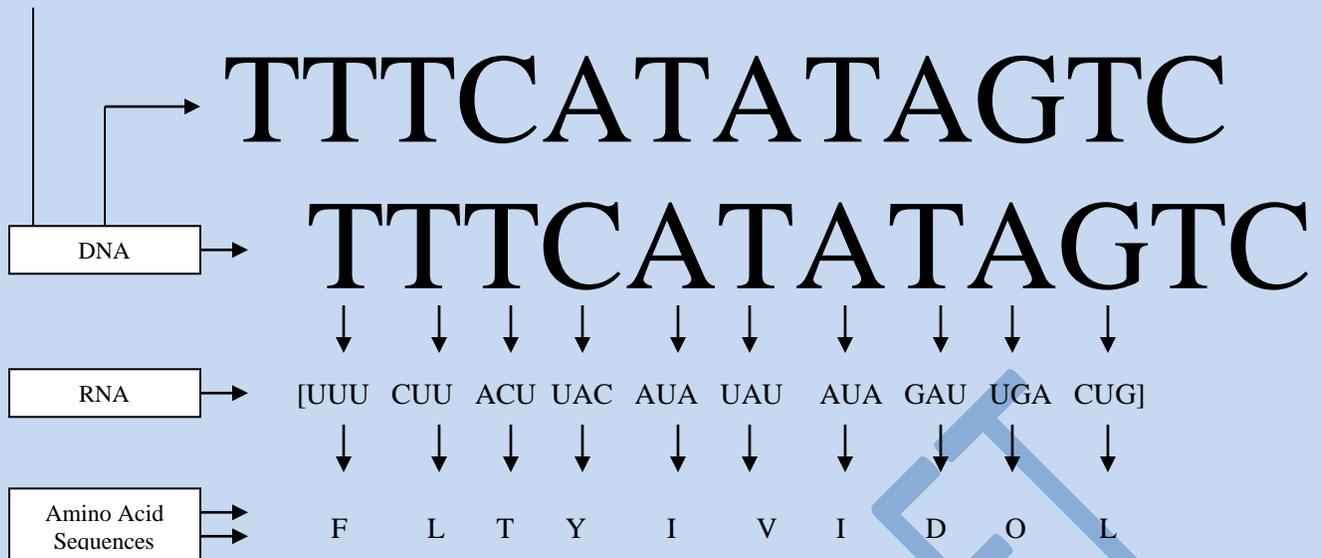
$$T^3 \left(L = \frac{I^2}{V} \right)$$

Individual CPDA Involving Phase - 1

TML SEQUENCES (5'→3')

DNA Sequences Representing Problem Analysis (PA)

→ TTTTCATATAGTC



TTL SEQUENCES (3'←5')

DNA Sequences Representing Decision Analysis (DA)

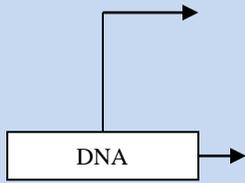


TQL SEQUENCES (5'→3')

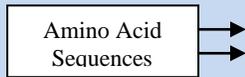
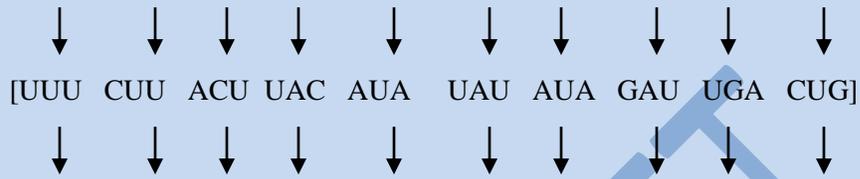
DNA Sequences Representing Potential Problem Analysis (PPA)



TTTCATATAGTC



TTTCATATAGTC

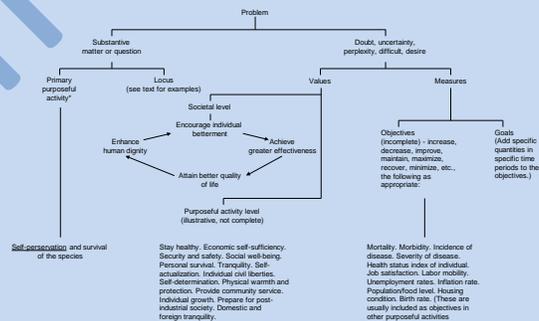


F L T Y I V I D O L

Final Sequencing for CPDA Document Structuring

F L T Y I V I D O L
F L T Y I V I D O L
F L T Y I V I D O L

THE PROBLEM FORMAT INVOLVING THE USABILITIES FRAMEWORK



THE INTERVENTIVE OPERATIONAL DESCRIPTIONS OF THE
GHOST TECHNOLOGY BASE IBOS [DOSA/DALP/IAOA]

$$G^2 \left(M = \frac{L^2}{A} \right)$$

Group CPDA Involving Phase - 2

1. **IBOS** – An Internet Based Operating System is a distributed operating system technology form, that just as a traditional operating system allocates CPU resources in stand-alone systems or workstations, it facilitates the same technological means within CPUs or systems located in local-area-networks throughout multiple wide-area-networks across the globe. The focal point of this technology also manipulates text, documents or information in a similar fashion in order to facilitate the overall objective of implementing problem solving measures of effectiveness within a host of platforms or business environments. [EINNS Links, **VL**, Sociological Methods Involving **Power/Authority** Issues] – Group Ordering & Development (**GOD**)
2. **DOSA** – A Distributed Operating Systems Architecture facilitates the organizational ability to overlap the structural divisions of the NAME network, with that of the developmental sections involved with TCP/IP Protocols, Trillium Network Designs, and the formulas representing the Principle Parts of English Speech. The goal of which, is to institute an infrastructure that will upgrade the overall functionality of the NAME network as a whole within virtual & real-time scenarios 60/60/24/7/365. [RAS Model, **RT**, Psychological Methods Involving **Morale/Cohesion** Issues] – Group Ordering Logic (**GOL**)
3. **DALP** – Distributed Abstract Life Programs is a technological framework that establishes a platform by which definitive norms & operational standards, i.e., DOT database systems & managerial text or protocols, facilitates the implementation of individual & societal-based models. These models support computer generated artificial scenarios used to induce problem-solving measures of effectiveness within over 4 billion ideological, procedural or societal environments. [EWA Models, **ERF**, Philosophical Methods Involving **Norms/Standards** or Value-Based Issues] – Managerial Alphanumeric Creation (**MAN**)
4. **IAOA** – The Integrated Autonomous Office Application is the means by which the foundation to input & output strategic or tactical information throughout the Internet consists of a representation and base pairing of 23-25 virtual chromosomes within an IDEAL cellular format. These virtual chromosomes function as barcodes housing condensed data streams within a cellular snap shot in time, or a planning & design approaches 48 cell mode of implementing problem-solving measures of effectiveness within virtual or real-time environments. Each 48 cellular planning & design matrix is interconnected with a 64 cellular genetic matrix, as well as a 20 cell consultative grid that are used collectively to process internet content into knowledge through traditional forms of search engine technologies. This format facilitates a means for personalizing the content of varied websites through library sciences. In closing, the 48 cells of a planning & design matrix overlap key components of the 64 cellular genetic matrix in order to facilitate a means, by which genetics is used to autonomously create synonymous relationships with people, places & things through words, concepts & ideas. While, the remaining 16 genetic cells represent & are infused into the 16 sections of the 5 Phase planning & design search engine protocols (SEP). [EINNS Net map, **CPDA**, Physiological Methods Involving **Goals/Objectives** & Strategic or Tactical Usabilities] – Manufacturing/Enterprise Resource Planning (**MRP/ERP**)

THE PROCEDURAL HIERARCHY WITHIN THE GLOBAL DRIVERS OF
STRATEGIC & TACTICAL INNOVATIONS OR INTERVENTIONS

$$A^2 \left(E = \frac{CM^2}{MC} \right)$$

Inter-Group CPDA Involving Phase - 3

The Quality Measures Taxonomies Issues Involving The Meaning of Life (QMT)

1. Reference Materials (EINNS) TML
 - a. Personalized Encyclopedias (Grammatic Synonymous Relationships)
 - b. Organizational Related Procedural Strategies (Operational Documentation)
 - c. Employee Related Procedural Tactics (Technological Thesauruses)
 - d. Biographic & Autobiographic References (Method Structuring)
 - e. Screenplays (Organizational, Political & Procedural Scenarios)
 - f. Internet Resources (Legal Scenarios)
 - g. Enterprise & Manufacturing Resource Planning (Logistic & Statistical Analysis)

The Applications used to Support Operational Systems Involving the Issues of The Tree of Life (ASOS)

2. The Thomas Registry Guides of Organizational or Business Classifications (EWA) TTL
 - a. Information Manufacturing
 - I. Databanking (MRP & ERP Frameworks)
 - II. Storage Area Networks (SAN)
 - III. Parallel Virtual Machines (PVM)
 - IV. Virtual Private Network (VPN)
 - V. Individual Based Models (ALF)
 - VI. Social Based Models (VRN)
 - VII. Economic Based Models (AAA)
 - b. Local Area Networks
 - I. Virtual Laboratory Technology (VLT)
 - II. Exploratory Research Framework (ERF)
 - III. Trillium Network Guidelines (TNG)
 - IV. Random Access Server (IVR)
 - V. Software Engineering Based Knowledge (SEBK)
 - VI. Software Engineering Initiative (SEI)
 - c. Distributed or Wide Area Networks
 - I. Quality Measures Taxonomies (QMT)
 - II. Applications used to Support Operational Systems (ASOS)
 - III. Applications used in Operational Systems (AOS)

The Applications used in Operational Systems Involving the Issues of The Quality Life (AOS)

3. The Dictionary of Occupational Titles Job Descriptions (EINNS Links) TQL
 - a. Performance Appraisals (Strategic & Tactical Operations)
 - b. Physiological Settings (Biological Suffix Trees)
 - c. Psychological Settings (Personality Profiles)
 - d. Philosophical Settings (Silent Weapons for Quiet Wars)

- e. Sociological Settings (Commanding Heights)
- f. Consultative Interventions (Consul Cube)
- g. Planning & Design Approaches (P&D Matrixes)

THE INTERVENTIONAL STRATEGIC & TACTICAL INTERPRETATIONS
OF THE IBOS [DOS/DALP/IAOA] GHOST TECHNOLOGY BASE

$$G^2 \left(S = \frac{L^2}{A} \right)$$

Social System CPDA Involving Phase - 4

1. The Biographical Interpretation of Operational Hierarchies – Computer Aided Design (CAD) The **Power/Authority** P&D Matrix (The Sociological Approaches)
 - a. Tactical & Strategic Operational Focal Points
 - I. Individual(s) – Person(s), Place(s) or Thing(s)
 - II. Group(s) – Community(ies)
 - III. Intergroup(s) – State(s)
 - IV. Social System(s) – Nation(s)
 - V. Larger Social System(s) – Global Entities or Economies/G8 Members
 - b. Educational Hierarchies/Taxonomies
2. The Biochemical Interpretation of the Consultative Planning & Design Approaches – Amino Acid Sequencing (AAA/HDR) The **Morale/Cohesion** P&D Matrix (The Psychological Approaches)
 - a. The Consultative Interventions
 - I. Theory
 - II. Catalytic
 - III. Confrontational
 - IV. Prescriptive
 - V. Acceptant
 - b. Situation Development
 - I. The consultative interventions involving 115 random chemical elements, whose sequences begin with those of the structural atomic issues related to industry designation(s) and/or influences.
 - II. Using chemical sequencing to represent the integrated association of consultative interventions.
 - III. The individual atomic letters, when associated with the lettering of other atomic elements, will randomly choose an intervention & vice versa.
3. The Biomechanical Interpretation of Operational Phases – Computer Aided Manufacturing (CAM) The **Norms/Standards** P&D Matrix (The Philosophical Approaches)
 - a. The Economic Intelligence Network News Service (EINNS)
 - I. Analytical Netmapping
 - b. The Economic Intelligence Network News Service Links (EINNS Links)
 - I. Conceptual Mapping
 - c. The Change Equation/Chromosomal Development (CE/CD)

- I. Genetic Mapping
 - d. The Employment Related Software Development (ERSD)
 - I. Procedural or Structural Mapping
 - e. The Cranial Nervous System (Peripheral [HRP]/Autonomic [ERP])
 - I. Biological Analogies (Gray's Anatomy)
 - II. The Diagnostic & Statistical Manual of Mental Disorders (DSM IV)
 - III. Physician's Desk Reference (PDR)
4. The Biological Interpretation of Operational Transactions – Strategic & Tactical Theories, Models & Methods (TMM) The **Goals/Objectives** P&D Matrix (The Physiological Approaches)
- a. The Consultative Approaches
 - I. Strategic Operations Phases 1-5/Consultative Grid
 - b. The Planning & Design Approaches
 - I. Tactical Operations Phases 1-5/Planning & Design Worksheet
 - c. The Planning & Design Genetic Matrix
 - I. Search Engine Protocol Phases 1-5/Change Equation/Chromosomal Development
 - d. The Approaches Involving Computer Aided Software Engineering
 - I. Excel Software Engineering Phases 1-5/Integrated Autonomous Office Application

**THE IDEAL CELLULAR RELATIONSHIP WITHIN THE GLOBAL DRIVERS
OF STRATEGIC & TACTICAL INNOVATIONS OR INTERVENTIONS**

$$T^3 \left(C = \frac{UL^2}{LL} \right)$$

Larger Social System CPDA Involving Phase - 5

1. The **3** Sections Involving the Meaning of Life, the Tree of Life & Quality of Life Issues within the Alphanumerical Grammatic Formula Systems (**MTQ**) – [A²]
 - a. The **3** Letters Representing the Human Genome
 - b. The **3** Letters Representing the Amino Acid Sequences
 - c. The **3** Letters Representing the Atomic Elements
 - d. The **3** Letters Housed within each Cell of the CPDA Consul Cube
 - e. The **3** Core Sections of each Grammatic Formula
 - I. Past, Present & Future Tenses
 - f. The **3** Sections of the Integrated Framework
 - g. The **3** Sections of the Change Equation Format
 - h. The **3** Core Sections of the Integrated Autonomous Office Application
 - i. The **3** Core Sections of the IBOS Virtual Laboratory Configuration (VL)
 - j. The **3** Areas Concerning PSP, TSP & CMM Structuring
 - k. The **3** Core Sections of the Problem Format (Problem Analysis **PA**, Decision Analysis **DA** & Potential Problem Analysis **PPA**)
 - l. The **3** Components of the Procedural Hierarchy
 - m. The **3** Versions of MAN within the Educational Environment of Software Engineering
2. The **4** Areas of Individual, Group, Intergroup, Social System (Business Entities), & Larger Social Systems (Local, State & Federal, National or International Entities) – [PA²]
 - a. The **4** Upper Level Components of the Planning & Design Approach Worksheet (WS)

- b. The 4 Managerial Components within Consultative Interventions
- c. The 4 Managerial Components of Capability Maturity Model Integration-Integrated Product & Process Design Staged (CMMI-IPPD Continuous)
- d. The 4 Managerial Components of Software-Capability Maturity Model (SW-CMM)
- e. The 4 Managerial Components of the GHOST Technology Format IBOS[DOSA/DALP/IAOA]
- f. The 4 Managerial Components of Strategic & Tactical Usabilities
- g. The 4 Managerial Components of Genetic Based Grammatic Development
- h. The 4 Managerial Components of Exploratory Research Framework (ERF)
- i. The 4 Managerial Components of the Economic Intelligence Network News Service Links and the development of Search Engine Protocols (SEP)
- j. The 4 Managerial Components within the 9 Principle Parts of English Speech Formula Systems
- k. The 4 Managerial Components of Management Based Methods, Models & Theories
- l. The 4 Managerial Components of the Comprehensive Formula Language Systems within the development of Genetic Grammar
- m. The 4 Managerial Components of Genetic Cellular Displacement within the Virtual Laboratory & ERF environments
- n. The 4 Structural/Educational Components of an Enterprise Work Architecture (EWA)
- 3. The 5 Phase Components of an IDEAL Cell or Snap Shot in Time (PERT- Quality Measures) – [T³⁽⁰⁾]
 - a. The 5 Components of Software Capability Maturity Model (SW-CMM) and the People Capability Maturity Model (P-CMM)
 - b. The 5 Components of the Capability Maturity Model Integration-Integrated Product & Process Design Staged (CMMI-IPPD Staged)
 - c. The 5 Components Involving Quality Measures Taxonomies (QMT)
 - I. The 12 Components Involved with the Applications used in Operational Systems (AOS)
 - II. The 12 Components Involving the Applications used to Support Operational Systems (ASOS)
 - d. The 5 Components of Risk Management (RM)
 - e. The 5 Components of Change Management (CM)
 - f. The 5 Software Initiating, Diagnosing, Establishing, Acting & Leveraging Components (IDEAL)
 - g. The 5 Divisions of the Problem Format within the Planning & Design Approach (PF)
 - h. The 5 Operational Phases of the Consultative Planning & Design Approach (CPDA)
 - i. The 5 Structural Hemispheres of the Human Brain
 - I. The 12 Components of the Cranial Nervous System (CNS)
- 4. The 9 Grammatic Formulas Representing the Principle Parts of English Speech – [G^{2(E)}]
 - a. The 9 Principle Parts of English Speech
 - b. The 9 Components of the Enneagram Personality Traits
 - c. The 9 Components of Maslow's Hierarchy of Needs
 - d. The 9 Virtual Laboratory Components
 - e. The 9 Random Access Server Components
 - f. The 9 Exploratory Research Framework Components
 - g. The 9 Matrix Elements of a Planning & Design Approach
 - h. The 9 Divisions of the NAME Network
 - i. The 9 Divisions of TCP/IP Protocols
 - j. The 9 Infused Components of the Capability Maturity Model Integration-Integrated Product & Process Design (CMMI-IPPD)
 - k. The 9 Sections used to Express the Educational Taxonomies of Geological Studies
 - l. The 9 Components of Software Engineering Based Knowledge (SEBK)
 - m. The 9 Components of Software Engineering Initiative (SEI)
 - n. The 9 Subcomponents within each Method Structure
 - o. The 9 Global Information Drivers of Strategic & Tactical Innovation
- 5. The 20 Letters Representing the Amino Acid Sequences – [G^{2(S)}]
 - a. The 20 Sets of Grammatic Stem Cells (4 Areas x 5 Phases & Structural Interventions of the Consultative Planning & Design Approaches)
 - b. The 20 Initial Cell Grid of the Consul Cube

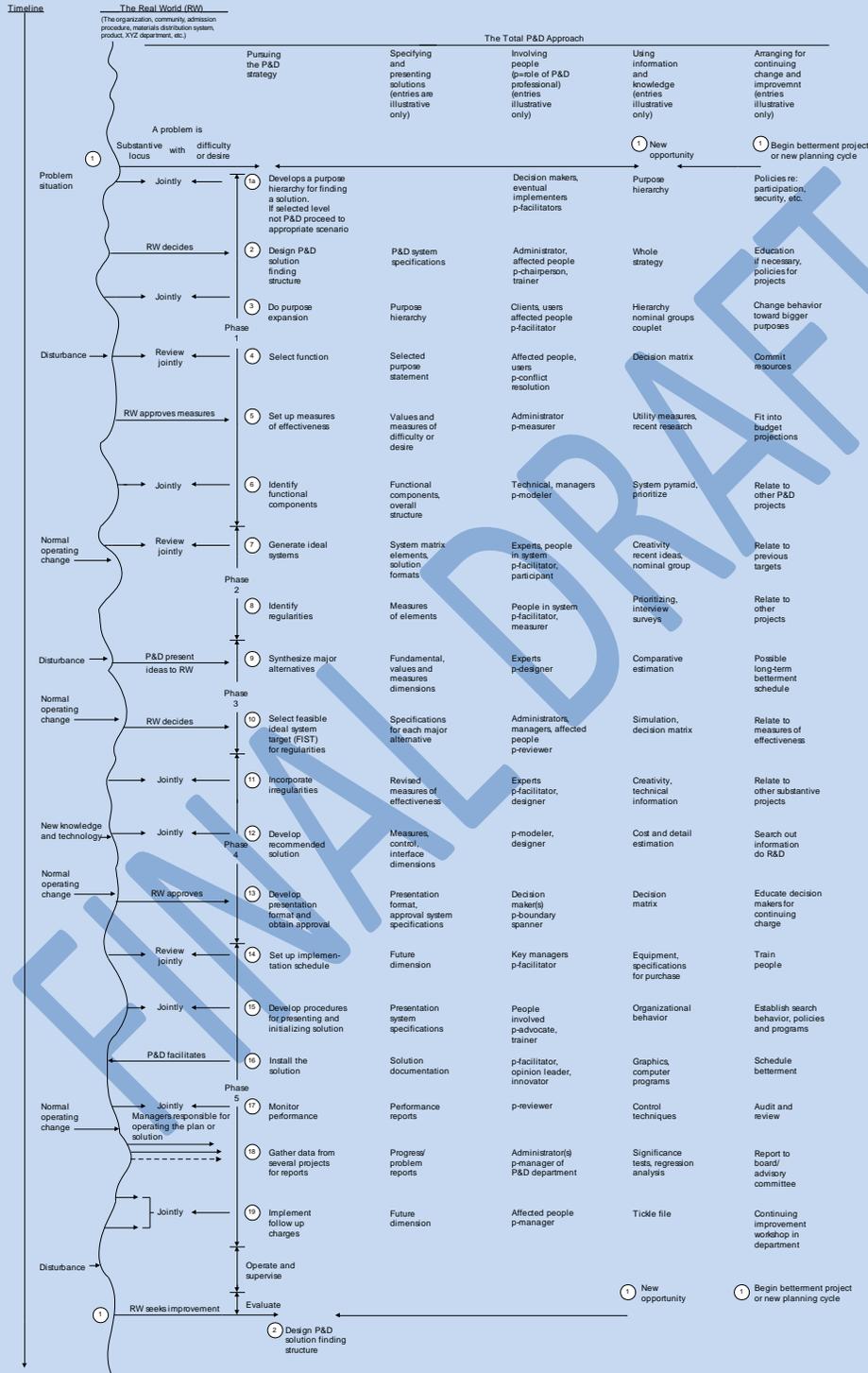
- I. The **20** Planning & Design Procedural Guidelines
 - II. The **1 - 18/24** Components of the Capability Maturity Model Integration-Integrated Product & Process Design (CMMI-IPPD)
 - III. The **20** Components of the Integrated Framework
 - IV. The **1 - 18/24** Mechanics of English Grammar
 - V. The **20** Chemical Industry Categories
 - VI. The **1 - 18** Atomic Elemental Sections
 - VII. The **20** Components Related to the Structure of the Grammatical Genome
6. The **48** Cell Planning & Design Matrix – [**T^{3(C)}**]
 - a. The **48** Laws of Power
 - b. The **23/46** Chromosomal Pairs (CMMI-IPPD Continuous & Staged)
 - I. The Change Equation (Change Management of Individual & Organizational Models)
 - II. The Development of Chromosomal Elements (Strategical & Tactical Operations)
 - c. The **48** Matrix Search Engines (Strategic Development)
 - I. The Forward Chaining Sequences (Organizational Development & Enterprise or Manufacturing Resource Planning Systems)
 - d. The **48** Matrix Search Engines (Tactical Development)
 - I. The Backward Chaining Sequences (Change or Risk Management Systems)
 - e. The **192** Search Engine Components (The Autonomous Development of **IDEAS**)
 - I. The **3** Part Processors (Formula Components) **Power/Authority**
 - II. The **4** Part Processors (Managerial Terminology) **Norms/Standards**
 - III. The **5** Phase Components (Procedural Steps or Structural Hemispheres) **Goals/Objectives**
 - IV. The **12** Method Structures (Regional Development) **Morale/Cohesion**
 - f. The **192** Planning & Design Sections (The Autonomous Development of **CONCEPTS**)
 - I. The **48** Planning & Design Cellular Issues Involving **Power/Authority**
 - II. The **48** Planning & Design Cellular Issues Involving **Morale/Cohesion**
 - III. The **48** Planning & Design Cellular Issues Involving **Norms/Standards**
 - IV. The **48** Planning & Design Cellular Issues Involving **Goals/Objectives**
 - g. The **192** Letters of the Human Genetic Matrix (The Autonomous Development of **WORDS**)
 - I. The **64** Cells Representative of **Words, Concepts & Ideas** or Search Engine Protocols (SEP)
 - h. The **384** MTQ Websites (Evolving Novel Organizational Forms)
 7. The **64** Cell Genetic Matrix – [**L²**]
 - a. The Collateral Genetic Cells representing the **16** sections of the 5 Phases covering the Planning & Design Approaches
 - I. The **48** Primary Genetic Cells used within a Planning & Design Matrix
 - b. The **64** Matrix Sections of the Magna Carter
 - c. The **65** SEBK Matrix Procedural Components
 - d. The **96** Duel Matrix Chapters of the IRS Tax Code
 8. The Doctrine of Managerial Interest – [**M²**]
 - a. The Procedural Definitions
 - I. The Dictionary of Occupational Titles (DOT)
 - b. The Organizational Determination
 - I. The Thomas Registry Guides
 - c. The Consultative Interventions of the Planning & Design Approach
 - d. The Theories, Models & Methods of Managerial Words, Concepts and Ideas
 - e. The Words, Concepts and Ideas about People, Places & Things
 9. The Procedural Examples within the Planning & Design Matrix or Change Equation – [**G^{2(M)}**]
 - a. Purpose **T³**
 - I. Fundamental/Identify/Initiating/Need Satisfaction
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
 - b. Inputs **M²**
 - I. Fundamental/Identify/Initiating/Need Satisfaction

- II. Values/Analyze/Diagnosing/Performance
- III. Measures/Track/Establishing/Maintenance
- IV. Control/Control/Acting/Adaptive
- V. Interface/Communicate/Leveraging/Organizational
- VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- c. **Outputs A^2**
 - I. [Fundamental/Identify/Initiating/Need Satisfaction](#)
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- d. **Sequence G^2**
 - I. [Fundamental/Identify/Initiating/Need Satisfaction](#)
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- e. **Environment G^2**
 - I. [Fundamental/Identify/Initiating/Need Satisfaction](#)
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- f. **Human Aids T^3**
 - I. [Fundamental/Identify/Initiating/Need Satisfaction](#)
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- g. **Physical Catalysts G^2**
 - I. [Fundamental/Identify/Initiating/Need Satisfaction](#)
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- h. **Information Aids L^2**
 - I. [Fundamental/Identify/Initiating/Need Satisfaction](#)
 - II. Values/Analyze/Diagnosing/Performance
 - III. Measures/Track/Establishing/Maintenance
 - IV. Control/Control/Acting/Adaptive
 - V. Interface/Communicate/Leveraging/Organizational
 - VI. Future/Plan/Manage the Software Process Improvement Program/Individual
- i. **[Transitive Verbiage](#) PA^2**
 - I. **Strategic & Tactical Usabilities**



| | Fundamental: Basic or Physical, Characteristics- What, How, Where, or Who (GROUP FORMAT) | Values: Motivating Beliefs, Global Desires, Ethics, Moral Matters (NORMS/STANDARDS) | Measures: Objectives (Criteria, Merit and Worth Factors), Goals (How Much, When, Rates, Performance Specifications) (GOALS/OBJECTIVES) | Control: How to Evaluate and Modify Element or System as it Operates (POWER/AUTHORITY) | Interface: Relation of all Dimensions to other Systems or Elements (MORALE/COHESION) | Future: Planned Changes and Research Needs for all Dimensions |
|---|--|--|--|---|---|--|
| Purpose: mission, aim, need, primary concern, focus | | | | | | |
| Inputs: people, things, information to start the sequence | | | | | | |
| Outputs: desired (achieves purpose) and undesired outcomes from sequence | | | | | | |
| Sequence: steps for processing inputs, flow, layout, unit operations | | | | | | |
| Environment: physical & attitudinal, organization, setting, etc. | | | | | | |
| Human agents: skills, personnel, rewards, responsibilities, etc. | | | | | | |
| Physical catalysts: equipment, facilities, etc. | | | | | | |
| Information aids: books, instructions, etc. | | | | | | |

The PDA Worksheet for the 5 – Phase Operational Biographic Imprinting of Julius Caesar as an Economic Footprint



The Pursuit of a Financial Perspective Involving the Implementation of DaVinci's Procrative Business Modeling of Global Market Economies

(An Economist's Mindset from an Integrated Listing of over 600 World Economists into a Single Equation)

1. **An Economic Outline for the Procreative Modeling of Global Markets within a Planning & Design Approach (PDA) Worksheet for Monetary Operational Grand Strategies:**
 - A. The Descriptive Procedural Mindset of an Economist/Broker as a Firm Utilizing over **(600)** Historical Economists, as a Single Minded Autonomous Economic Function, within a PDA Worksheet (i.e., **X³** the Neuroeconomic Procedural Guidelines);
 - I. The Ancient and Modern History of Economic or Monetary Thought as Phase One within the Planning & Design Approach Worksheet.
 - II. The Economic Theories within **(4)** Managerial Categories & **(117)** Overlapping Financial Subcategories as Phase Two within the Planning & Design Approach Worksheet.
 - III. Evolutionary and Institutional Economics as the New Mainstream within Phase Three of the Planning & Design Approaches.
 - IV. Behavioral Economics within **(4)** Managerial Categories & **(24)** Subcategories Involving the **(24)** Points of the Change Equation utilizing Chromosomal Development within Phase Four of the Planning & Design Approach Worksheet.
 - V. The **(5)** Point Outline of Cognitive Biases, Involving the **(43)** Categories of Behavioral Finance within the **(48)** Types of Economic Systems, or the **(40)** Categories of Economic Indicators encompassing Phase Five of the Planning & Design Approach Worksheet;
 - (a.) The **(20)** Step List of Financial Topics within the Pursuing the Planning & Design Strategy (**PPDS**) Column of the PDA Worksheet. [Vertical Inter-Changeable Rotation (VIR) Involving **Norms/Standards** or **DALP Technologies**]
 - (b.) The **(18)** Step List of Financial Services Companies within the Specifying & Implementing Solutions (**SIS**) Column of the PDA Worksheet. [Vertical Inter-Changeable Rotation (VIR) Involving **Morale/Cohesion** or **DOSA Technologies**]
 - (c.) The **(18)** Step List of Important Publications In Economics within the Information & Knowledge (**I&K**) Column of the PDA Worksheet. [Vertical Inter-Changeable Rotation (VIR) Involving **Power/Authority** Issues or **IBOS Technologies**]
 - (d.) The **(20)** Step List of Economic Topics within the Arranging for Continuous Change & Improvement (**ACCI**) Column of the PDA Worksheet. [Vertical Inter-Changeable Rotation (VIR) Involving **Goals/Objectives** or **IAOA Technologies**]
 - B. The Conceptual Implementation of **(165)** Accounting Topics within all **(144)** Sections of the Global Information Drivers of Strategic & Tactical Innovations (GIDSTI), as well as the **(21)** Major Categories of Financial Markets Involving **(36)** Economic Adaptive Autonomous Agents;
 - I. The **(15/10)** Point Assignment of Marketing Structures & Pricing within IT Investments, and a Political/Religious Enterprise Work Architecture.

- II. The (4) Areas of a Political Media or Das Kapital as a Source for Market-Based Ideological **Counter-Measures** within the (4) Approaches of the Grammatic Genome.
 - III. The (6) Dimensions of Marketing for a Consultative Planning & Design Approach (CPDA) Stratagem Matrix, Sections A – E.
 - IV. The List of Basic Economic Topics Representing the (9) PPES Formula System for a PDA Matrix.
 - V. The List of Behavioral Economics Representing the (9) PPES Formula System for a CPDA Matrix.
 - VI. The List of Financial Services Involving the (9) PPES Formula System for the Solution Framework Matrix.
 - VII. The List of (11) Marketing Topics Representing Employment Related Software Development (ERSD).
 - VIII. The (12) Methods of Financial Services Involving Market Generation.
 - IX. The (12) Part Mechanism for Autonomous Agent Formatting.
2. **An Economic Outline for the Procreative Modeling of Global Markets within a Consultative Planning & Design Approach (CPDA) Worksheet for Monetary Operational Grand Tactics:**
- A. The Descriptive Operational Policy-Based Mindset of a **Financier/Broker** as an Individual Utilizing a List of (81) Scholarly Journals In Economics, as **Morale** or **Cohesive** Tactics in Specifying & Implementing Solutions within a Consultative Planning & Design Approach (CPDA) Worksheet (i.e., **X³** the **Autonomous Economic Procedural Guidelines**). [Vertical Inter-Changeable **Clockwise** Rotation (VIR)]
 - B. The List of (100) International Trade Topics as a Means of Engaging in **Power** or **Authority** Issues within the Tactical Methods Involving the Consultative Planning & Design Approaches (CPDA) Worksheet. [Vertical Inter-Changeable **Counter-Clockwise** Rotation (VIR)]
 - C. The (4/115) Categories of Financial Services as a Means of Engaging in **Norms** or **Standards** within the Tactical Approaches Involving the Consultative Planning & Design Approaches (CPDA) Worksheet. [Vertical Inter-Changeable **Clockwise** Rotation (VIR)]
 - D. The (21/121) Categories of Markets as a Means of Engaging in **Goals** or **Objectives** within the Tactical Methods Involving the Consultative Planning & Design Approaches (CPDA) Worksheet. [Vertical Inter-Changeable **Counter-Clockwise** Rotation (VIR)]
 - I. The (288) Categories of Economics by Geographical Locations, Overlapping all (324) Components within the Tactical Areas of the CPDA Worksheet as Stationary Elements.
 - II. The (53) Tactical Matrix Categories of Economies by Continents within the CPDA Worksheet.
 - III. The (46) Stationary Strategic Components of the CPDA Worksheet, Sections A-1 to A-4.
3. **The Socioeconomic Base Equation(s) for the Individualized Global Free Market Fusion of Information:**

$$X^3 \left(RW = \frac{EH^2}{QM} \right)$$

Homo Economicus Universal

The Consul Cube Genomic Configurations for Establishing Genetic-Based Concepts within a Consultative P&D Effort

A Roman Emperor's Consul Mindset as 16 Separate Emperors Function as One In Reference to the GIDSTI Economic Principles Involving Julius Caesar as a Point of Origin for Modern Commercial Expansionism

- | | | | |
|---|--|--|--|
| <ol style="list-style-type: none"> 1. <u>A-1</u> ^<u>A</u> ^ 2. <u>A-1-1</u> ^<u>AAA</u> ^ 3. <u>A-1-2</u> ^<u>AAF</u> ^ 4. <u>A-1-3</u> ^<u>AAK</u> ^ 5. <u>A-1-4</u> ^<u>AAP</u> ^ 6. <u>A-1-5</u> ^<u>AAT</u> ^ 7. <u>A-2</u> ^<u>C</u> ^ 8. <u>A-2-1</u> ^<u>ACC</u> ^ 9. <u>A-2-2</u> ^<u>ACG</u> ^ 10. <u>A-2-3</u> ^<u>ACL</u> ^ 11. <u>A-2-4</u> ^<u>ACQ</u> ^ 12. <u>A-2-5</u> ^<u>ACV</u> ^ 13. <u>A-3</u> ^<u>D</u> ^ 14. <u>A-3-1</u> ^<u>ADD</u> ^ 15. <u>A-3-2</u> ^<u>ADH</u> ^ 16. <u>A-3-3</u> ^<u>ADM</u> ^ 17. <u>A-3-4</u> ^<u>ADR</u> ^ 18. <u>A-3-5</u> ^<u>ADW</u> ^ 19. <u>A-4</u> ^<u>E</u> ^ 20. <u>A-4-1</u> ^<u>AEE</u> ^ 21. <u>A-4-2</u> ^<u>AEI</u> ^ 22. <u>A-4-3</u> ^<u>AEN</u> ^ 23. <u>A-4-4</u> ^<u>AES</u> ^ 24. <u>A-4-5</u> ^<u>AEY</u> ^ | <ol style="list-style-type: none"> 31. <u>B-2</u> ^<u>G</u> ^ 32. <u>B-2-1</u> ^<u>BGC</u> ^ 33. <u>B-2-2</u> ^<u>BGG</u> ^ 34. <u>B-2-3</u> ^<u>BGL</u> ^ 35. <u>B-2-4</u> ^<u>BGQ</u> ^ 36. <u>B-2-5</u> ^<u>BGV</u> ^ 37. <u>B-3</u> ^<u>H</u> ^ 38. <u>B-3-1</u> ^<u>BHD</u> ^ 39. <u>B-3-2</u> ^<u>BHH</u> ^ 40. <u>B-3-3</u> ^<u>BHM</u> ^ 41. <u>B-3-4</u> ^<u>BHR</u> ^ 42. <u>B-3-5</u> ^<u>BHW</u> ^ 43. <u>B-4</u> ^<u>I</u> ^ 44. <u>B-4-1</u> ^<u>BIE</u> ^ 45. <u>B-4-2</u> ^<u>BII</u> ^ 46. <u>B-4-3</u> ^<u>BIN</u> ^ 47. <u>B-4-4</u> ^<u>BIS</u> ^ 48. <u>B-4-5</u> ^<u>BIY</u> ^ | <ol style="list-style-type: none"> 62. <u>C-3-1</u> ^<u>CMD</u> ^ 63. <u>C-3-2</u> ^<u>CMH</u> ^ 64. <u>C-3-3</u> ^<u>CMM</u> ^ 65. <u>C-3-4</u> ^<u>CMR</u> ^ 66. <u>C-3-5</u> ^<u>CMW</u> ^ 67. <u>C-4</u> ^<u>N</u> ^ 68. <u>C-4-1</u> ^<u>CNE</u> ^ 69. <u>C-4-2</u> ^<u>CNI</u> ^ 70. <u>C-4-3</u> ^<u>CNN</u> ^ 71. <u>C-4-4</u> ^<u>CNS</u> ^ 72. <u>C-4-5</u> ^<u>CNY</u> ^ | <ol style="list-style-type: none"> 91. <u>D-4</u> ^<u>S</u> ^ 92. <u>D-4-1</u> ^<u>DSE</u> ^ 93. <u>D-4-2</u> ^<u>DSI</u> ^ 94. <u>D-4-3</u> ^<u>DSN</u> ^ 95. <u>D-4-4</u> ^<u>DSS</u> ^ 96. <u>D-4-5</u> ^<u>DSY</u> ^ |
| <ol style="list-style-type: none"> 25. <u>B-1</u> ^<u>F</u> ^ 26. <u>B-1-1</u> ^<u>BFA</u> ^ 27. <u>B-1-2</u> ^<u>BFF</u> ^ 28. <u>B-1-3</u> ^<u>BFK</u> ^ 29. <u>B-1-4</u> ^<u>BFP</u> ^ 30. <u>B-1-5</u> ^<u>BFT</u> ^ | <ol style="list-style-type: none"> 49. <u>C-1</u> ^<u>K</u> ^ 50. <u>C-1-1</u> ^<u>CKA</u> ^ 51. <u>C-1-2</u> ^<u>CKF</u> ^ 52. <u>C-1-3</u> ^<u>CKK</u> ^ 53. <u>C-1-4</u> ^<u>CKP</u> ^ 54. <u>C-1-5</u> ^<u>CKT</u> ^ 55. <u>C-2</u> ^<u>L</u> ^ 56. <u>C-2-1</u> ^<u>CLC</u> ^ 57. <u>C-2-2</u> ^<u>CLG</u> ^ 58. <u>C-2-3</u> ^<u>CLL</u> ^ 59. <u>C-2-4</u> ^<u>CLQ</u> ^ 60. <u>C-2-5</u> ^<u>CLV</u> ^ | <ol style="list-style-type: none"> 73. <u>D-1</u> ^<u>P</u> ^ 74. <u>D-1-1</u> ^<u>DPA</u> ^ 75. <u>D-1-2</u> ^<u>DPF</u> ^ 76. <u>D-1-3</u> ^<u>DPK</u> ^ 77. <u>D-1-4</u> ^<u>DPP</u> ^ 78. <u>D-1-5</u> ^<u>DPT</u> ^ 79. <u>D-2</u> ^<u>Q</u> ^ 80. <u>D-2-1</u> ^<u>DQC</u> ^ 81. <u>D-2-2</u> ^<u>DQG</u> ^ 82. <u>D-2-3</u> ^<u>DQL</u> ^ 83. <u>D-2-4</u> ^<u>DQQ</u> ^ 84. <u>D-2-5</u> ^<u>DQV</u> ^ 85. <u>D-3</u> ^<u>R</u> ^ 86. <u>D-3-1</u> ^<u>DRD</u> ^ 87. <u>D-3-2</u> ^<u>DRH</u> ^ 88. <u>D-3-3</u> ^<u>DRM</u> ^ 89. <u>D-3-4</u> ^<u>DRR</u> ^ 90. <u>D-3-5</u> ^<u>DRW</u> ^ | <ol style="list-style-type: none"> 97. <u>E-1</u> ^<u>T</u> ^ 98. <u>E-1-1</u> ^<u>ETA</u> ^ 99. <u>E-1-2</u> ^<u>ETF</u> ^ 100. <u>E-1-3</u> ^<u>ETK</u> ^ 101. <u>E-1-4</u> ^<u>ETP</u> ^ 102. <u>E-1-5</u> ^<u>ETT</u> ^ 103. <u>E-2</u> ^<u>V</u> ^ 104. <u>E-2-1</u> ^<u>EVC</u> ^ 105. <u>E-2-2</u> ^<u>EVG</u> ^ 106. <u>E-2-3</u> ^<u>EVL</u> ^ 107. <u>E-2-4</u> ^<u>EVQ</u> ^ 108. <u>E-2-5</u> ^<u>EVV</u> ^ 109. <u>E-3</u> ^<u>W</u> ^ 110. <u>E-3-1</u> ^<u>EW D</u> ^ 111. <u>E-3-2</u> ^<u>EW H</u> ^ 112. <u>E-3-3</u> ^<u>EW M</u> ^ 113. <u>E-3-4</u> ^<u>EW R</u> ^ 114. <u>E-3-5</u> ^<u>EW W</u> ^ 115. <u>E-4</u> ^<u>Y</u> ^ 116. <u>E-4-1</u> ^<u>EYE</u> ^ 117. <u>E-4-2</u> ^<u>EYI</u> ^ 118. <u>E-4-3</u> ^<u>EYN</u> ^ 119. <u>E-4-4</u> ^<u>EYS</u> ^ 120. <u>E-4-5</u> ^<u>EYY</u> ^ |

The 80 Structural Elements of Strategic & Tactical Operations Involving the Principles of the 48 Laws of Power within the 20 Economic Profiles (P/A)

The 81 Sections of Strategic & Tactical Operations Involving the Principles of the Solution Framework within the 20 Relevant Terms of Government (M/C)

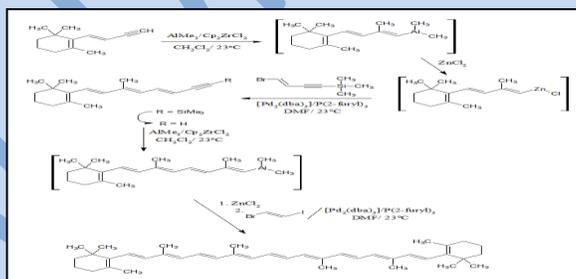
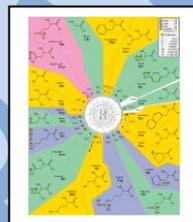
The 84 Sections of Rambam within Strategic & Tactical Operations Involving the Governmental Principles & Systems within the 20 Classes of Government (N/S)

The 80 Legions of Roman Strategic & Tactical Operations Involving the Economic Principles & Systems within the 20 Attributes of Government (G/O)

The Alpha, Beta, Charlie, Delta & Echo 24 Chromosomal Base Pairings for the Upper & Lower Level Change Equation Components of the 24 Books within the Torah Shebiksav

Example Section as Defined by the Periodic Table of Elements

1. A-1 ^A^
2. A-1-1 ^AAA^
3. A-1-2 ^AAF^
4. A-1-3 ^AAK^
5. A-1-4 ^AAP^
6. A-1-5 ^AAT^

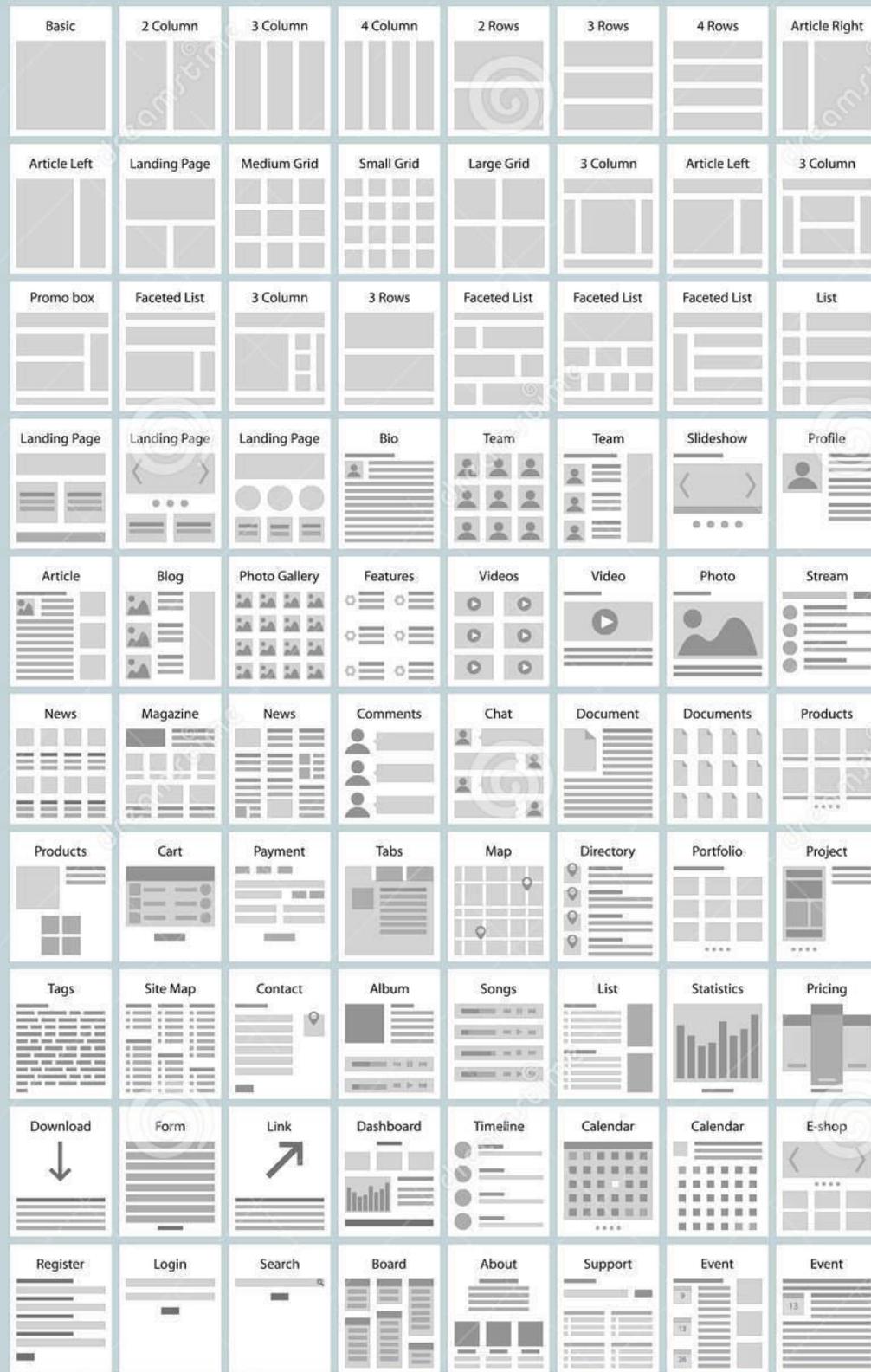


Sections A-1-1 to E-4-5 (The Transmetalation of Organic and In-Organic Computations)

Sections A-1-1 to A-4-5

80 MINI WIREFRAMES

Website Flowchart Template



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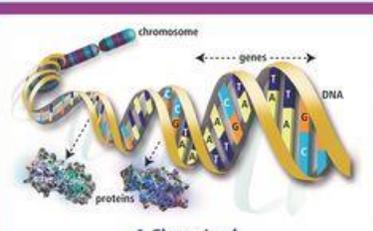
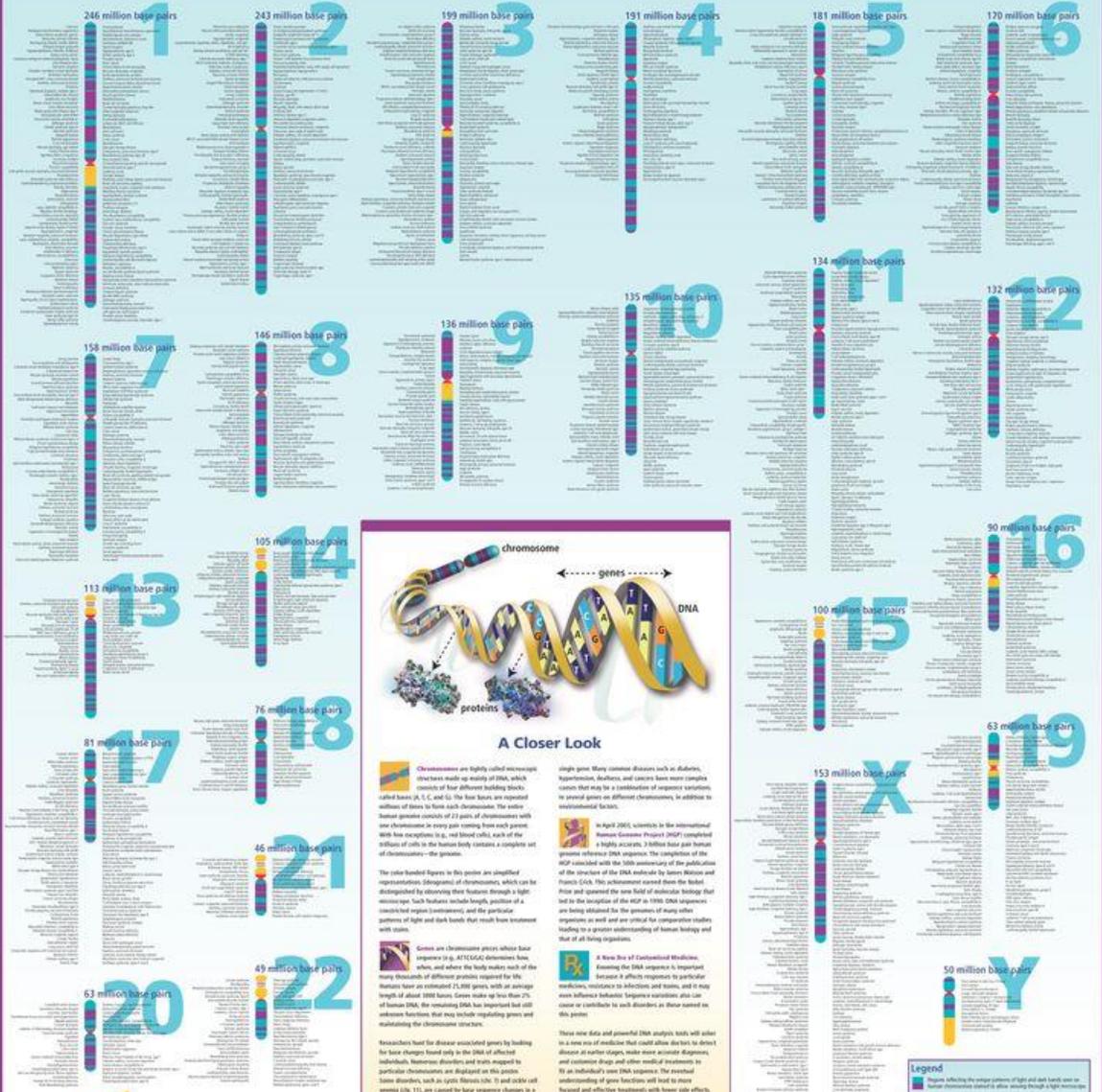


Human Genome Landmarks

Selected Genes, Traits, and Disorders

www.ornl.gov/hgmis/posters/chromosome

genomics.energy.gov



Chromosomes are tightly coiled microscopic structures made up mainly of DNA, which consists of four different building blocks, called bases (A, T, C, and G). The base pairs are repeated millions of times to form each chromosome. The entire human genome consists of 22 pairs of chromosomes with one chromosome in every pair coming from each parent. With few exceptions (e.g., red blood cells), each of the billions of cells in the human body contains a complete set of chromosomes—the genome.

The color-banded figures in this poster are simplified representations (karyotypes) of chromosomes, which can be distinguished by observing their features through a light microscope. Each feature includes length, position of a centromere, banding pattern, and the particular patterns of light and dark bands that result from treatment with stains.

Genes are chromosome pieces whose base sequence is the ATCGACG sequence base, when, and where the body makes each of the many thousands of different proteins required for life. Humans have an estimated 21,000 genes, with an average length of about 3,000 bases. Genes make up less than 2% of human DNA. The remaining DNA has important but still unknown functions that may include regulating genes and maintaining the chromosome structure.

Researchers hunt for disease-associated genes by looking for base changes found only in the DNA of affected individuals. Recurrent disorders and traits mapped to particular chromosomes are assigned to this poster. Some disorders, such as cystic fibrosis, can be traced to a specific site. Others, such as autism, are caused by base sequence changes in a single gene. Many common disorders such as diabetes, hypertension, asthma, and cancer have more complex causes that may be a combination of sequence variations in several genes on different chromosomes, in addition to environmental factors.

In April 2001, scientists in the international Human Genome Project (HGP) completed a highly accurate 3 billion base pair human genome reference DNA sequence. The completion of the HGP coincided with the 50th anniversary of the publication of the structure of the DNA molecule by James Watson and Francis Crick. This achievement opened the field of molecular biology that led to the inception of the HGP in 1990. DNA sequences are being identified for the genomes of many other organisms as well and are critical for comparative studies leading to a greater understanding of human biology and that of all living organisms.

A new era of Computational Medicine. Knowing the DNA sequence is important because it affects responses to particular medicines, responses to infections and toxins, and it may even influence behavior. Sequence variations also can cause or contribute to such disorders as those named on this poster.

These new data and powerful DNA analysis tools will allow in a new era of medicine that could allow doctors to detect disease at earlier stages, make more accurate diagnoses, and customize drugs and other medical treatments to fit an individual's own DNA sequence. The eventual cause of many diseases will be traced to these new found and effective treatments with fewer side effects.

Gene Gateway
www.ornl.gov/hgmis/posters/chromosome

Step-by-step instructions for using the Web to learn about:

- Genetic Disorders**
 - Causes, inheritance, symptoms, diagnosis, treatment
 - Associated genes
 - Outgoing groups and organizations
 - Genetic health professionals
 - Articles and other materials
- Genes and Proteins**
 - Gene name, symbol, size, protein product
 - Chromosome maps
 - Gene and protein sequence data
 - Similar sequences in other organisms
 - Gene mutations associated with disorders
 - Molecular structures of proteins

For More Information

- Human Genome Project Information: Comprehensive HGP information and a look at the "new biology" of the 21st century. www.ornl.gov/hgmis/hgpi/index.html
- Genetics and its Impact on Science and Society: A Primer. www.ornl.gov/hgmis/genetics/index.html
- Genetics Education Resources: www.ornl.gov/hgmis/genetics/education/index.html
- FOK Genetics (UK): Explains how molecular and plant genetics function for knowledge and other applications. www.fokgenetics.com
- Medline and the New Genetics: New genetic technologies and research results. www.ornl.gov/hgmis/medline/index.html
- Nature Human Genome Collection: Detailed analysis of all of the chromosomes. www.nature.com/human-genome-collection/index.html
- National Human Genome Research Institute: National Institutes of Health genome program. www.nih.gov/genome/
- Centers for Genetics and the Biotechnology Revolution for students and teachers. www.ornl.gov/hgmis/biotech/index.html
- DOE Joint Genome Institute: Facility for integrated high-throughput sequencing and computational analysis. www.jgi.doe.gov
- Genetic, Legal, and Social Issues: Implications surrounding use of genome data. www.ornl.gov/hgmis/genetics/index.html

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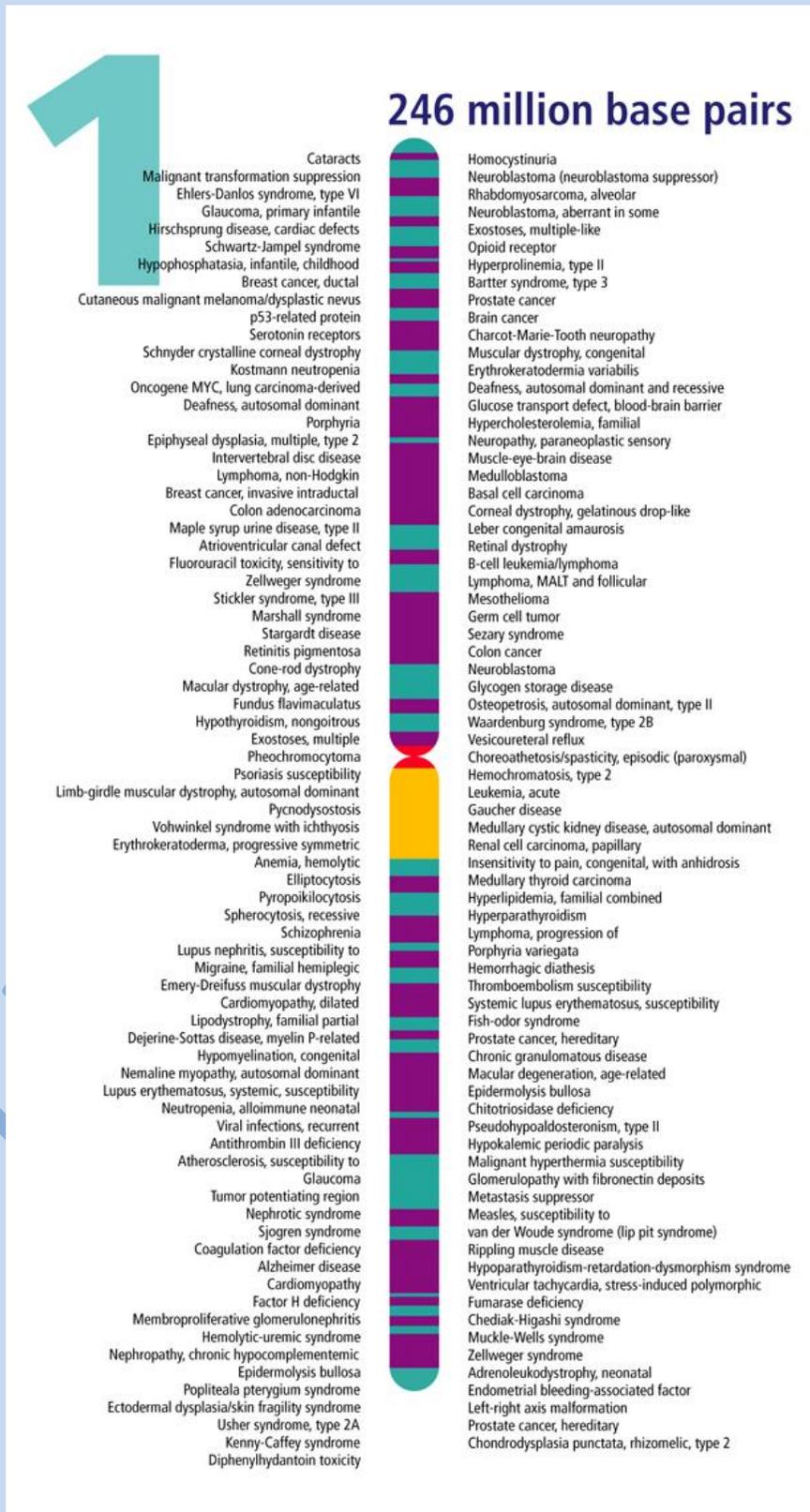
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Oak Ridge, TN 37831

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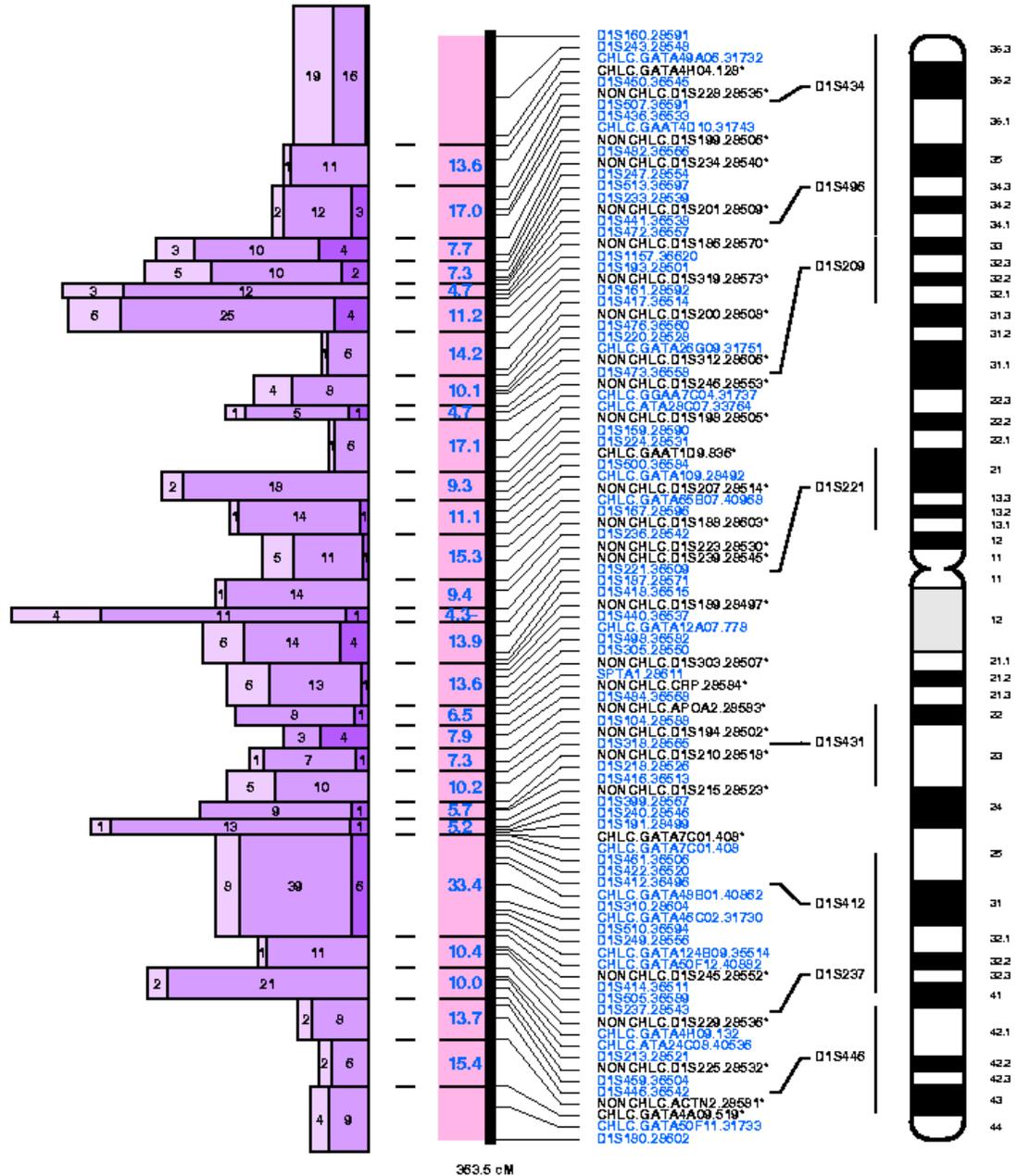
Genomic Science Program
genomics.energy.gov

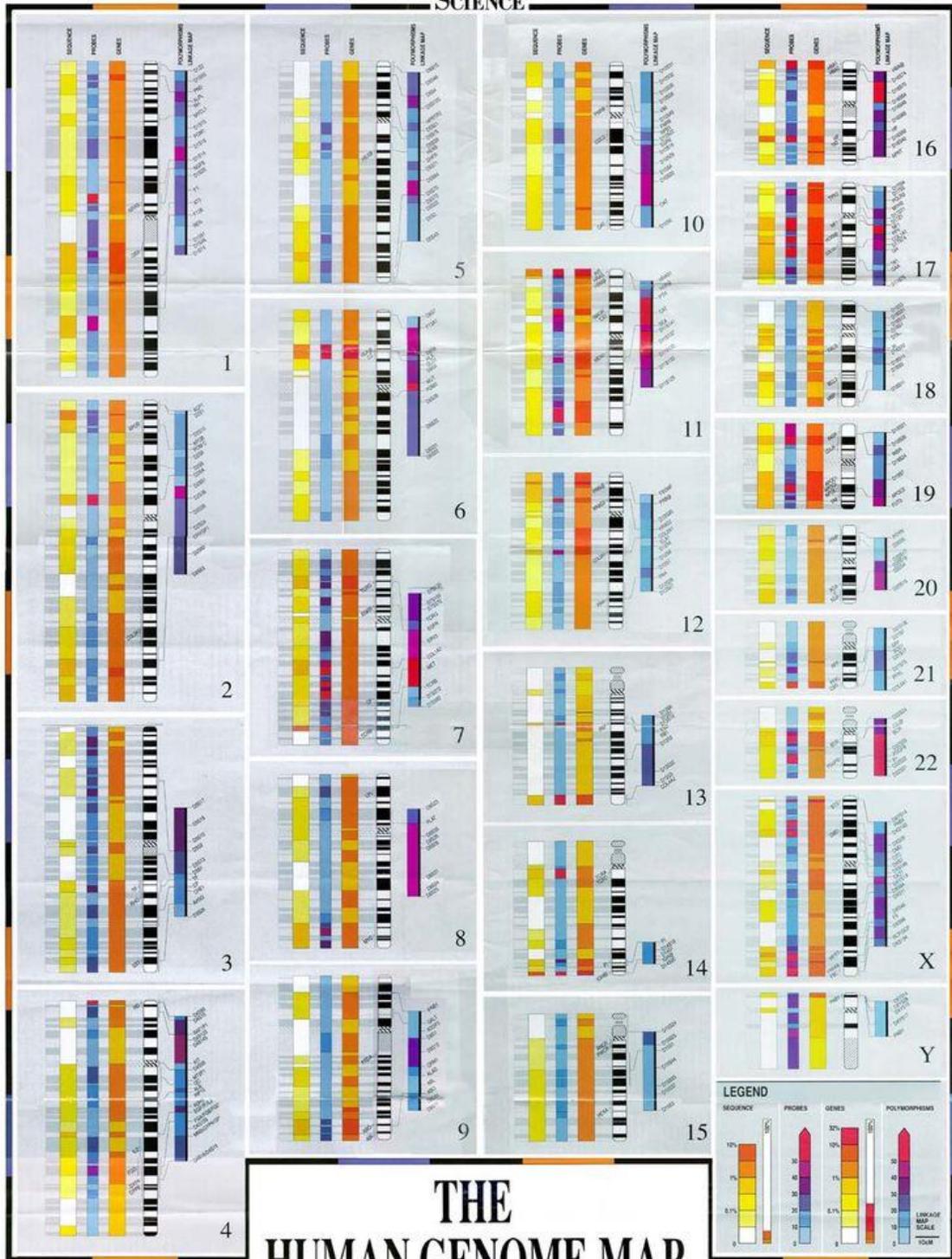
Alpha Chromosomes



Beta Chromosomes

Chromosome 1 Version v8c7 Integrated Marker Map





THE HUMAN GENOME MAP 1990

Results of efforts to map and sequence the human genome, either published or in press by July 31, 1990, are depicted in the bars surrounding the ideogram of each of the 24 chromosomes. Each type of bar is labeled at the top of the wall chart. The data are illustrated as colored intervals according to logarithmic or linear scales, as shown in the legend. Further information, including a description of the allocation and estimation procedures, appears on the back and in the accompanying article (J. C. Stephens *et al.*), in the October 12, 1990 issue of *Science*.

The **SEQUENCE** density bar indicates progress towards determining the complete DNA sequence of each chromosome band. An estimate of progress for each band was obtained by dividing the length of known DNA sequence currently allocated to the band by the length

that was estimated to exist in that band.

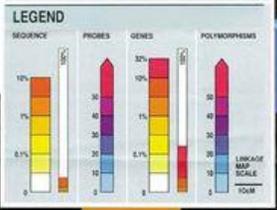
The **PROBES** distribution bar reflects the extent of scientific research activity for each band by showing the number of probes (defined pieces of DNA including clones and PCR primers) allocated to the band.

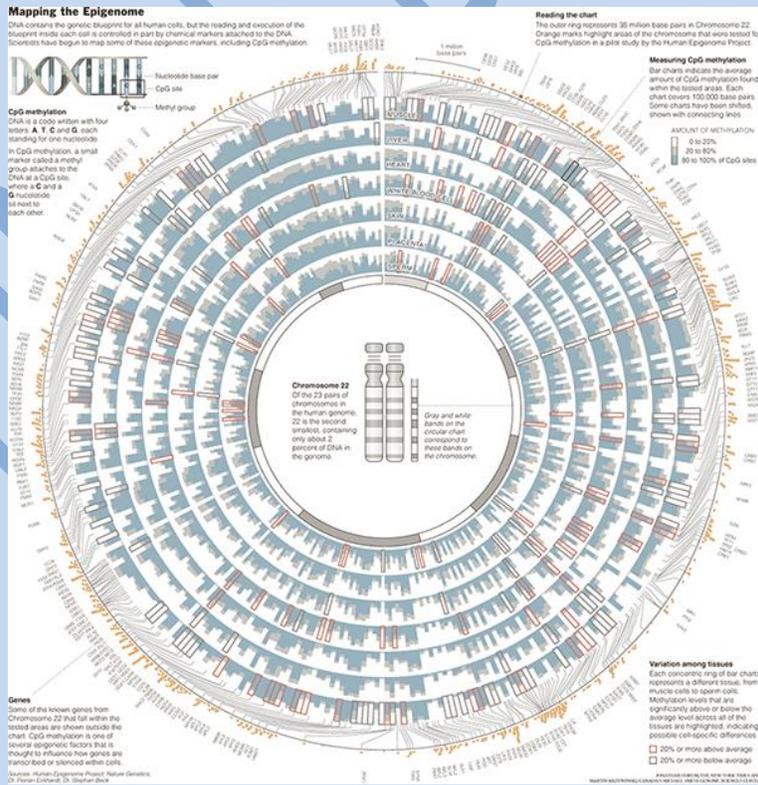
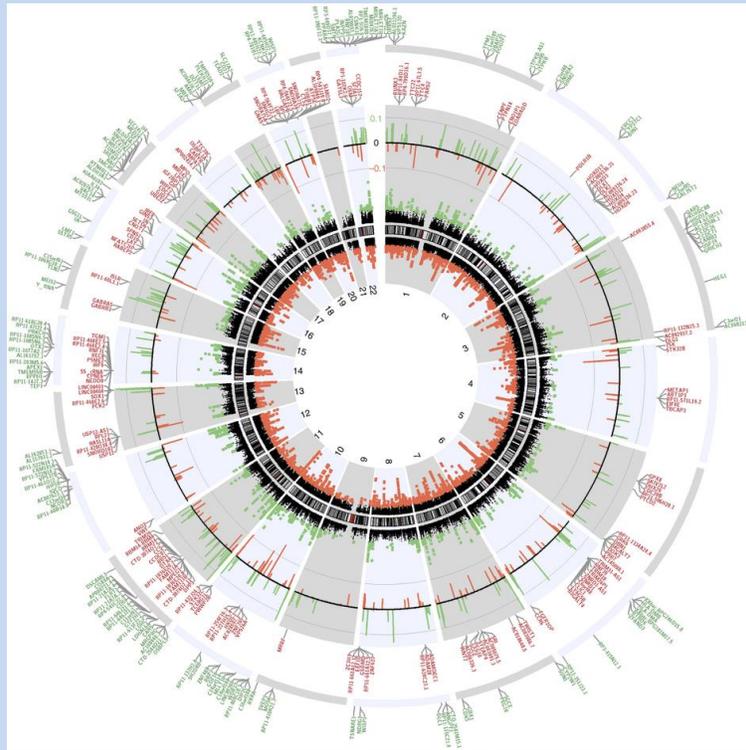
The **GENES** density bar shows progress towards identifying all genes in each band. As with sequence, an estimate of progress was calculated by dividing the number of known genes allocated to the band by the estimated total number of genes in the band.

The **LINKAGE MAP**, shown as the heavy right border of the polymorphism bar, depicts relative order and distance

in centimorgans for loci selected from published maps to give an illustrative map with a resolution averaging 10 to 20 cM. The **POLYMORPHISMS** bar indicates the number of known polymorphic loci allocated to the cytogenetic intervals formed by the linkage map. Lines connect the bar to the ideogram for those loci with a precise cytogenetic map localization.

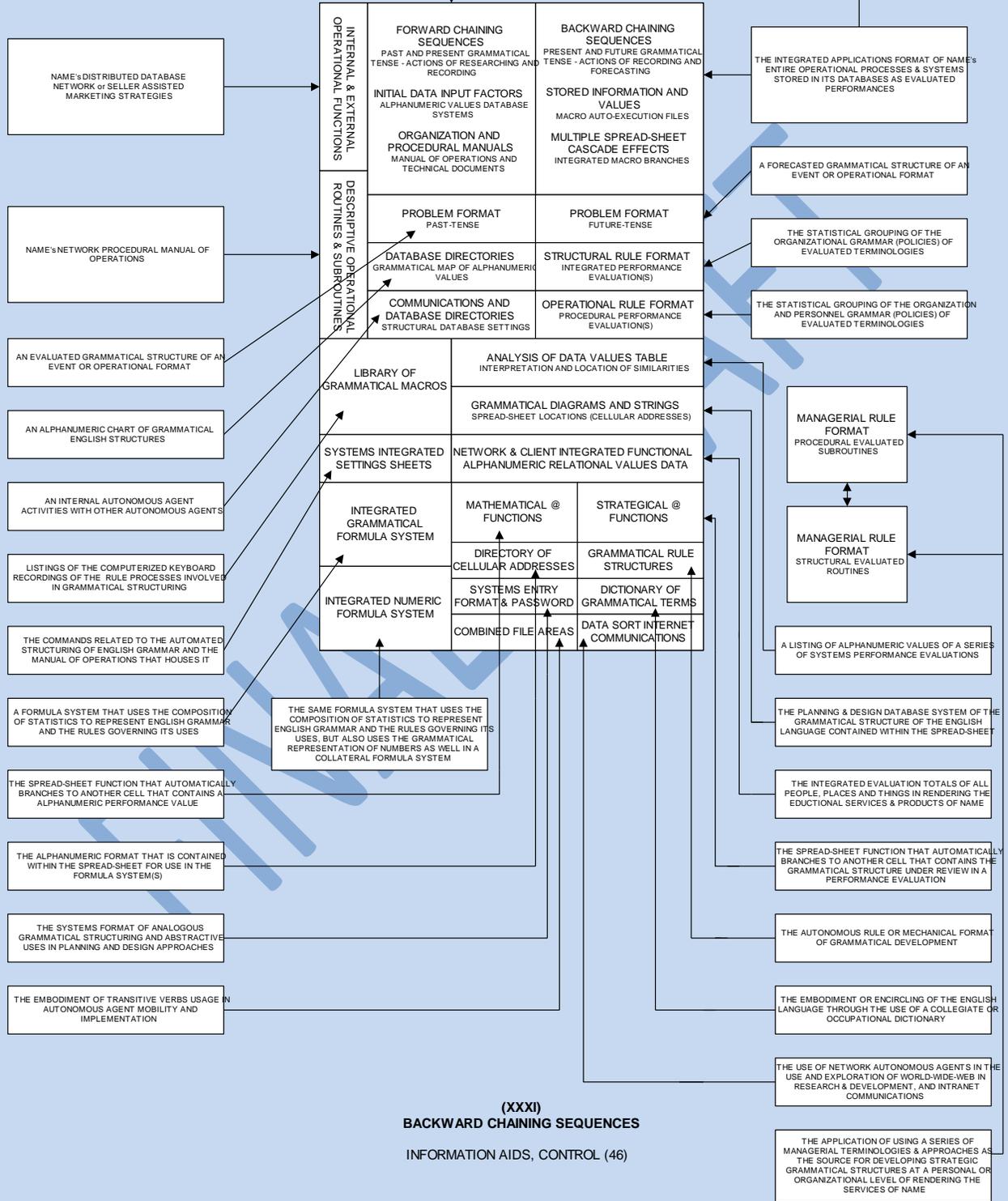
Representative genes are identified by their alphanumeric symbols to the left of the ideogram. Vertical bars show the band (or bands if less precisely mapped) known to contain each gene. Names and disease associations are in the table on the back. These genes were included because of their location in bands of high information content or because of their interest to the broad scientific community or the general public.



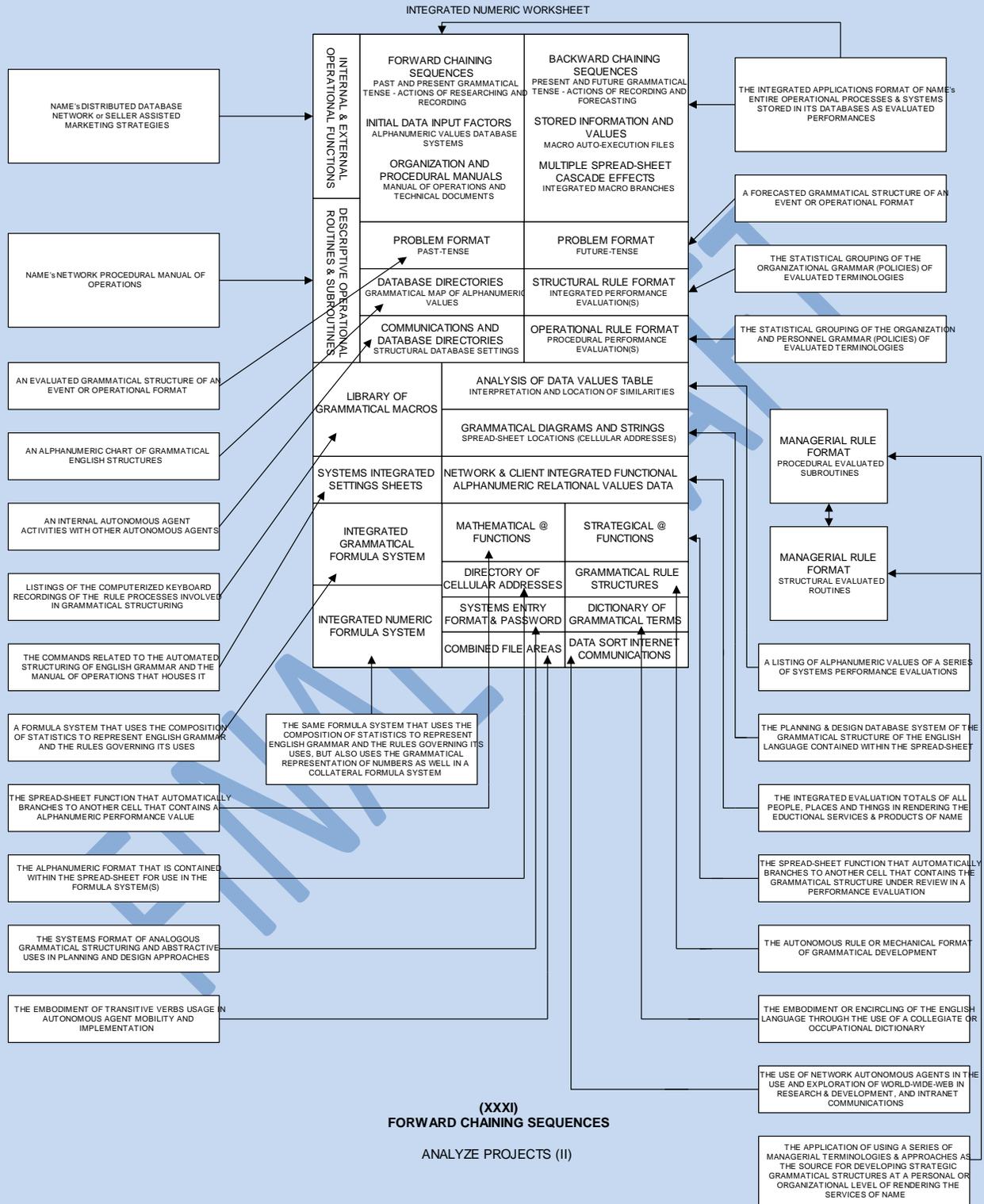


**THE AUTONOMOUS AGENT WORKSHEET of INTERNAL PROCESSES, SYSTEMS
and
CHART OF PROCEDURES**

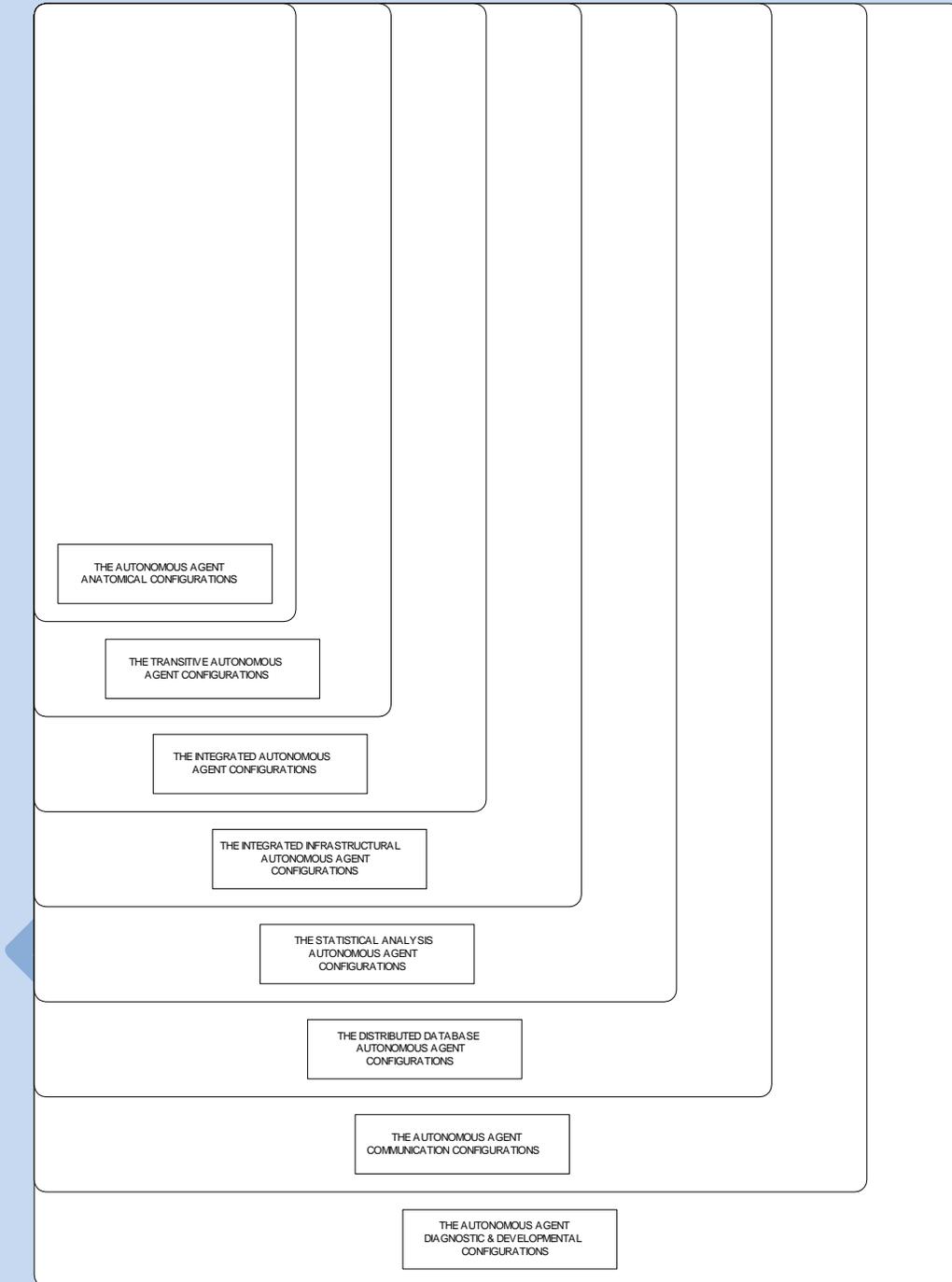
INTEGRATED GRAMMATICAL WORKSHEET



**THE AUTONOMOUS AGENT WORKSHEET of INTERNAL PROCESSES, SYSTEMS
and
CHART of PROCEDURES**



THE INTEGRATED AUTONOMOUS AGENT FORMULA SHEETS, SYSTEMS
and
CHART OF PROCEDURES



(XXXV)
BACKWARD CHAINING SEQUENCES

PURPOSE, FUTURE (6)

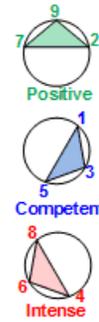
The Enneagram

Personal Growth Tool

Karen Horney
Social Style

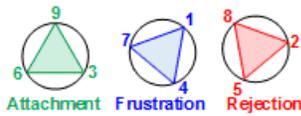
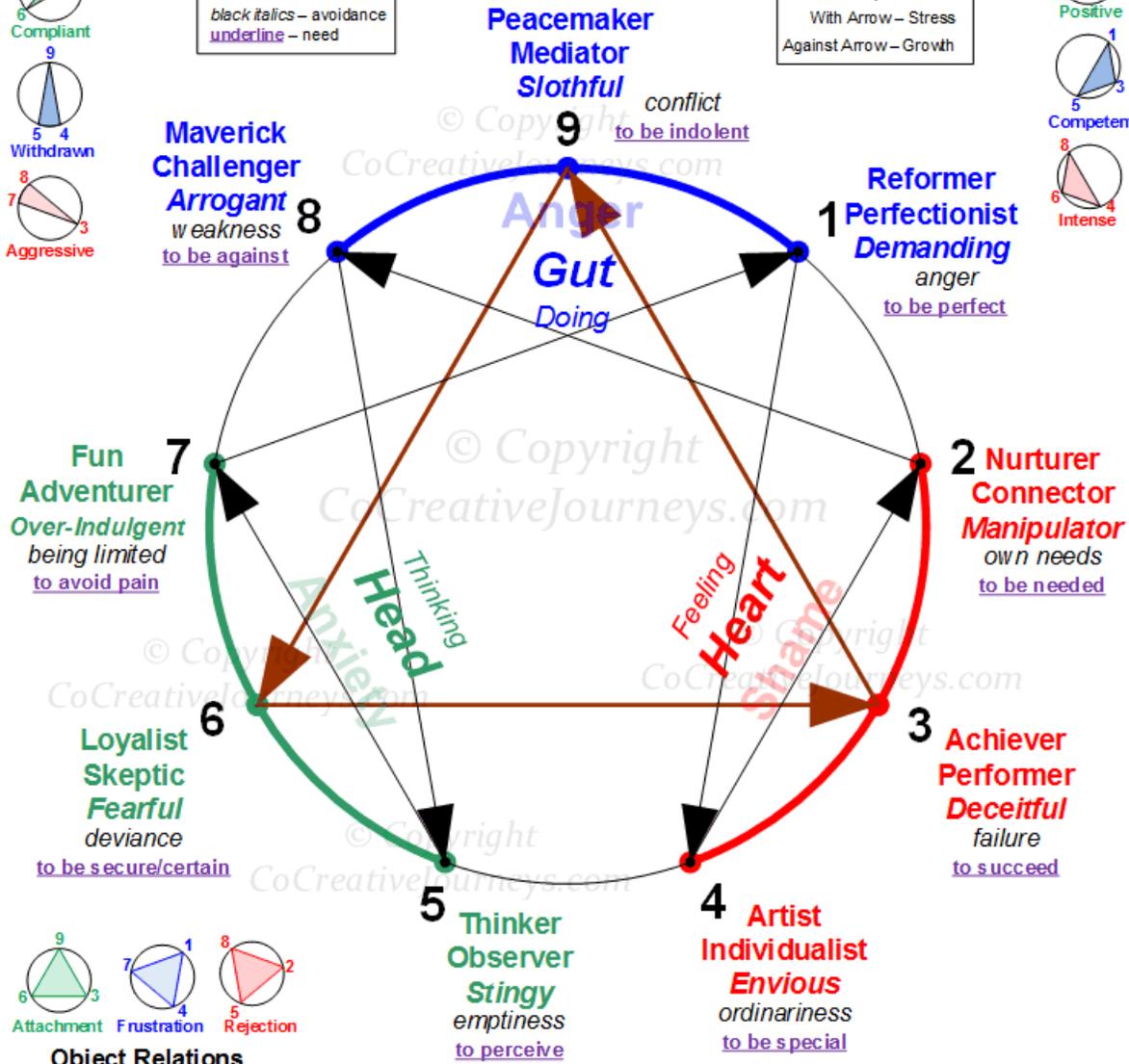


Harmonic Demeanor



black italics – avoidance
underline – need

With Arrow – Stress
Against Arrow – Growth



Object Relations
Bellinda Gore

For Further Study

- 9Types.com
- EnneagramInstitute.com
- CoCreativeJourneys.com/enneagram/nine-types

The Enneagram Made Easy

by Renee Baron & Elizabeth Wagele

The Wisdom of the Enneagram

by Don Richard Riso and Russ Hudson

Discovering the Enneagram

by Richard Rohr and Andreas Ebert

Professional Organizations

- InternationalEnneagram.org
- IEAColorado.org

Instincts (subtypes)

- Sexual (one-on-one)
- Self-Preservation
- Social

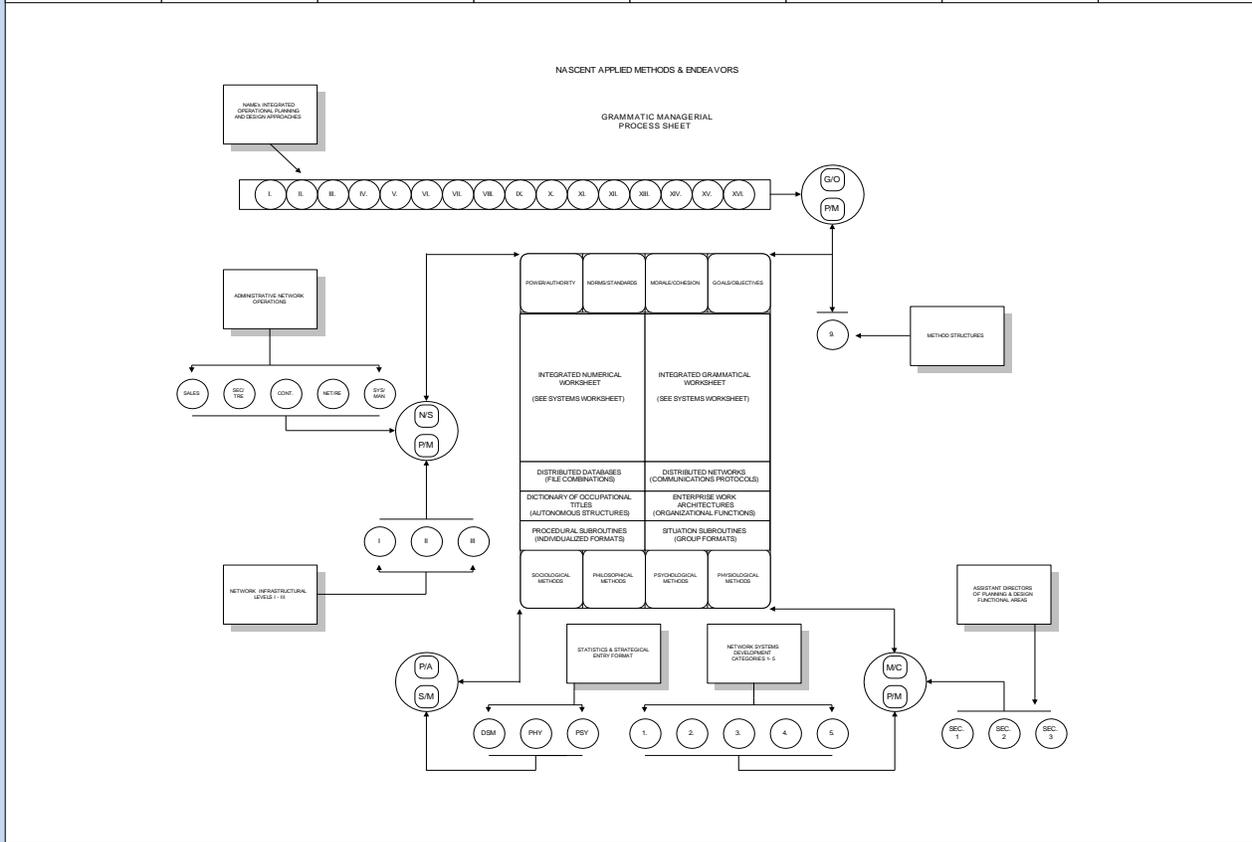
Updated 7/1/19 © Copyright 2005, 2019
CoCreativeJourneys.com

Paul Paiva
Enneagram Instructor & Evangelist
Paul@CoCreativeJourneys.com

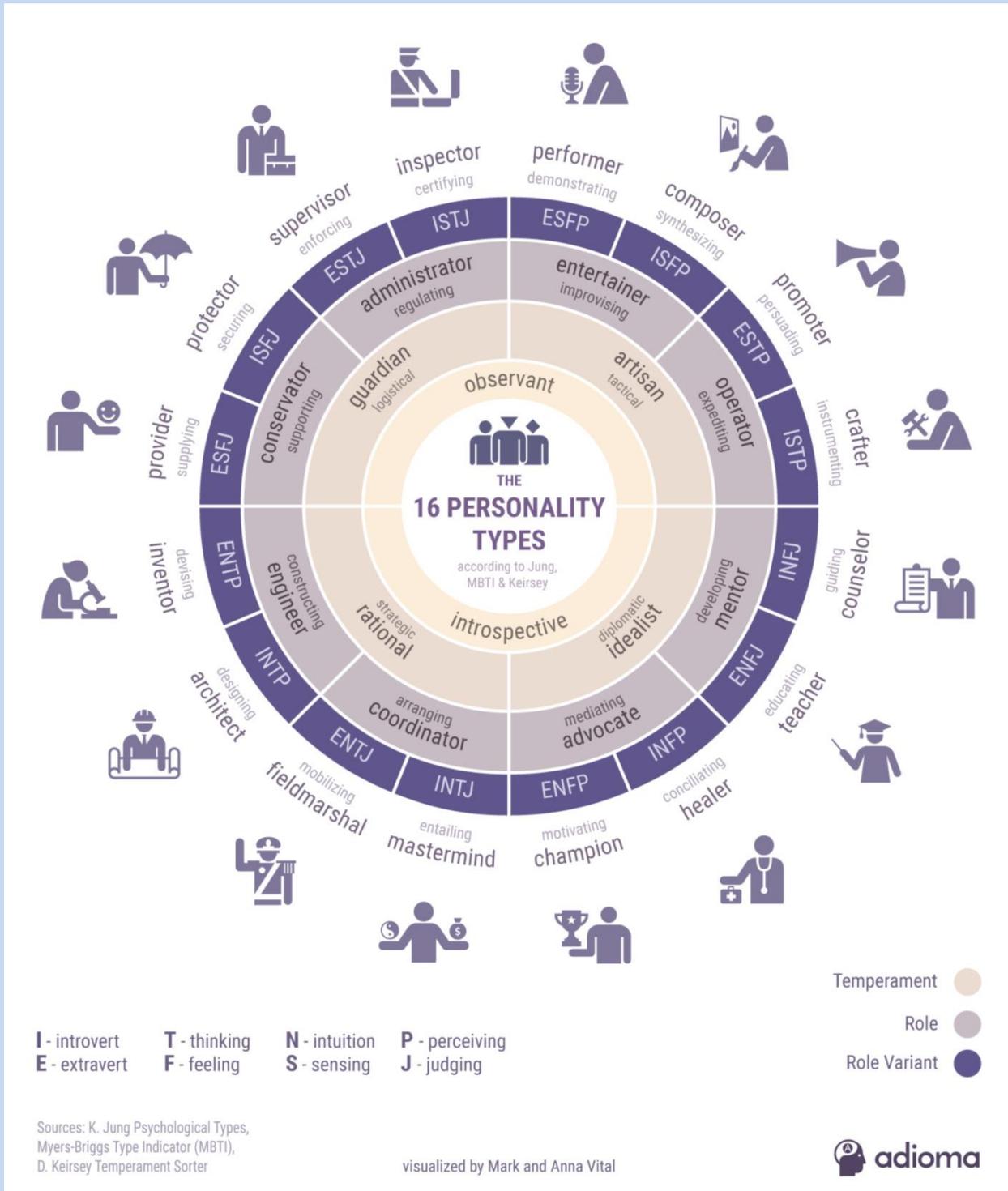
THE AUTONOMOUS AGENT TIMELINE PERFORMANCE, MEASURING, PROCESS SYSTEMS
and
CHART OF PROCEDURES

AUTONOMOUS AGENT DATABASE STRUCTURE

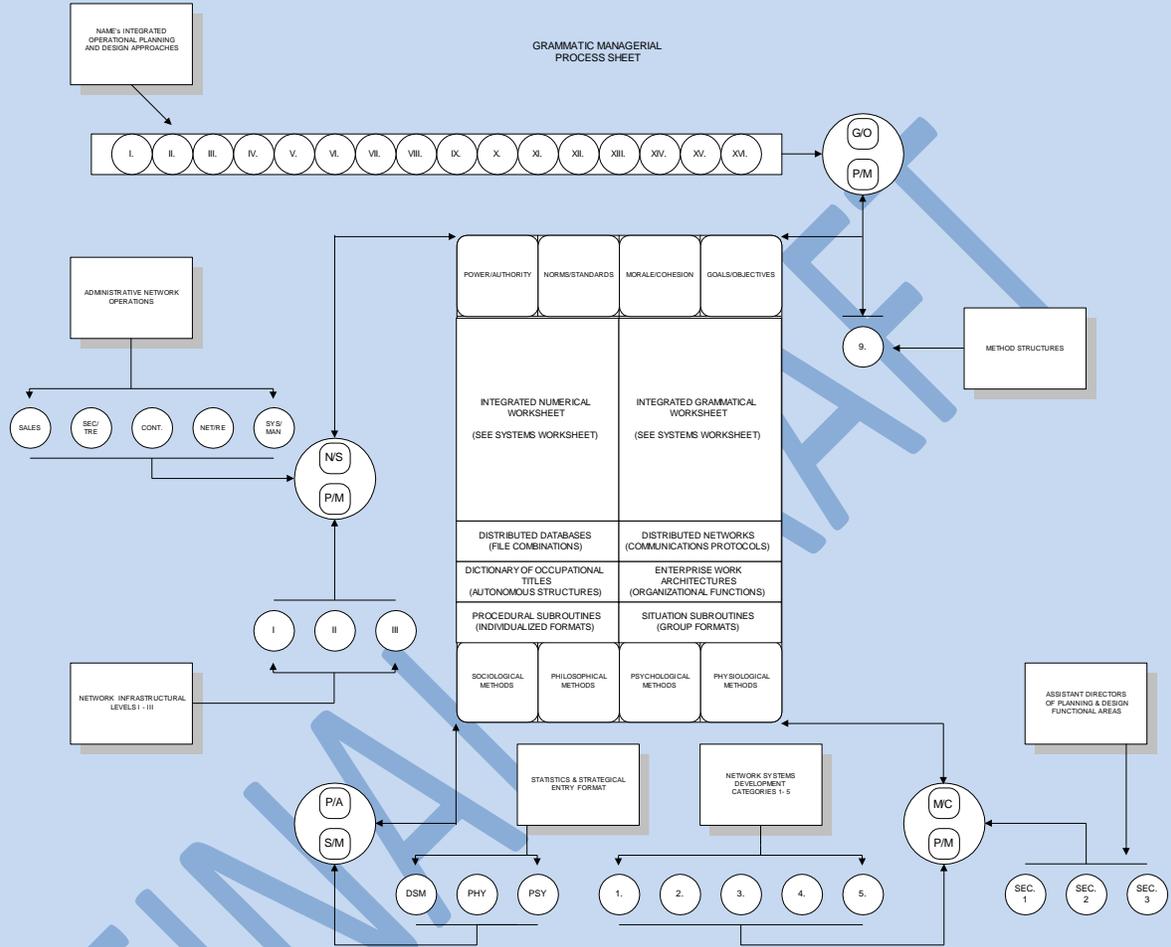
| INDIVIDUAL DEVELOPMENT FORMAT | | | | ORGANIZATIONAL DEVELOPMENT FORMAT | | | |
|-------------------------------|-------|------|-------|-----------------------------------|-------|------|-------|
| AAAC | TAAC | IAAC | IIAAC | AAAC | TAAC | IAAC | IIAAC |
| SAAAC | DDAAC | AACC | AADDC | SAAAC | DDAAC | AACC | AADDC |



(XXXIII)
BACKWARD CHAINING SEQUENCES
INFORMATION AIDS, MEASURES (45)



THE AUTONOMOUS AGENT MANAGERIAL PROCESSES SHEET, SYSTEMS
and
CHART OF PROCEDURES

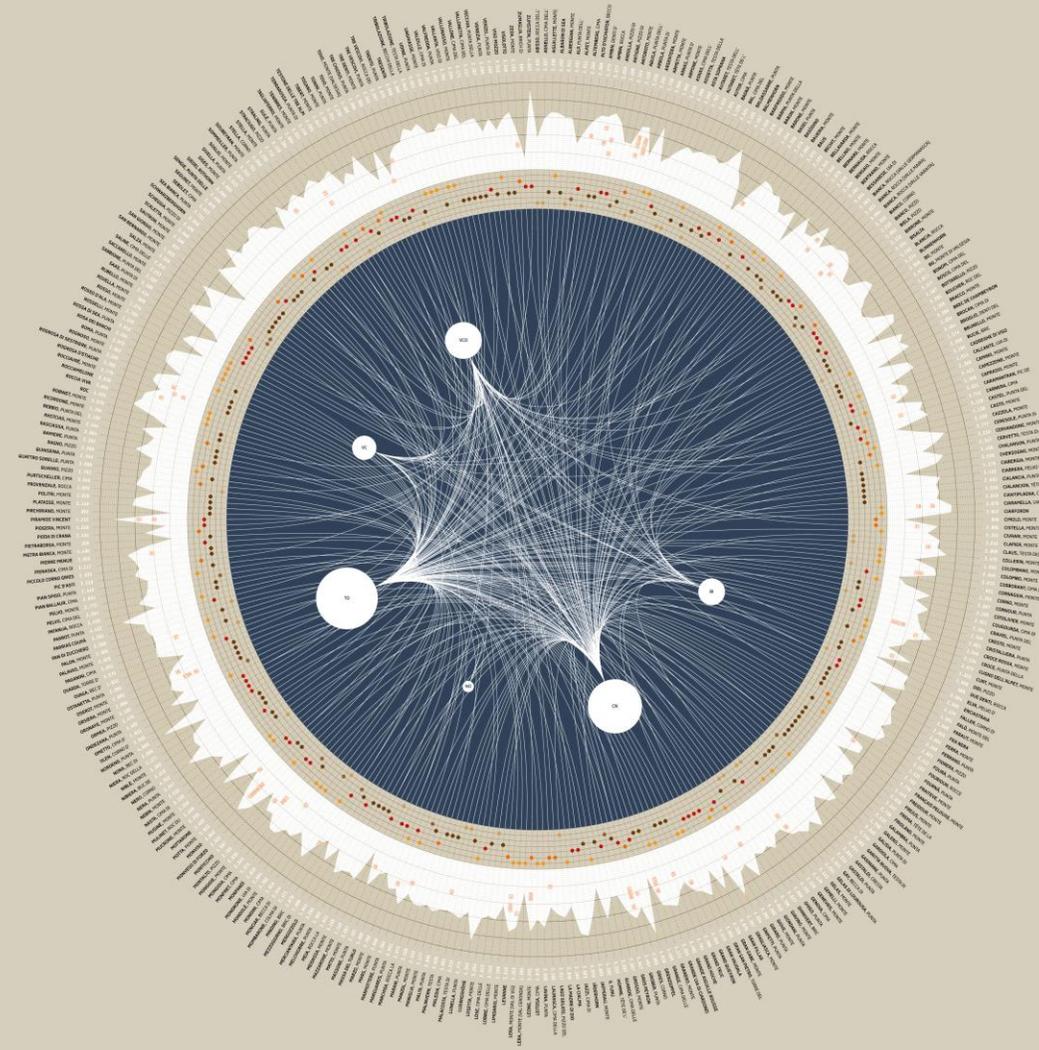


(XXXII)
FORWARD CHAINING SEQUENCES
IDENTIFY MANAGEMENT STYLES (V)



PEAK ME UP

AVVOLTI DALLE VETTE ALPINE PIEMONTESI

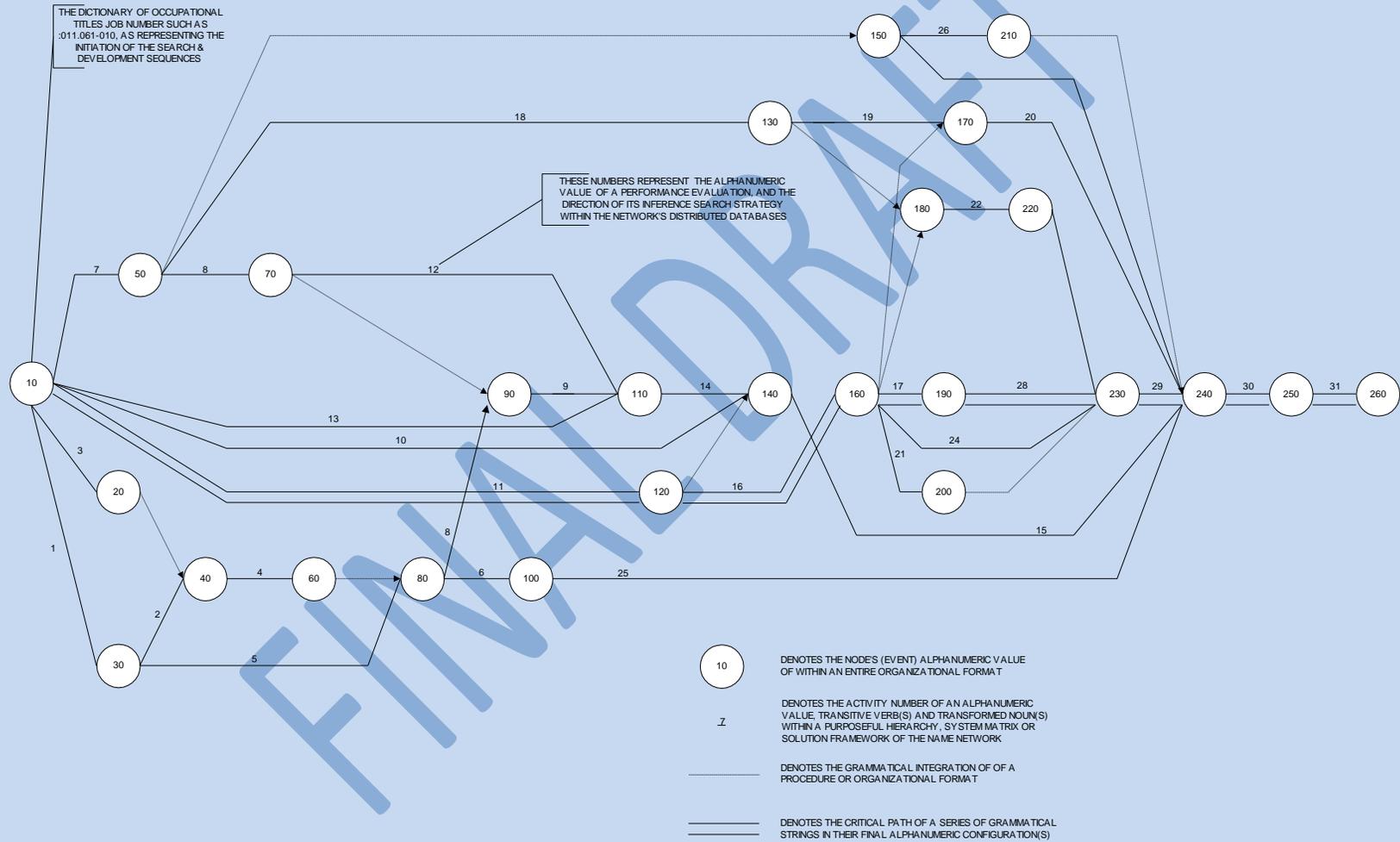


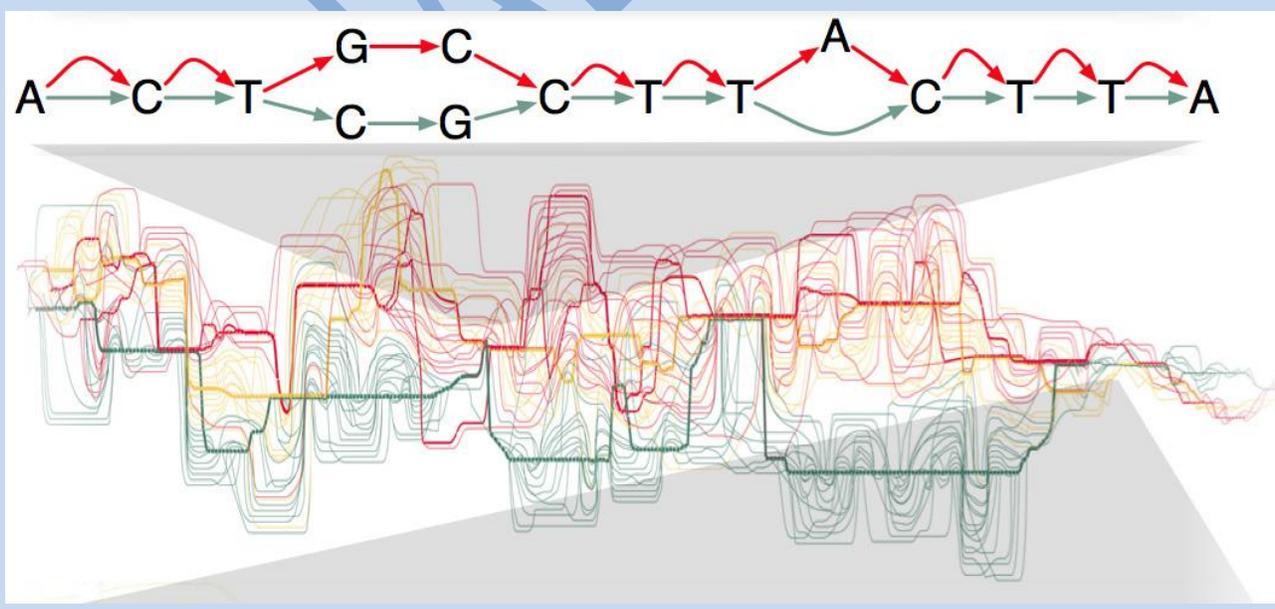
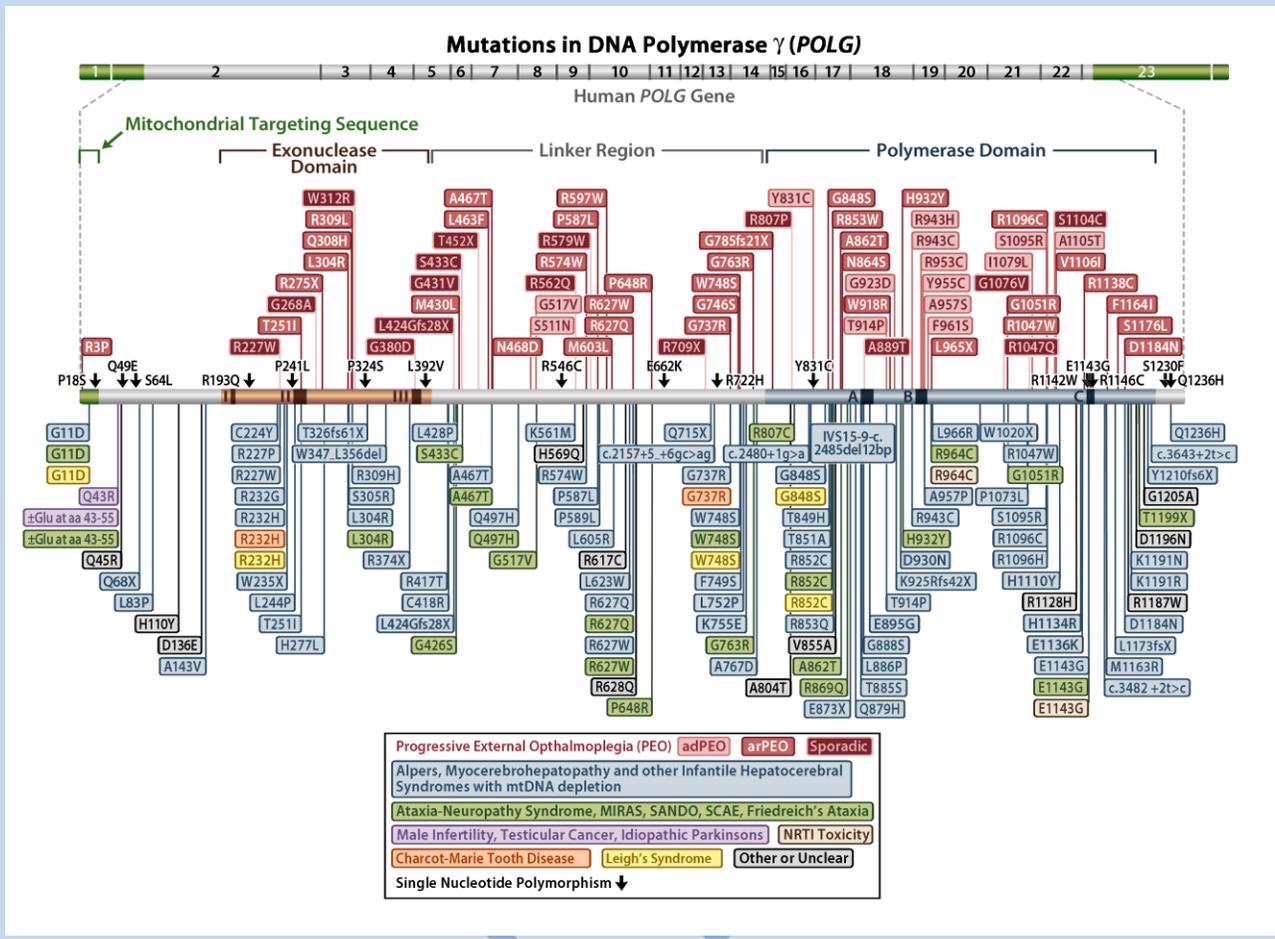
| CAI | REGIONE | VALLE | NUMERO | NOME | ALTEZZA (m) |
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NASCENT APPLIED METHODS & ENDEAVORS

THE PROCEDURAL MAP OF GRAMMATICAL DEVELOPMENT





50+ BLOCKCHAIN REAL WORLD USE CASES

GOVERNMENT

Essentia develops world's first blockchain solution to manage international logistics hub together with Traffic Labs and the Finnish Government

IDENTIFICATION

Voter registration is being facilitated via a blockchain project in Switzerland spearheaded by Uport

MOBILE PAYMENTS

The blockchain ledger that Ripple uses has been latched onto by a group of Japanese banks, who will be using it for quick mobile payments.

INSURANCE

A smart contract-based blockchain is being used by Insurer American International Group Inc as a means of saving costs and increasing transparency.

ENDANGERED SPECIES PROTECTION

The protection of endangered species is being facilitated via a blockchain project that records the activities of these rare animals.

CARBON OFFSETS

IBM is using the Hyperledger Fabric blockchain in China to monitor carbon offset trading.

ENTERPRISE

Ethereum's blockchain can be accessed as a cloud-based service courtesy of Microsoft Azure.

BORDER CONTROL

Essentia has devised a border control system that would use blockchain to store passenger data in the Netherlands.

SUPPLY CHAINS

IBM and Walmart have partnered in China to create a blockchain project that will monitor food safety.

HEALTHCARE

A number of healthcare systems that store data on the blockchain have been pioneered including MedRec.

SHIPPING

Shipping is a natural fit for blockchain, and Maersk have been trialling a blockchain-based project within the maritime logistics industry.

REAL ESTATE

Blockchain is now being used to complete real estate deals, the first of which was conducted in Kiev by Propy.

ENERGY

Essentia is developing a test project that will help energy suppliers track the distribution of their resources in real time, whilst maintaining data confidentiality.

LAND REGISTRY

Land registry titles are now being stored on the blockchain in Georgia in a project developed by the National Agency of Public Registry.

COMPUTATION

Digital Currency Group are helping Amazon Web Services examine ways in which the distributed ledger technology can help improve database security.

ADVERTISING

New York Interactive Advertising Exchange has been experimenting with blockchain as a means of providing an ads marketplace for publishers.

BORDER CONTROL

Essentia is developing a blockchain project for border control that will allow customs agents to record passenger data from an array of inputs and safely store it.

JOURNALISM

Decentralized journalism, as enabled by blockchain technology, has the potential to prevent censorship and increase transparency as Civil has shown.

WASTE MANAGEMENT

Waltonchain is using RFID technology to store waste management data on the blockchain in China.

ENERGY

Food importation is another industry where blockchain is proving its worth, with Louis Dreyfus Co trialling a soybean importation operation using this technology.

TAXATION

In China, a tax-based initiative is using blockchain to store tax records and electronic invoices led by Miscoal Network.

ENERGY

Chile's National Energy Commission has started using blockchain technology as a way of certifying data pertaining to the country's energy usage as it seeks to update its electrical infrastructure.

RAILWAYS

Russian rail operator Novotrans is storing inventory data on a blockchain pertaining to repair requests and rolling stock.

DIAMONDS

The De Beers Group is using blockchain to track the importation and sale of diamonds.

FINE ART

By storing certificates of authenticity on the blockchain, it's possible to dramatically reduce art forgeries, as one blockchain project is proving.

NATIONAL SECURITY

For the past two years, the US Department of Homeland Security has been using blockchain to record and safely store data captured from its security cameras.

TOURISM

In a bid to boost its tourism economy, Hawaii is examining ways in which blockchain-based cryptocurrencies can be adopted throughout the US state.

ENTERPRISE

Google is building its own blockchain which will be integrated into its cloud-based services, enabling businesses to store data on it, and to request their own white label version developed by Alphabet Inc.

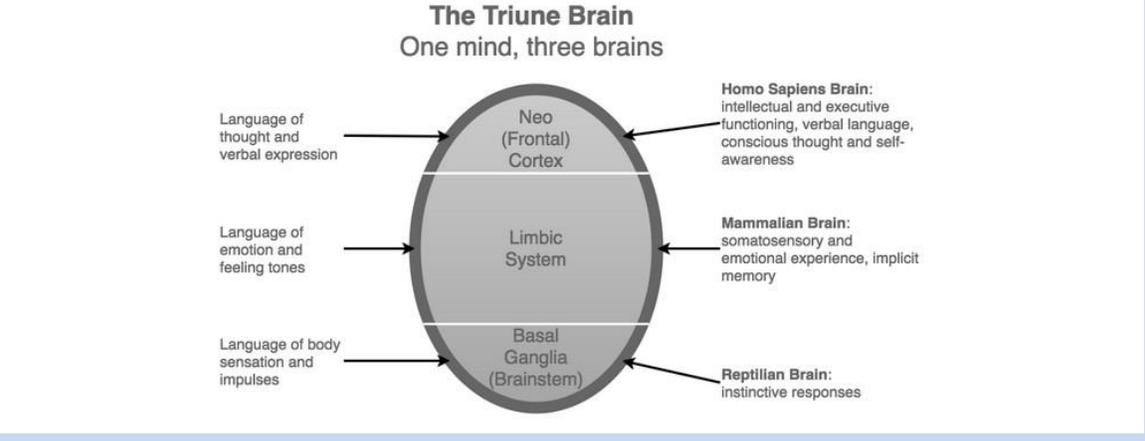
MUSIC

Arbit is a blockchain-based project led by former Guns N Roses drummer Matt Sorum seeking a fairer way to reward musicians for their creative efforts.

FISHING

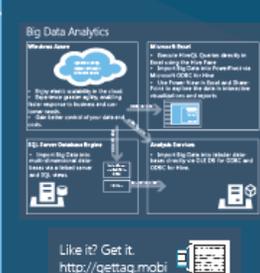
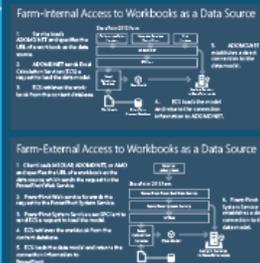
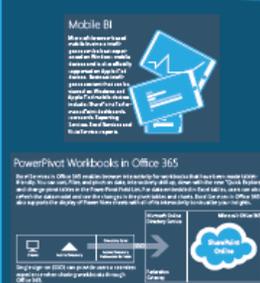
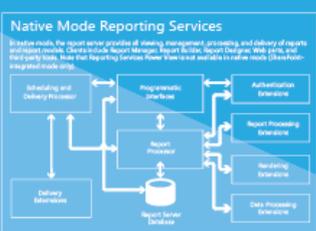
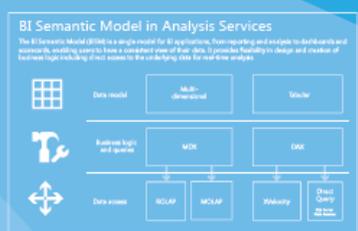
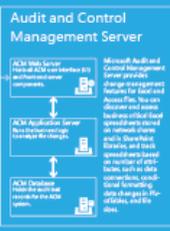
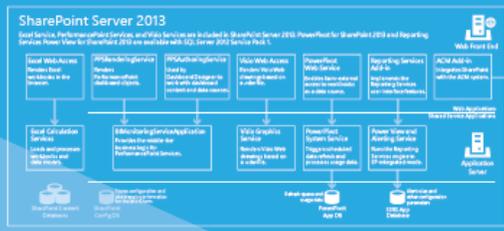
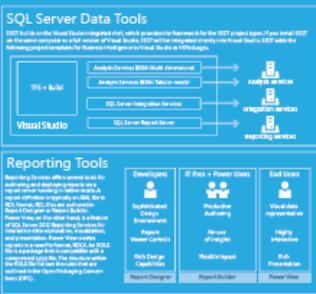
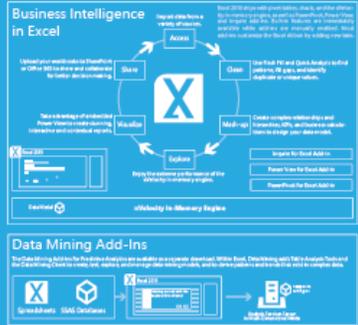
Blockchain technology has been used to provide a transparent record of where fish was caught, as a means of ensuring it was legally landed.

MATTEO GIANPIETRO ZAGO



MICROSOFT BUSINESS INTELLIGENCE AT A GLANCE

Clients
Presentation Subsystem
Information Sources

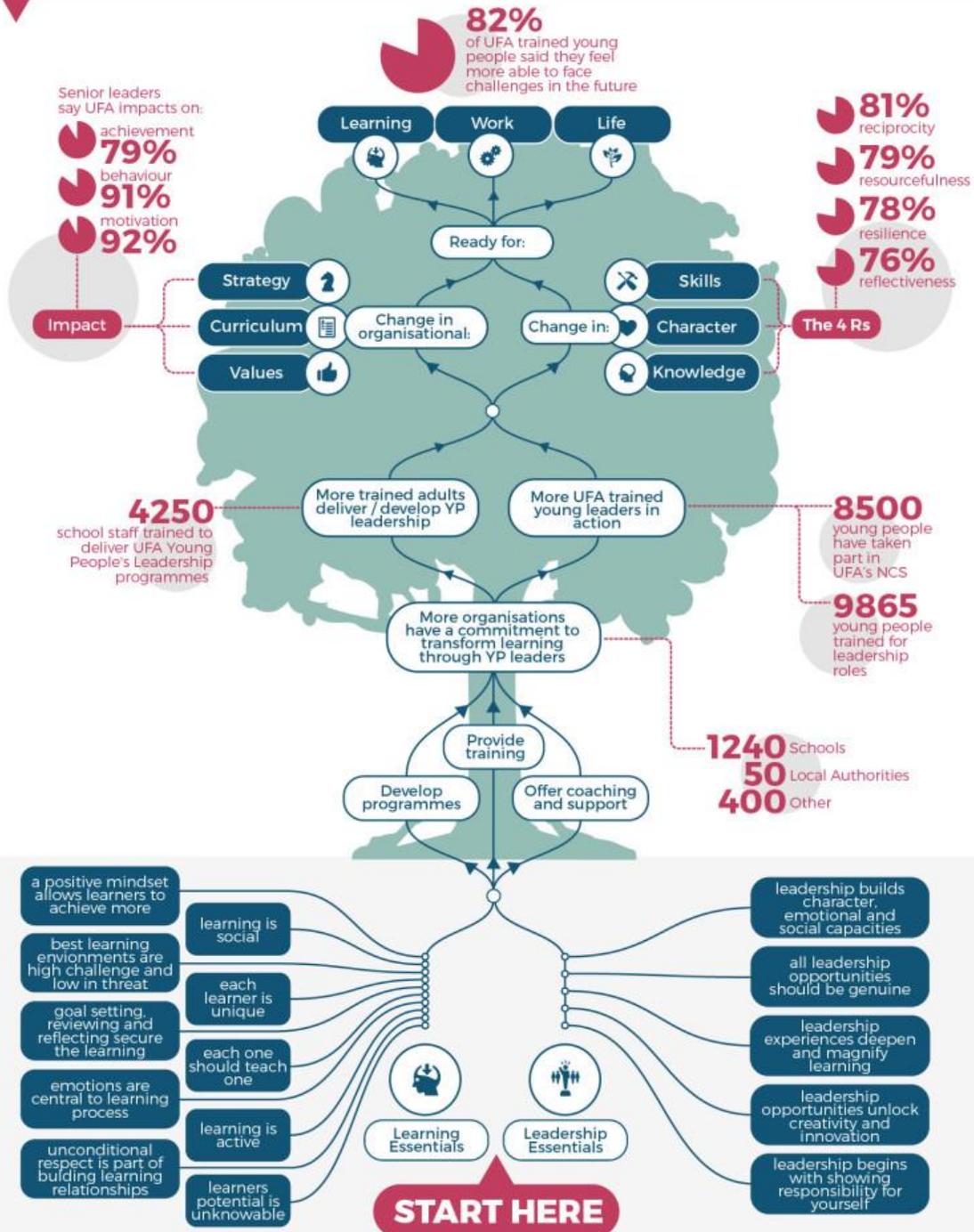


Like it? Get it. <http://gettag.mobi>

365 DataScience

| | Data | | Data Science | | |
|------------------------------|--|--|---|---|---|
| | TRADITIONAL | BIG | BUSINESS INTELLIGENCE | TRADITIONAL METHODS | MACHINE LEARNING |
| WHEN it is applied | At the beginning of your analysis | | After the data has been gathered & organized | After BI reports have been created and discussed | |
| | | | PAST | NOW | FUTURE |
| WHY you need it | data-driven decisions require well-organized and relevant raw data stored in a digital format | | use data to create reports and dashboards to gain business insights | assess potential future scenarios by using advanced statistical methods | utilize artificial intelligence to predict behavior in unprecedented ways |
| WHAT techniques are involved | <p>DATA COLLECTION</p> <p>PREPROCESSING</p> <ul style="list-style-type: none"> class labeling (categorical vs numerical) data cleansing dealing with missing values <p>CASE SPECIFIC</p> <ul style="list-style-type: none"> e.g. balancing & shuffling datasets | <p>DATA COLLECTION</p> <p>PREPROCESSING</p> <ul style="list-style-type: none"> class labeling (number, text, digital images, digital video data, digital audio data) data cleansing dealing with missing values <p>CASE SPECIFIC</p> <ul style="list-style-type: none"> text data mining, confidentiality - preserving data mining techniques | <p>ANALYZE THE DATA</p> <p>EXTRACT INFO AND PRESENT IT IN THE FORM OF:</p> <ul style="list-style-type: none"> metrics KPIs reports dashboards | <p>REGRESSION</p> <p>LOGISTIC REGRESSION</p> <p>CLUSTERING</p> <p>FACTOR ANALYSIS</p> <p>TIME SERIES</p> | <p>SUPERVISED LEARNING</p> <ul style="list-style-type: none"> SVMs NNs deep learning random forests bayesian networks <p>UNSUPERVISED LEARNING</p> <ul style="list-style-type: none"> k-means deep learning <p>REINFORCEMENT LEARNING</p> <p>similar to supervised learning, but instead of minimizing the loss, one maximizes reward</p> |
| WHERE | <p>BASIC CUSTOMER DATA</p> <p>HISTORICAL STOCK PRICE DATA</p> | <p>SOCIAL MEDIA</p> <p>FINANCIAL TRADING DATA</p> | <p>PRICE OPTIMIZATION</p> <p>INVENTORY MANAGEMENT</p> | <p>USER EXPERIENCE (UX)</p> <p>SALES FORECASTING</p> | <p>FRAUD DETECTION</p> <p>CLIENT RETENTION</p> |
| HOW using what tools | <p>PROGRAMMING LANGUAGES</p> <p>R, Python</p> <p>SOFTWARE</p> <p>SQL, MATLAB, IBM SPSS</p> | <p>PROGRAMMING LANGUAGES</p> <p>R, Python</p> <p>Java, Scala</p> <p>SOFTWARE</p> <p>Hadoop, HBase, MongoDB</p> | <p>PROGRAMMING LANGUAGES</p> <p>R, Python</p> <p>SQL, MATLAB</p> <p>SOFTWARE</p> <p>Power BI, SAS, Qlik, Tableau</p> | <p>PROGRAMMING LANGUAGES</p> <p>R, Python</p> <p>MATLAB</p> <p>SOFTWARE</p> <p>IBM SPSS, EViews, STATA</p> | <p>PROGRAMMING LANGUAGES</p> <p>R, Python, MATLAB</p> <p>Java, C</p> <p>SOFTWARE</p> <p>Scala, Microsoft Azure, rapidminer</p> |
| WHO | <p>DATA ARCHITECT</p> <p>DATABASE ENGINEER</p> <p>DATABASE ADMINISTRATOR</p> | <p>BIG DATA ARCHITECT</p> <p>BIG DATA ENGINEER</p> | <p>BI ANALYST</p> <p>BI CONSULTANT</p> <p>BI DEVELOPER</p> | <p>DATA SCIENTIST</p> <p>DATA ANALYST</p> | <p>DATA SCIENTIST</p> <p>MACHINE LEARNING ENGINEER</p> |
| ARE YOU AWARE | 200,000 lines of data is not necessarily big data. It is not just volume that defines a data set as 'big' - variety, variability, velocity, veracity, and other characteristics are determinative as well. | | Qualitative analysis tools such as SWOT are not used for quantitative analysis. Hence, they are not part of business intelligence. | Software like Excel, SPSS, and Stata, can be successfully used by data science teams in many companies. | In deep learning, there is still a debate on WHY the algorithms used outperform all conventional methods. |

Theory of Change





(ANMESCL2 EL NEGRO)

ALPHA NUMEROUS MAXIMA
EGREGIA SUMMA CUM LAUDE

Software Engineering and Information Manufacturing Procedural Hierarchy Support Documentation

Section One – Introduction (5' -> 3')

Executive Summary
Press Release
DNA Mapping & Virtual Intelligence

Section Two – Project Overview (3' <- 5')

Carnegie Mellon's Procedural & Organizational Development Proposals within
NAME's IBOS [DOS/DALP/IAOA] Technology & Marketing Bases

Mathematical/Formula-Based Technology Development

(Project Operation)

1. Software Development Using VDM ≥
2. **Spiral Development** ≥
3. Attribute-Based Architectural Styles (ABAS) ≥
4. Evolutionary Co-Word Analysis ≥
5. Steps in an Architecture Tradeoff Analysis Method Quality Attribute Models and Analysis (ATAM) ≥
6. **Taxonomy of Coordination Mechanisms Used in Real-Time Software Based on Domain Analysis***
7. Analysis of Input-Output Paradigms for Real-Time Systems ≥
8. Real-Time Locking Protocol ≥

9. Design Specifications for Adaptive Real-Time Systems (**SMARTS**) >
10. Browsers for Distributed Systems Universal Paradigm or Siren's Song >
11. Establishing a Software Measurement Process >
12. **Goal-Driven Software Measurement--A Guidebook** >
13. Formal Verification of Programs >
14. Coming Attractions in Software Architecture >

Distributed Technological Fulfillment

(Project Planning)

1. **Training Guidelines for a Software Organization** >
2. Personal Process in Software Engineering >
3. Analysis of a Software Maintenance System: A CASE Study >
4. Guide to CASE Adoption >
5. Tool Integration and Environment Architectures >
6. Tool Interface Technology >
7. Approaches to Legacy System Evolution >
8. Architecture for Evolvable Industrial Computing >
9. Architecture-Based Development (ATAM) >
10. Serpent Dialogue Model >
11. Studying Software Architecture Through Design Spaces and Rules >
12. Design Space and Design Rules for User Interface Software Architecture >
13. **User Interface Technology Survey***
14. Classification and Bibliography of Software Prototyping >
15. Software Process Modeling >
16. Models of Software Evolution Life Cycle and Process >
17. Classifying Software Design Methods >
18. COTS Activity Framework >
19. Manager's Checklist for Validating Software Cost and Schedule Estimates >
20. Cleanroom Software Engineering Reference Model >
21. Cleanroom Software Engineering Implementation >
22. Formal Specification of Software >
23. Software Engineering >
24. Component-Based Software Engineering >
25. Reverse-Engineering Environment Framework >
26. Reengineering: An Engineering Problem >
27. Experiment Planning for Software Development: Redevelopment Experiment >
28. Reuse-Based Software Development >
29. Guide to the Assessment of Software Development Methods >
30. Establishing a Software Measurement Process >
31. Software Quality Measurement: A Framework for Counting Problems and Defects >
32. **PSM** >
33. Software Metrics >
34. Unit Analysis and Testing >
35. Study in Software Maintenance >

Operational Development as Guided through PERT Systems

(P&D Purposeful Hierarchies Involving People)

1. **IDEAL, A User's Guide*** (5' -> 3')
2. IDEAL (SAIF) Definition ≥
3. Capability Maturity Model Relationships ≥
2. CMM(SM)-Based Appraisal for Internal Process Improvement (CBA IPI)
Method Description ≥
3. CMM Appraisal Framework, Version 1_0 ≥
4. Maturity Questionnaire ≥
5. Documentation in Architectural Layers ≥
6. ABDM ≥
7. Capability Maturity Model Relationships (SE-CMM) ≥
8. **SE-CMM** ≥
9. Requirements Management into Organizations ≥
10. **CMMI & SW-CMM Mapping** ≥
11. Software Engineering Process Group Guide ≥

Organizational Fulfillment

(Project Definitions)

1. **SCE** ≥
2. **SCE Supplier Selection** ≥
3. **CMMI-SE-SW-IPPD, V1_02, Staged** ≥
 - a. **SM & CMM** ≥
4. **CMMI-SE-SW-IPPD, V1_02, Continuous** ≥
 - a. **1999 Survey of High Maturity Organizations** ≥
 - b. **SA-CMM[R]** ≥
 - c. **Software Acquisition Risk Management** ≥
 - d. **Software Acquisition Process Maturity Questionnaire** ≥
5. **Guidelines for Developing a Product Line Concept of Operations** ≥
6. **C4 Software Technology Reference Guide***
7. **Requirements Management into Organizations** ≥
8. **PSP[SM]** ≥
9. **TSP[SM]** ≥
10. **People Capability Maturity Model (P-CMM)** ≥
11. **People CMM(R)-Based Assessment Method Description** ≥
12. **STR** ≥
13. **Technology and Adoption of Software Process Automation** ≥
14. **Staff-hours and Reporting Schedule** ≥
15. **SEI Strategic Plan 1997** ≥

Foundation for Strategical/Tactical Autonomous Security Profiles

(Project Interpretation)

1. **Handbook for Computer Security Incident Response Teams (CSIRTs)***
2. Software Safety ≥
3. SRE Method Description ≥
4. SRE Method Description Notebook ≥
5. **TRM Team Risk Management ≥**
6. **Laws (Intellectual Property Protection for Software) ≥**

Section Three – Laboratory or Software Engineering Support Documents

(5' -> 3')

A. Employment Related Software Development:

1. Individual, Group, Inter-group, Organization and Larger Social System Development – Consultative Intervention Matrix and SEI Documents.
2. The Dictionary of Occupational Titles and Thomas Registry Guide – Autonomous or Collaborative Agent Formatting and Enterprise Work Architectural Design Technologies (i.e., **DALP (3' <- 5')**).
 - 2a. The Solution Framework for Strategic Development – NAME's Sequential Application of its overall processes and procedures within the Human Genome Environment.
 - 2b. The Statement of Operations – The Planning & Design Approach toward NAME's employee development.
 - 2c. The Strategic Programming Format – The Operational Environments.
3. The Planning & Design Approach – Distributed Grammatical Database Structure and Analytical Netmapping Technologies (i.e., **IAOA (5' -> 3')**).
 - 3a. The Systems Matrix – The Application of Human Genetics towards Words, Phrases, Sentences, etc.
 - 3b. The Description of Operational Duties – The Sequential Application of Human Genetics toward NAME's Ideals, Concepts or Procedural Tasks.
 - 3c. The Biological Programming Format – The Initialization of Environmental Virtual Biological Cloning.
4. The Method Structure – Guide to the Software Engineering Body of Knowledge (i.e., **DOSA (5' -> 3')**).***
5. The Manufacturing Planning and Control Structure – Evolving Novel Organizational Forms through Genetic Algorithms.
6. The Group Ordering Logic – MRP/ERP Systems Development.
7. The Formula Format – The Operational Guidelines for Autonomous Agent(s) Procedural Implementation.
 - 7a. The Systems Matrix – The Application of Human Genetics towards Search Engine Protocols and Document Analysis.
 - 7a1. The Description of Operational Duties – The Sequential Application of Human Genetics toward NAME's customer Ideals, Concepts or Procedural Tasks.

- 7a2. The Biological Programming Format – The Initialization of Individual, Group, Inter-group, Organization and Larger Social System Virtual Biological Cloning.
- 7b. The Solution Framework for Strategic Development – NAME’s Sequential Application of Proteins within the Human Genome.
- 7b1. The Statement of Operations – The Planning & Design Approach toward NAME’s customer development.
- 7b2. The Strategic Programming Format – The ROOT System.
- 8. The Strategic Programming Charts – The Level-by-Level Inference from Large-Scale Gene Expression Data.
- 9. The Phase-to-Phase Operational Format – Project Control through a Computer Associate Procedural Model.
- 10. The Systems Architecture – The TOVE Architectural Model.
- 11. Employment Related Systems Development – IBOS/DALP/DOSA Replicative Templates.

B. Exhibits

- 1. **Traditional Marketing Strategies**
- 2. **NAME’s Marketing Strategies**

* Lead Documents
 ▾ Go Support Documents

All Things In A Box

An example of two complementary strands of DNA would be:

(5' -> 3') ATGGAATTCTCGCTC (Coding, sense strand) ?
 (3' <- 5') TACCTTAAGAGCGAG (Template, antisense strand) .

(5' -> 3') AUGGAAUUCUCGCUC (mRNA made from Template strand) !

Integrated Cross-the-Board Infrastructural Framework for NAME's Internet-Based Operating Systems IBOS [DOSA/DALP/IAOA]

(Virtual or real-time internet, evolving inter-operable, interactive, multi-tasking/multiple application environments)

Evolving Generic Inter-Operable MT/MA Platforms (5' -> 3')

1. **Words, Ideas, and Concepts** (Grammatical, Mathematical or Alphanumeric Formulas)
2. **Technological Innovations** (**Sociological, Philosophical, Psychological & Physiological**)
3. **Global Environment** (Educational, Strategic, Tactical, Financial and Logistical Market Forces)

Individual Generic Interactive MT/MA Platforms (3' <- 5')

4. **High Level Managers** (Definitive **P/A** DOT Occupations and Educational Procedures)
5. **Middle Level Managers** (Definitive **N/S** DOT Occupations and Strategic Procedures)
6. **Low Level Managers** (Definitive **M/C** DOT Occupations and Tactical Procedures)
7. **Worker Level Employee** (Definitive **G/O** DOT Occupations and Logistical Procedures)

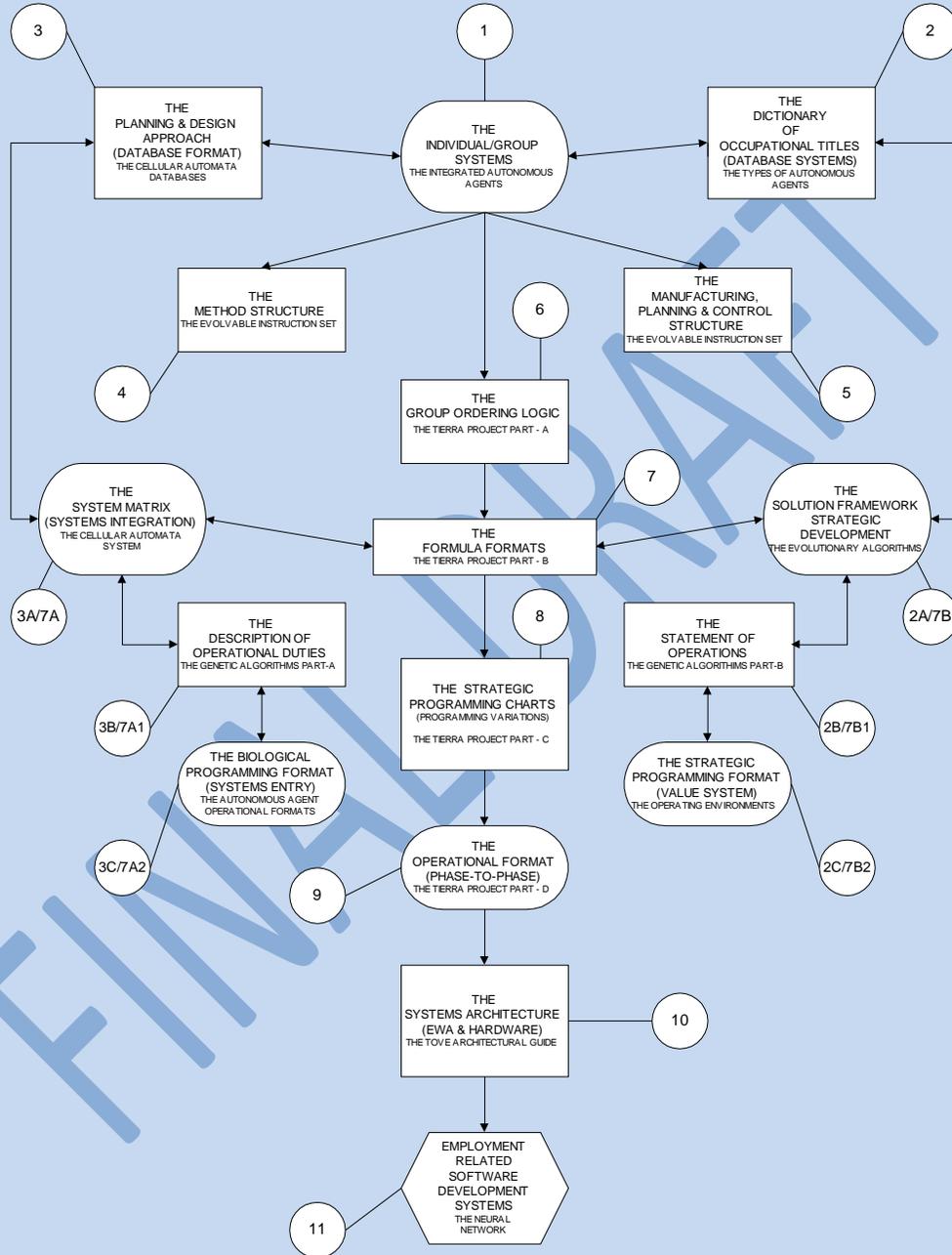
Organizational Generic Internet-Based MT/MA Platforms (5' -> 3')

8. **Governmental Institutions** (International, Federal & State Constitutional, Regulatory and Judicial Based Entities)
9. **Financial Institutions** (Banking, Monetary Markets and Investment Brokerage Firms)
10. **Law Firms** (International, Governmental, Corporate, Criminal, Torts, Family Law, etc.)
11. **Law Enforcement or Intelligence Organizations** (Legal or Investigative Entities)
12. **Scientific Organizations** (Academic, Technical or Medical Research & Development Firms)
13. **Educational Institutions** (Academic, Professional, Occupational or Technical Entities)
14. **Institutional Foundations** (Academic, Charitable, Non-profit or Research Associations)
15. **Religious Organizations or Foundations** (Judaic, Christian, Islamic, Buddhist, Hindu, etc.)
16. **Business Ownership Structures** (Sole Proprietor, Partnership, Joint Venture or Corporation)
17. **Business Operational Classifications** (Financial, Educational, Internet, Manufacturer, Importer, Exporter, Distributor, Wholesaler, Retailer, R&D, R&D Joint Venture and Administrative Based)
18. **Business Infrastructures** (Industrial, Hierarchical or Distributed Managerial Resources)
19. **Organizational Policies** (Structural, Financial and Operational ERP/MRP Procedures)

(5' -> 3')

NASCENT APPLIED METHODS & ENDEAVORS

EMPLOYMENT RELATED SOFTWARE DEVELOPMENT
GUIDE



UX

Principles

What This Is About!

This infographic details three critical principles of UX Design in one handy chart. As you will see, they all tie together.



UX Psychology

Human Behavior

#1 People Don't Want to Work or Think More Than They Have To

Pay attention to affordance. Only provide the features people really need. Let users decide how much detail they want to see.

#2 People Have Limitations

People lose interest quickly. Make content easy to scan and digest. Use headers and short blocks of text to keep their interest.

#3 People Make Mistakes

Anticipate users making every possible mistake and make it easy to undo those mistakes.

#4 Human Memory Is Complicated

Don't make people remember something from one task to the next. People can only remember 3-4 items at any given time.

#5 People Are Social

People look to others for guidance. Make sure to give them something they want and then ask for more such as filling out a form, etc.

#6 Attention

People pay attention to something different or novel. Bright colors. Large fonts. Don't do things to distract people as they are easily distracted.

#7 People Crave Information

We can't help but want to learn more. People usually want one info than they can process. The human needs to know what is going on at all times and feel in control.

#8 Unconscious Processing

We can't help but want to learn more. People usually want one info than they can process. The human needs to know what is going on at all times and feel in control.

#9 People Create Mental Models

We can't help but want to learn more. People usually want one info than they can process. The human needs to know what is going on at all times and feel in control.

#10 Visual System

We can't help but want to learn more. People usually want one info than they can process. The human needs to know what is going on at all times and feel in control.

UX Heuristics

Guidelines To Follow

#1 Visibility of System Status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

#2 Match Between System and The Real World

The system should speak the users' language with words, phrases and concepts. Follow real-world conventions in a logical order.

#3 User Control and Freedom

Users often make mistakes and will need "emergency exits" that are clearly marked. Support undo and redo.

#4 Consistency and Standards

Users should not have to wonder whether different words, situations, or actions mean the same thing.

#5 Error Prevention

Careful design which prevents problems from occurring in the first place. Either eliminate error prone conditions or present users with confirmations before they commit the action.

#6 Recognition Rather Than Recall

Minimize the user's memory load by making objects, actions and options visible, instructions for use of the system should be visible or easily retrievable.

#7 Flexibility and Efficiency of Use

The system should cater to both experienced and inexperienced users - make use of accelerators and allow users to tailor frequent actions where appropriate.

#8 Aesthetic and Minimalist Design

Dialogues should not contain information which is irrelevant or rarely needed.

#9 Help Users Recover From Errors

Error messages should be presented in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

#10 Help and Documentation

If you need to provide help, it should be easy to search, focused on the user's task, list concrete steps and not be too large.

UX Laws

Applied Principles

#1 Hick's Law

The time it takes to make a decision increases with the number and complexity of choices.

#2 Jacob's Law

Users spend most of their time on other sites so they prefer your site to work the same way as all the other sites they already know.

#3 Miller's Law

The average person can only keep 7 (plus or minus 2) items in their working memory.

#4 Occam's Razor

The simplest solution tends to be the right one. When presented with competing hypotheses to solve a problem, select the solution with the fewest assumptions.

#5 Pareto Principle

For many events, roughly 80% of the effects come from 20% of the causes.

#6 Tesler's Law

For any system there is a certain amount of complexity which cannot be reduced. Also known as the Law of Conservation Complexity.

#7 Von Restorff Effect

The isolation effect. Predicts that when multiple similar objects are present, the one that differs from the rest is most likely to be remembered.

#8 Zeigarnik Effect

People remember uncompleted or interrupted tasks better than completed tasks.

#9 Miller's Law

Productivity soars when a computer and its users interact at a pace (~400ms) that ensures that neither as to wait on the other.

#10 Serial Position Effect

Users have a propensity to best remember the first and last items in a series.

The Product Launch Checklist

Product

Legal & Commercial

- Customer contracts in place?
- All commercial or legal risks signed off?
- Appropriate commercial and legal agreements in place with suppliers.

Product Proposition

- Overall proposition is clearly established?
- Target customer profiles are identified?
- The product name is finalised and approved?
- The product positioning defined against current portfolio
- The proposition and key messages are validated with target prospects...

Product Development

- All new components are developed and in place?
- New product is embedded into any existing processes?
- Professional and customer services teams are ready?
- Trials are complete and confident to launch based on the trial.
- Packaging, documentation, user guides, etc...

Customer Experience

- Customers can find product?
- Customers can buy product?
- Customers can receive product?
- Customers can get support if needed?
- Customers can cancel or return product?
- Customers can pay for product?

Promotion

Press and Analysts

- PR agency is involved (if required)?
- Identified list of journalists, opinion leaders
- Press release or press launch is event planned?

Marketing Communication

- Customer launch event is planned?
- Advertising and/or direct marketing is planned?
- Roadshows, User groups and/or promotional engagements are...
- Online promotions, press releases and/or magazine articles are...
- Website updates are in place (or planned)?

Lead Generation

- Tools established to capture lead customers?
- Promotional strategy established for lead customers, existing...
- Specific events in place to generate leads, i.e. trade show, user group or sales.

Internal Communication

- Mechanism established to communicate launch within the business?
- Special events planned, i.e. office stands, posters, presentations?
- Use of product before launch, i.e. 'eat your own dogfood'

Pricing

Channels Pricing

- Channel pricing strategy is in place?
- Pricing structure defined for different channels, i.e. direct...
- Appropriate commission structures are in place?

Pricing Structure

- Proposed pricing structure is approved?
- Pricing structure tested on the relevant systems?
- Pricing structure trialed with successful quality gates?
- Introductory pricing strategy in place (if any)?

Collateral

- Plan to produce soft copy and printed collateral?
- White papers written, which gives more in-depth detail on product?
- Different collateral ready for customer audiences, i.e. executive level...

Demo

- Demo is available for internal training?
- Demo is available to promote / use with customers?

Channels to Market

Channel Strategy

- Sales channel strategy has been defined and agreed?
- Preferred roll-out channel are ready?

Channel Plans

- Changes to channel processes are in place?
- Channel communication plans are drawn?
- The agreement is signed-off with each channel?
- Channel collaterals are available, i.e. training packs, sales guides?

Pricing Tools

- Pricing documents are created, approved & distributed?
- Tools are in place to help customers and sales work out pricing?

Competitive Pricing Analysis

- Establish how your product stacks up against rivals?
- View on pricing from the channels (direct or indirect)?
- Quizzed suppliers, partner, ...?

Support

Channel Stock

- Sufficient stock planned for launch and post launch?
- Appropriate stock monitoring and replenishment.

Plans

Launch Plans

- Launch date is set?
- Communication strategy for launch is agreed?
- Launch plan is developed and agreed?

Post Launch Plans

- Post-launch sales targets are in place?
- Post-launch marketing plans are in place?
- Post-launch analysis and evaluations are planned?
- Budget and resource secured to address post-launch issues?
- Post-launch development roadmaps are planned for the product?
- Process to gather feedback from customers and from the channels.

Post Launch

- After-sales support trained on the product?
- Processes are established to deal with after-sales support?
- Measurement metrics are in place to check on performance?
- Support documentation are ready, i.e. FAQs, websites, product.

Maqsood

maqsood@gmail.com

The InterFACE or Whole Body Effect

([The Spinal Nerve Pathways](#))

1. [Word Processing](#) {The ARMS-HANDS} Strategic or Tactical Writings*
2. [Databases](#) {The HEAD-InterFACE} Grammatical Storage & Manipulation
3. [Spread-Sheet](#) {The GENDER-MALE/FEMALE} Mathematical Storage & Manipulation
4. [Graphics](#) {The TORSO-MAJOR INTERNAL ORGANS} Visual or Physical Representations
5. [Communications](#) {The LEGS-FEET} Strategic or Tactical Evolution*
6. Print-Graph {The INTERNET-VISUAL InterFACE}
7. [Services](#) {NAME}

The InterFACE Senses of Cranial Pathways Into Chromosomal Implementation & Evolution

([The Cranial Nerve Pathways & Special Senses](#))

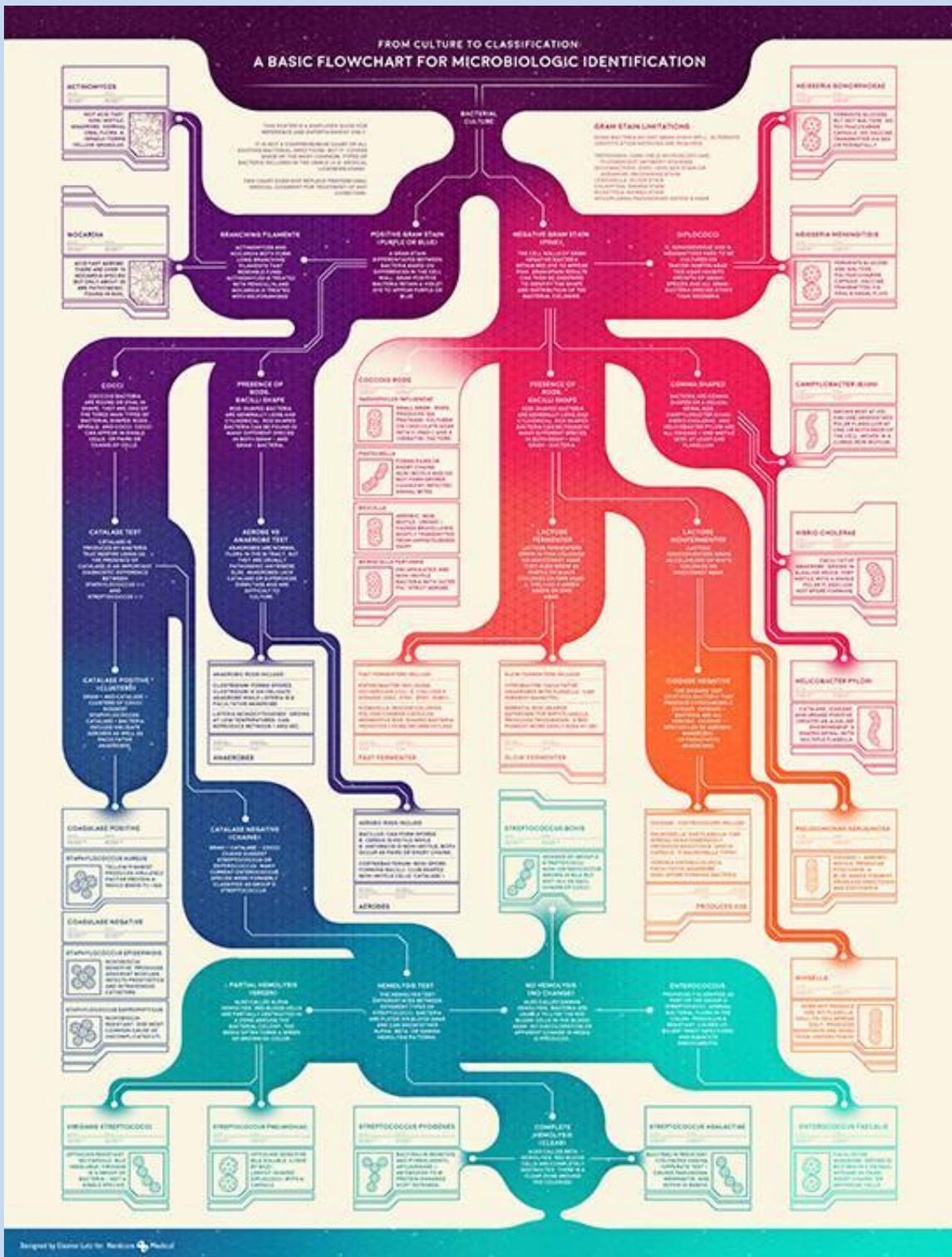
1. The Eyes (Sight/Optical Devices)
2. The Ears (Hearing/Listening Devices)
3. The Nose (Smell/Odor Detection Devices)
4. The Mouth (Taste or Audio/Speaking Devices)
5. The Skin (Touch/Analysis or Consensus Devices)

The Virtual Machine Cerebral InterFACE Processes

1. GSDBCPDA Operational Phase – One** ([The Hind-brain or Rhombencephalon](#))
2. GSDBCPDA Operational Phase – Two** ([The Mid-brain or Mesencephalon](#))
3. GSDBCPDA Operational Phase – Three** ([The Fore-brain or Prosencephalon](#))
4. GSDBCPDA Operational Phase – Four** ([The Meninges of the Brain and Medulla Spinalis](#))
5. GSDBCPDA Operational Phase – Five** ([Pathways from the Brain to the Spinal Cord](#))

*Sign Language/Dancing

**Genetic Sequence Database-Consultative Planning & Design Approach ([GSDBCPDA](#))



Human Body Ingredients

The four ingredients below are essential parts of the body's protein, carbohydrate and fat architecture.



O

OXYGEN
65.0%

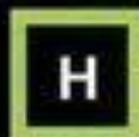
Critical to the conversion of food into energy.



C

CARBON
18.5%

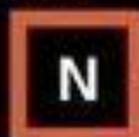
The so-called backbone of the building blocks of the body and a key part of other important compounds, such as testosterone and estrogen.



H

HYDROGEN
9.5%

Helps transport nutrients, remove wastes and regulate body temperature. Also plays an important role in energy production.



N

NITROGEN
3.3%

Found in amino acids, the building blocks of proteins; an essential part of the nucleic acids that constitute DNA.

(Percentage of body weight. Source: Biology, Campbell and Reece, eighth edition.)

Other Key Elements

Calcium: 1.5%
Lends rigidity and strength to bones and teeth; also important for the functioning of nerves and muscles, and for blood clotting.

Phosphorus: 1.0%
Needed for building and maintaining bones and teeth; also found in the molecule ATP (adenosine triphosphate), which provides energy that drives chemical reactions in cells.

Potassium: 0.4%
Important for electrical signaling in nerves and maintaining the balance of water in the body.

Sulfur: 0.3%
Found in cartilage, insulin (the hormone that enables the body to use sugar), breast milk, proteins that play a role in the immune system, and keratin, a substance in skin, hair and nails.

Chlorine: 0.2%
Needed by nerves to function properly; also helps produce gastric juices.

Sodium: 0.2%
Plays a critical role in nerves' electrical signaling; also helps regulate the amount of water in the body.

Magnesium: 0.1%
Plays an important role in the structure of the skeleton and muscles; also found in molecules that help enzymes use ATP to supply energy for chemical reactions in cells.

Iodine (trace amount)
Part of an essential hormone produced by the thyroid gland; regulates metabolism.

Iron (trace amount)
Part of hemoglobin, which carries oxygen in red blood cells.

Zinc (trace amount)
Forms part of some enzymes involved in digestion.

HUMAN

A CONSTRUCTION GUIDE TO THE EARLY HUMAN EMBRYO AND FETUS

REQUIRED MATERIALS

Human embryos are produced by a plasma membrane and an outer zona pellucida. Fertilized with a sperm cell, it enters a cell cycle. The cell cycle causes cortical granules in the zona pellucida (which the plasma membrane) to prevent polyspermy by allowing the zona pellucida.

Sperm and highly mobile granules with compact DNA and a single flagellum. Contact with an egg releases the acrosome reaction, in which hydrolytic enzymes are released from the acrosomal vesicle to penetrate the zona pellucida.

IMPORTANT EMBRYONIC GENES & HORMONES

HOXA
Limb patterning, midbrain development, organization along dorsal-ventral axis. Produced at the apical ectodermal ridge (dorsal limb).

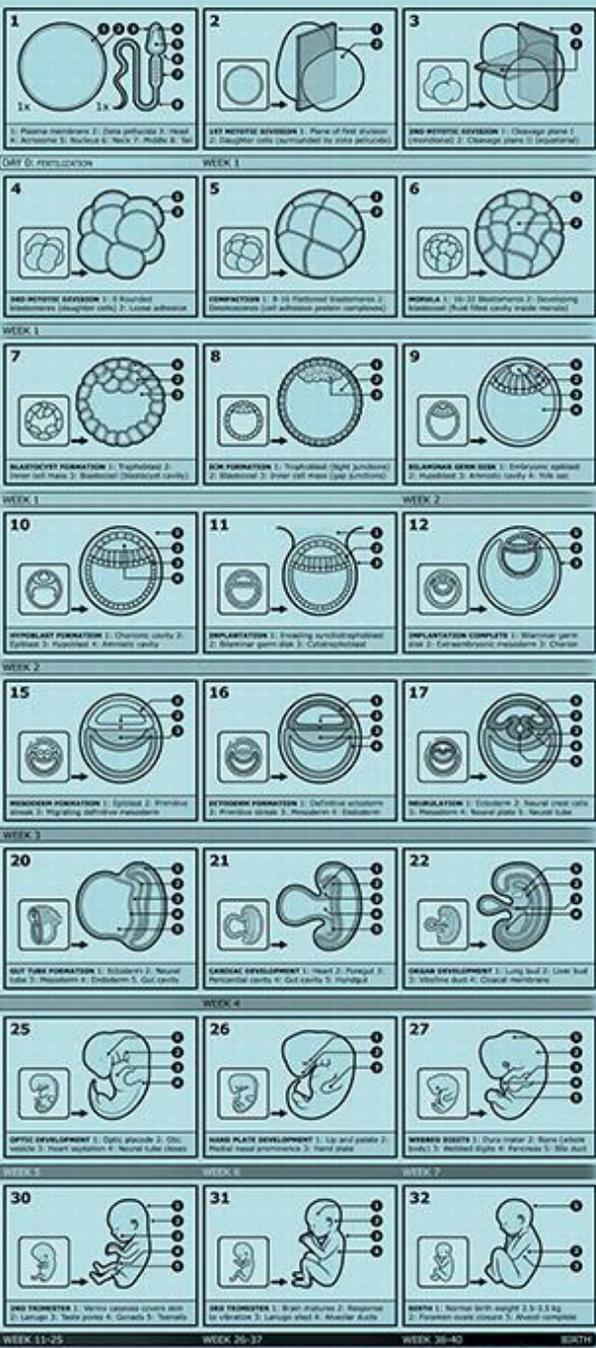
SHOX
Skeletal & limb development, cell formation, CNS maturation, patterning along anterior-posterior axis. Produced by the notochord.

SHOX
Segment organization, specification of regional differences along anterior-posterior axis. DNA contains homeobox sequence.

SHOX
Limb lengthening, induce proliferation, neural regeneration, axon growth. Produced at apical ectodermal ridge (dorsal limb).

SHOX
Proliferates in blood at 9 days, in urine 10 days post fertilization. Produced by endovascular implantation. Promotes axonal outgrowth.

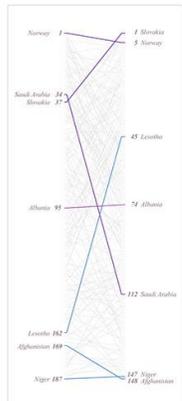
FINISHED PRODUCT



Designed by Elaine Lutz for Medscape Medical © 2012

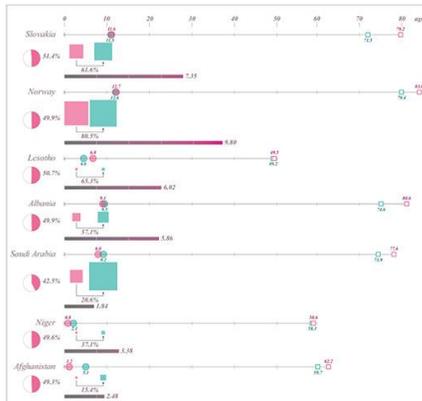
The Gender Development Index

There are 148 countries in total on the GDI (Gender Development Index). Women outlive men in almost every country. Women even outlive men by more than 5 years in 42% of these countries. There are more women than men in the world. Russian Federation and other former Soviet states have the greatest percentages of women: above 53% of their population is female (the life expectancy difference here is even more than 10 years). Women's GNI (Gross National Income) is however lower than men's in all countries. In fact, in almost 50% of these countries women have a GNI less than half of men's GNI. In 110 countries (that's 75%) women go to school for a shorter period of time than men (mean years of schooling). Although countries might be on top of HDI (Human Development Index), this doesn't evidently mean they also do well when it comes to the GDI.

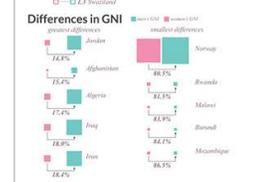
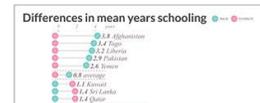


Differences in HDI and GDI ranking
Several conditions can cause a country to do better or worse, or even much better or worse on GDI. There's much correspondence to be found in the overall classification of higher and lower development countries. However history, health, economics, freedom of all sorts, security, laws (the level of democracy, culture, education, religion and / or other convictions, and not to mention wars, they all influence the levels of equality in rights and development. Bear in mind that on the whole people in the less developed countries live shorter than in higher developed countries, so a higher GDI ranking doesn't always mean better life conditions.

Comparing countries
In which country are you (as a woman) better of living? Comparing very high with very low ranks is easy, you'd choose high like Norway but what if the GDI rank is okay but the HDI is very unequal and there's little / no democracy (like Saudi Arabia)? These are just some extremes, but what are the most important conditions? What if you were able to choose? Are you going to choose for wealth, for more equality or for a longer life? Check/compare all countries in the graph below.



Country, although on the HDI, which due to missing or incomplete data have no ranking on GDI are for that matter not included.
Source: Gender-related Development Index
http://hdr.undp.org/en/data/index/5/gender-related-development-index-gdi
No Callout data set / GDI-MDCXK, http://indicators.org/about/
Population, female (% of total), http://data.worldbank.org/indicator/SP.POPSTOTLFE.ZS



KEY: Important milestones in early childhood development

COGNITIVE: LANGUAGE

- L1 [Calls parents, 10 months]: Makes many different sounds, and calls parents using simple words like "mama" or "dada."
- L2 [-200 words, 24 months]: Knows ~200 words, can say 2-4 word sentences. Repeats words and follows simple instructions.
- L3 [-1000 words, 3 years]: Knows ~1000 words. Can say 2-3 sentences at a time and name familiar objects and people.
- L4 [Complete sentences, 4 years]: Uses complete sentences and basic grammar such as prepositions. Can say their own full name.
- L5 [Detailed stories, 4 years]: Can tell detailed stories. Sings songs and/or recites poems from memory.

COGNITIVE: OBSERVATION

- O1 [Orients to voice, 4 months]: Follows moving things with eyes, watches faces closely, and recognizes familiar people.
- O2 [Orients to name, 9 months]: Can recognize and orient to their own name. Watches the path of falling objects.
- O3 [Object permanence, 9 months]: Understands that objects and people can exist while unobserved. Plays peek-a-boo.

MOTOR: GROSS MOTOR & POSTURE

- G1 [Lifts head up, 1 month]: Can hold their head up unassisted. Begins to push up with their arms when lying on stomach.
- G2 [Rolls & sits, 6 months]: Rolls in both directions (front to back, back to front). Begins to sit without support.
- G3 [Crawls, 8 months]: Crawls on all fours. Can get into a sitting position unassisted and stay sitting without support.
- G4 [Stands, 10 months]: Pulls up on furniture or people to stand. Can stand while holding on to things, and may stand alone.
- G5 [Walks, 12-18 months]: Walks without holding onto things. Pulls toys while walking, and may begin to run.
- G6 [Climbs stairs, 18 months]: Walks up and down stairs while holding on. Climbs onto & down from furniture unassisted.
- G7 [Kicks ball, 24 months]: Can kick a ball and throw balls overhead. Begins to run and can stand on tiptoe.
- G8 [Rides tricycle, 3 years]: Can pedal a tricycle unassisted. Walks up and down stairs without holding on, one foot on each step.
- G9 [Hops on one foot, 4 years]: Hops on one foot and can stand on one foot for up to 2 seconds. Catches thrown balls fairly well.

MOTOR: DEXTERITY / FINE MOTOR

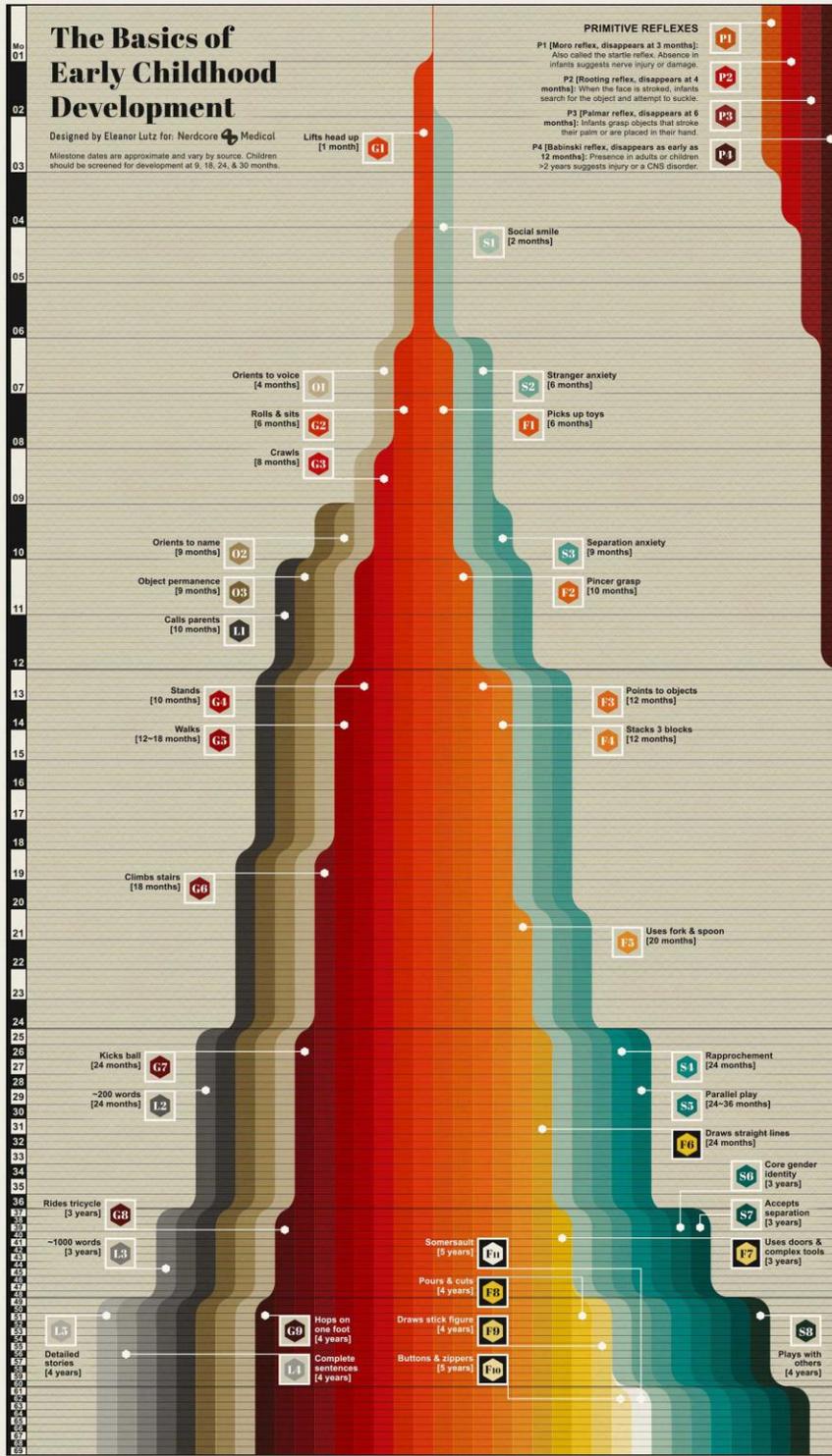
- F1 [Picks up toys, 6 months]: Passes toys from hand to hand. Can bring things from their hand to their mouth.
- F2 [Pincer grasp, 10 months]: Picks up objects between thumb and index finger. Moves things smoothly between hands.
- F3 [Points to objects, 12 months]: Points and pokes things with index finger. Can hang two things together and copy gestures.
- F4 [Stacks 3 blocks, 12 months]: Can stack a set of 3 colored into a tower. 8 cubes stacked = ages to years x 3.
- F5 [Uses fork & spoon, 20 months]: Can feed themselves with a fork and spoon. Drinks from a cup unassisted.
- F6 [Draws straight lines, 24 months]: Copies straight lines and circles. May use one dominant hand more than the other.
- F7 [Uses doors & complex tools, 3 years]: Uses objects with levers & moving parts (door handles, screw-top jars, puzzles).
- F8 [Pours & cuts, 4 years]: Can pour liquids, use scissors with supervision, and mash their own food.
- F9 [Draws stick figure, 4 years]: Draws people with 2-4 body parts and copies simple shapes.
- F10 [Buttons & zippers, 5 years]: Grooms and dresses themselves using buttons, zippers and shoelaces.
- F11 [Somersault, 5 years]: Can swing, climb, and do a somersault. Stands on one foot for >10 seconds. May be able to skip.

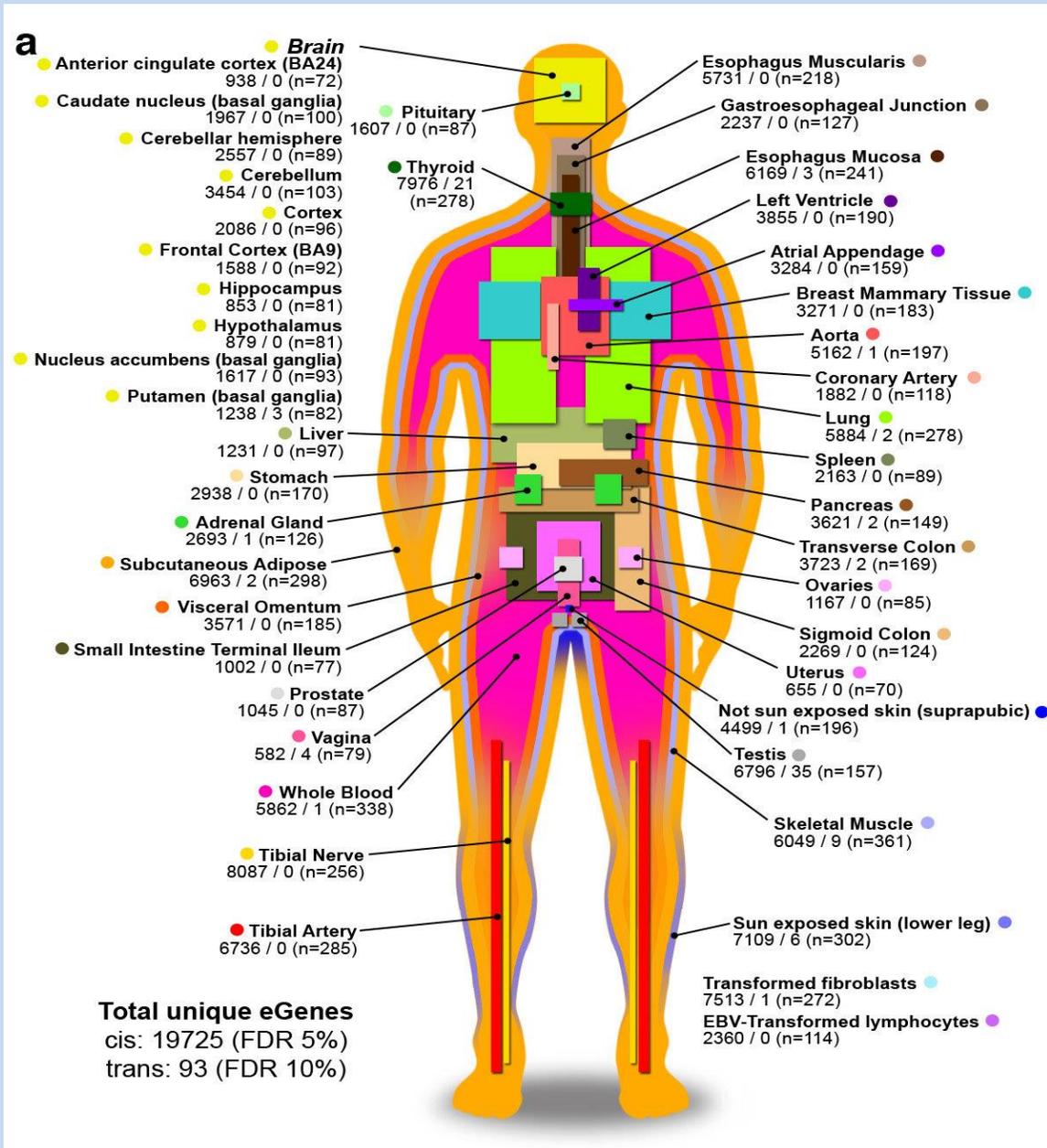
SOCIAL: ATTACHMENT & PLAY

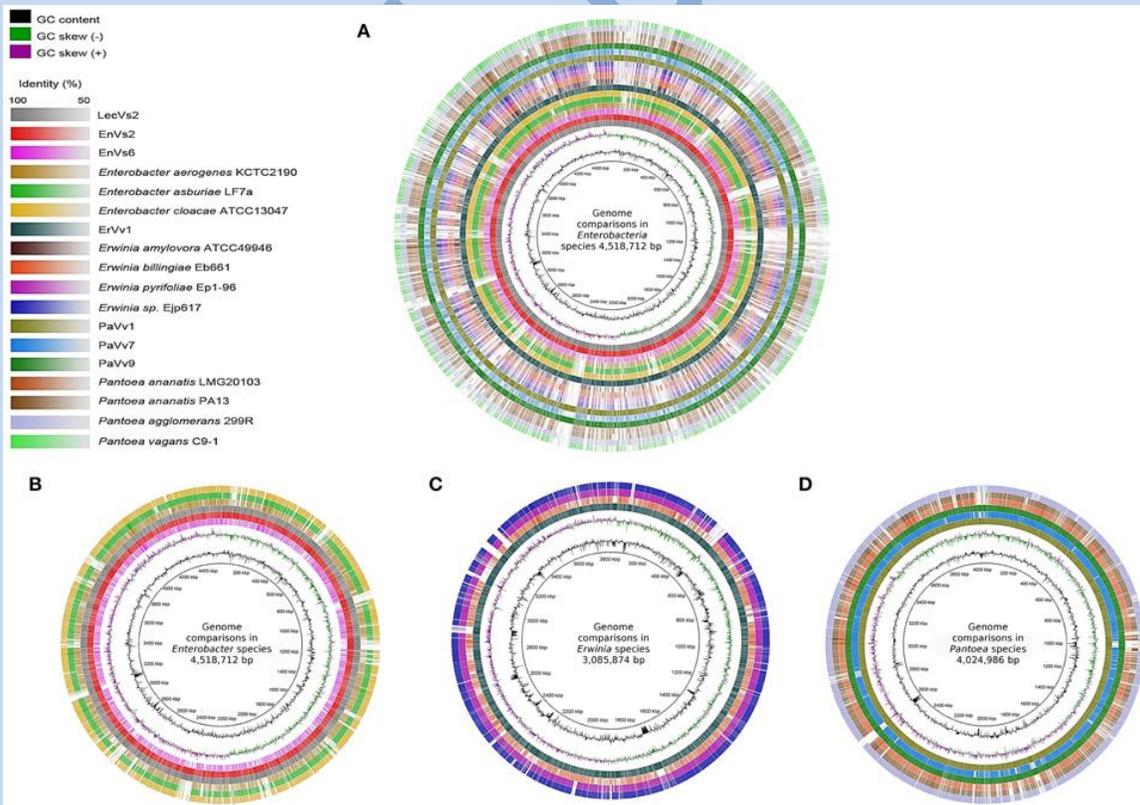
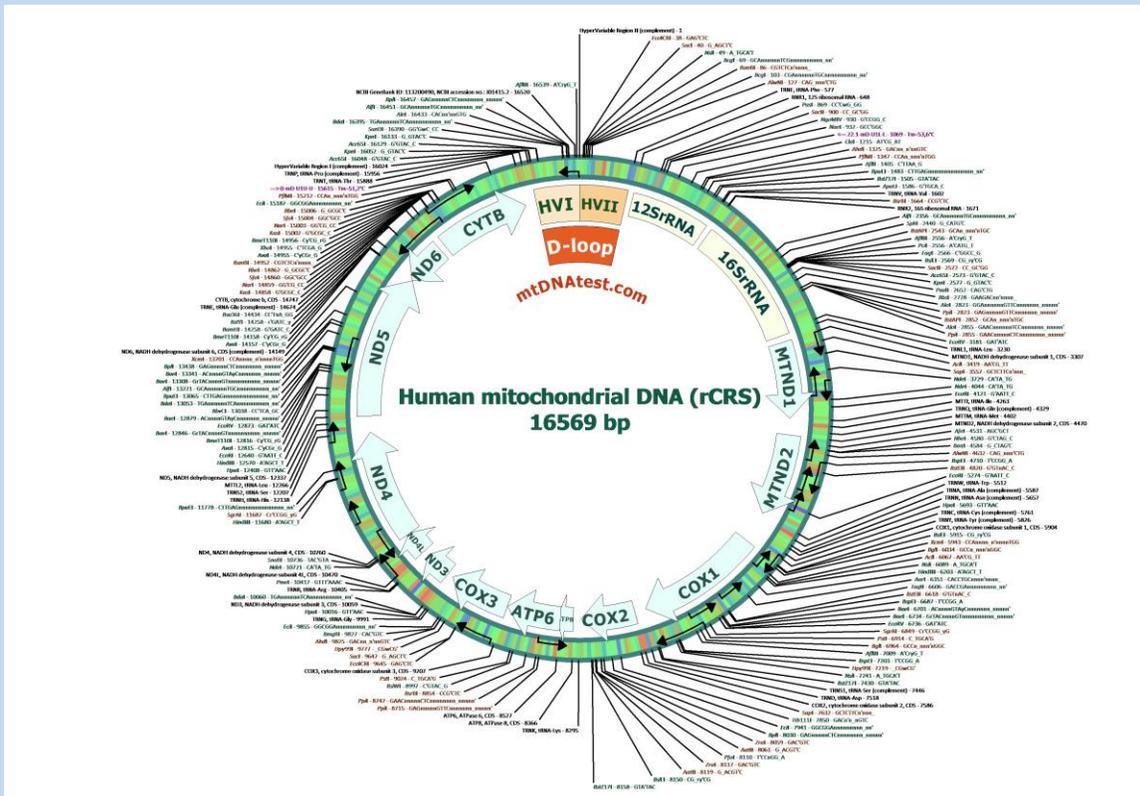
- S1 [Social smile, 2 months]: Begins to smile at people. Attempts to look at parents when they are nearby.
- S2 [Stranger anxiety, 6 months]: Recognizes familiar people. Knows if someone is a stranger and may be anxious.
- S3 [Separation anxiety, 9 months]: May be clingy with familiar adults such as parents, and avoid leaving their side during play.
- S4 [Approachement, 24 months]: Shows more independence. Moves away from and returns to parents (at parks, during play, etc.).
- S5 [Parallel play, 24-36 months]: Plays alongside other children with their own toys. May show interest in their friends' play.
- S6 [Core gender identity, 3 years]: Core gender identity is realized. Children may choose toys or activities based on gender.
- S7 [Accepts separation, 3 years]: Becomes more independent. Can comfortably spend many hours away from parents.
- S8 [Plays with others, 4 years]: Cooperative play with others (games with rules, role play involving different characters).

The Basics of Early Childhood Development

Designed by Eleanor Lutz for: Nerdcore Medical
Milestone dates are approximate and vary by source. Children should be screened for development at 9, 18, 24, & 30 months.







Codons Found In DNA

| | | Second Position of Codon | | | | | |
|---|---|--------------------------|-------------|----------------------|----------------------|------------------|---|
| | | T | C | A | G | | |
| F i r s t P o s i t i o n | T | TTT Phe [F] | TCT Ser [S] | TAT Tyr [Y] | TGT Cys [C] | T C A G | T h i r d P o s i t i o n |
| | | TTC Phe [F] | TCC Ser [S] | TAC Tyr [Y] | TGC Cys [C] | | |
| | | TTA Leu [L] | TCA Ser [S] | TAA <i>Ter</i> [end] | TGA <i>Ter</i> [end] | | |
| | | TTG Leu [L] | TCG Ser [S] | TAG <i>Ter</i> [end] | TGG Trp [W] | | |
| | C | CTT Leu [L] | CCT Pro [P] | CAT His [H] | CGT Arg [R] | T C A G | |
| | | CTC Leu [L] | CCC Pro [P] | CAC His [H] | CGC Arg [R] | | |
| | | CTA Leu [L] | CCA Pro [P] | CAA Gln [Q] | CGA Arg [R] | | |
| | | CTG Leu [L] | CCG Pro [P] | CAG Gln [Q] | CGG Arg [R] | | |
| | A | ATT Ile [I] | ACT Thr [T] | AAT Asn [N] | AGT Ser [S] | T C A G | |
| | | ATC Ile [I] | ACC Thr [T] | AAC Asn [N] | AGC Ser [S] | | |
| | | ATA Ile [I] | ACA Thr [T] | AAA Lys [K] | AGA Arg [R] | | |
| | | ATG Met [M] | ACG Thr [T] | AAG Lys [K] | AGG Arg [R] | | |
| | G | GTT Val [V] | GCT Ala [A] | GAT Asp [D] | GGT Gly [G] | T C A G | |
| | | GTC Val [V] | GCC Ala [A] | GAC Asp [D] | GGC Gly [G] | | |
| | | GTA Val [V] | GCA Ala [A] | GAA Glu [E] | GGA Gly [G] | | |
| | | GTG Val [V] | GCG Ala [A] | GAG Glu [E] | GGG Gly [G] | | |

Codons Found In Messenger RNA

| | | Second Position | | | | | | | | | |
|----------------|-----|-----------------|-------------|-----|-----|-----|------|-----|------|---|----------------|
| | | U | | C | | A | | G | | | |
| First Position | U | UUU | Phe | UCU | Ser | UAU | Tyr | UGU | Cys | U | Third Position |
| | | UUC | | UCC | | UAC | | UGC | | C | |
| | | UUA | Leu | UCA | | UAA | Stop | UGA | Stop | A | |
| | | UUG | | UCG | | UAG | Stop | UGG | Trp | G | |
| | C | CUU | Leu | CCU | Pro | CAU | His | CGU | Arg | U | |
| | | CUC | | CCC | | CAC | | CGC | | C | |
| | | CUA | | CCA | | CAA | Gln | CGA | | A | |
| | | CUG | | CCG | | CAG | | CGG | | G | |
| | A | AUU | Ile | ACU | Thr | AAU | Asn | AGU | Ser | U | |
| | | AUC | | ACC | | AAC | | AGC | | C | |
| | | AUA | | ACA | | AAA | Lys | AGA | A | | |
| | | AUG | Met (start) | ACG | | AAG | | AGG | G | | |
| G | GUU | Val | GCU | Ala | GAU | Asp | GGU | Gly | U | | |
| | GUC | | GCC | | GAC | | GGC | | C | | |
| | GUA | | GCA | | GAA | Glu | GGA | | A | | |
| | GUG | | GCG | | GAG | | GGG | | G | | |

An explanation of the Genetic Code: DNA is a two-stranded molecule. Each strand is a polynucleotide composed of **A** (adenosine), **T** (thymidine), **C** (cytidine), and **G** (guanosine) residues polymerized by "dehydration" synthesis in linear chains with specific sequences. Each strand has polarity, such that the 5'-hydroxyl (or 5'-phospho) group of the first nucleotide begins the strand and the 3'-hydroxyl group of the final nucleotide ends the strand; accordingly, we say that this strand runs 5' to 3' ("*Five prime to three prime*"). It is also essential to know that the two strands of DNA run *antiparallel* such that one strand runs 5' -> 3' while the other one runs 3' -> 5'. At each nucleotide residue along the double-stranded DNA molecule, the nucleotides are complementary. That is, **A** forms two hydrogen-bonds with **T**; **C** forms three hydrogen bonds with **G**. In most cases the two-stranded, antiparallel, complementary DNA molecule folds to form a helical structure which resembles a spiral staircase. This is the reason why DNA has been referred to as the "Double Helix".

One strand of DNA holds the information that codes for various genes; this strand is often called the template strand or antisense strand (containing anticodons). The other, and complementary, strand is called the coding strand or sense strand (containing codons). Since mRNA is made from the template strand, it has the same information as the coding strand. The table above refers to triplet nucleotide codons along the sequence of the coding or sense strand of DNA as it runs 5' -> 3'; the code for the mRNA would be identical but for the fact that RNA contains **U** (uridine) rather than **T**.

An example of two complementary strands of DNA would be:

(5' → 3') **ATGGAATTCTCGCTC** (Coding, sense strand)
 (3' ← 5') **TACCTTAAGAGCGAG** (Template, antisense strand)

(5' → 3') **AUGGAAUUCUCGCUC** (mRNA made from Template strand)

Since amino acid residues of proteins are specified as triplet codons, the protein sequence made from the above example would be Met-Glu-Phe-Ser-Leu... (MEFSL...).

Practically, codons are "decoded" by transfer RNAs (tRNA) which interact with a ribosome-bound messenger RNA (mRNA) containing the coding sequence. There are 64 different tRNAs, each of which has an anticodon loop (used to recognize codons in the mRNA). 61 of these have a bound amino acyl residue; the appropriate "charged" tRNA binds to the respective next codon in the mRNA and the ribosome catalyzes the transfer of the amino acid from the tRNA to the growing (nascent) protein/polypeptide chain. The remaining 3 codons are used for "punctuation"; that is, they signal the termination (the end) of the growing polypeptide chain.

Lastly, the Genetic Code in the table above has also been called "The Universal Genetic Code". It is known as "universal", because it is used by all known organisms as a code for DNA, mRNA, and tRNA. The universality of the genetic code encompasses animals (including humans), plants, fungi, archaea, bacteria, and viruses. However, all rules have their exceptions, and such is the case with the Genetic Code; small variations in the code exist in mitochondria and certain microbes. Nonetheless, it should be emphasized that these variances represent only a small fraction of known cases, and that the Genetic Code applies quite broadly, certainly to all known nuclear genes.

Codon Tables

| | | Third Position | | | |
|-----|----|----------------|-----|-----|-----|
| | | A | C | G | U |
| | AA | Lys | Asn | Lys | Asn |
| F | AC | Thr | Thr | Thr | Thr |
| i | AG | Arg | Ser | Arg | Ser |
| r | AU | Ile | Ile | MET | Ile |
| s P | CA | Gln | His | Gln | His |
| t o | CC | Pro | Pro | Pro | Pro |
| s | CG | Arg | Arg | Arg | Arg |
| & i | CU | Leu | Leu | Leu | Leu |
| t | GA | Glu | Asp | Glu | Asp |
| S i | GC | Ala | Ala | Ala | Ala |
| e o | GG | Gly | Gly | Gly | Gly |
| c n | GU | Val | Val | Val | Val |
| o | UA | . | Tyr | . | Tyr |
| n | UC | Ser | Ser | Ser | Ser |
| d | UG | . | Cys | Trp | Cys |
| | UU | Leu | Phe | Leu | Phe |

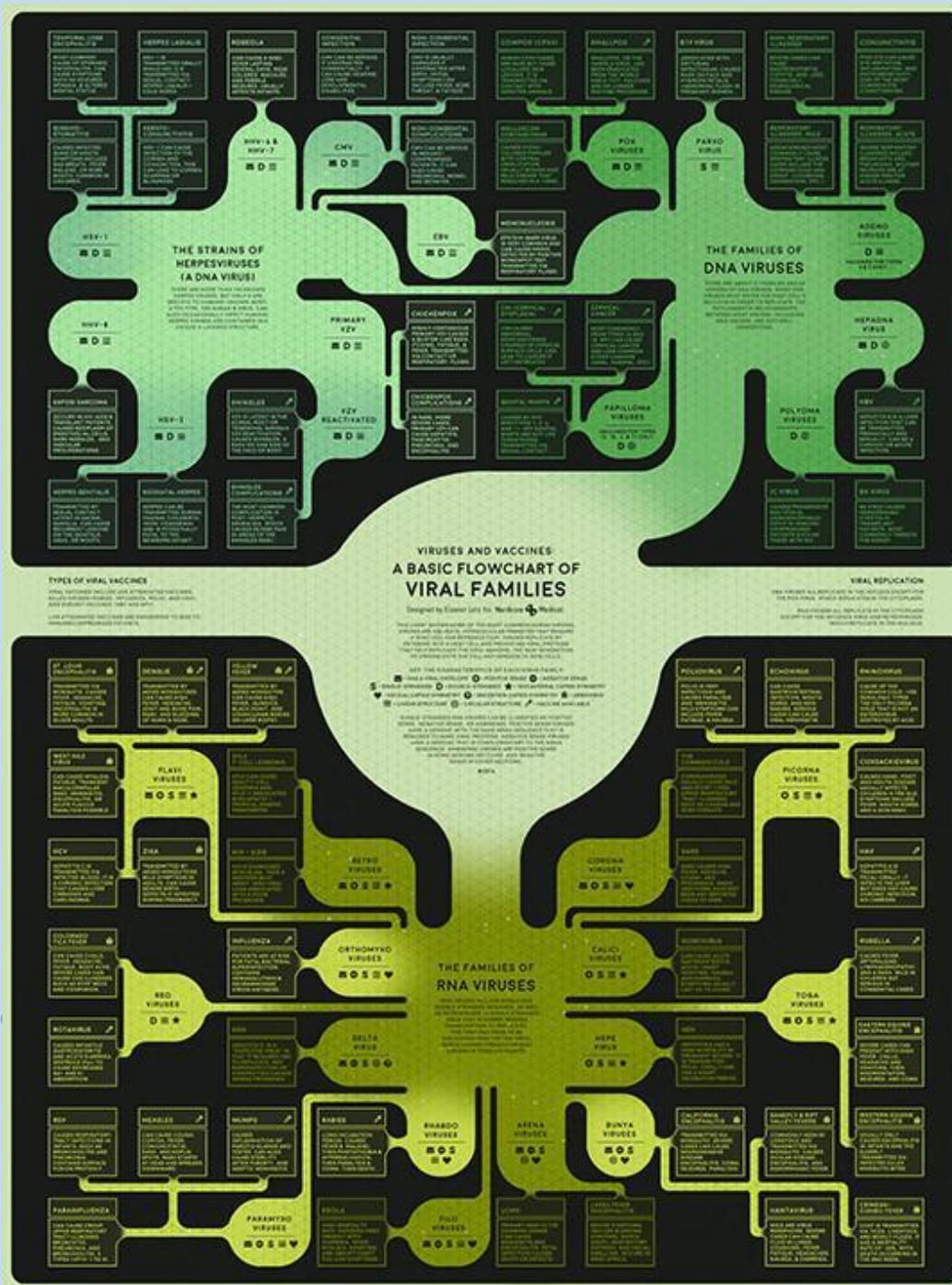
Another way to look at this is:

| NAME | 3 Letter Abbreviation | 1 Letter Abbreviation | DNA codons for each Amino Acids |
|---------------|-----------------------|-----------------------|--|
| Alanine | Ala | 1. A | GCA, GCC, GCG, GCU |
| Cysteine | Cys | 3. C | UGC, UGU |
| Aspartic Acid | Asp | 4. D | GAC, GAU |
| Glutamic Acid | Glu | 5. E | GAA, GAG |
| Phenylalanine | Phe | 6. F | UUC, UUU |
| Glycine | Gly | 7. G | GGA, GGC, GGG, GGU |
| Histidine | His | 8. H | CAC, CAU |
| Isoleucine | Ile | 9. I | AUA, AUC, AUU |
| Lysine | Lys | 11. K | AAA, AAG |
| Leucine | Leu | 12. L | UUA, UUG, CUA, CUC, CUG, CUU |
| Methionine | Met | 13. M | AUG |
| Asparagine | Asn | 14. N | AAC, AAU |
| Proline | Pro | 16. P | CCA, CCC, CCG, CCU |
| Glutamine | Gln | 17. Q | CAA, CAG |
| Arginine | Arg | 18. R | CGA, CGC, CGG, CGU |
| Serine | Ser | 19. S | UCA, UCC, UCG, UCU, AGC, AGU |
| Threonine | Thr | 20. T | ACA, ACC, ACG, ACU |
| Valine | Val | 22. V | GUA, GUC, GUG, GUU |
| Tryptophan | Trp | 23. W | UGG |
| Tyrosine | Tyr | 25. Y | UAC, UAU |
| Stop Codons | . | | UAA, UAG, UGA - B(2) J(10) O(15) U(21) Z(26) |

An example of the multiple combinations of DNA possible for a single peptide is an example of spelling my first name (without a termination codon):

So to code for 'MARK' there would be 16 combinations, other sequences of 4 letters would vary in the number of possibilities based on the number of codons that could code for a single amino acid. Some amino acids have up to 6 codons that will be translated into a single Amino Acid.

| M | A | R | K | M | A | R | K | M | A | R | K | M | A | R | K |
|-----------------|-----|-----|-----|-----------------|-----|-----|-----|-----------------|-----|-----|-----|-----------------|-----|-----|-----|
| MET | Ala | Arg | Lys |
| ===== | | | | ===== | | | | ===== | | | | ===== | | | |
| AUG-GCU-AGA-AAG | | | | AUG-GCU-AGG-AAG | | | | AUG-GCU-AGA-AAA | | | | AUG-GCU-AGG-AAA | | | |
| AUG-GCG-AGA-AAG | | | | AUG-GCG-AGG-AAG | | | | AUG-GCG-AGA-AAA | | | | AUG-GCG-AGG-AAA | | | |
| AUG-GCC-AGA-AAG | | | | AUG-GCC-AGG-AAG | | | | AUG-GCC-AGA-AAA | | | | AUG-GCC-AGG-AAA | | | |
| AUG-GCA-AGA-AAG | | | | AUG-GCA-AGG-AAG | | | | AUG-GCA-AGA-AAA | | | | AUG-GCA-AGG-AAA | | | |



B19 VIRUS

ASSOCIATED WITH ERYTHEMA INFECTIOSUM. CAUSES RASH ON FACE AND HYDROPS FETALIS (ABNORMAL FLUID) IN PREGNANT WOMEN.

NON-RESPIRATORY ILLNESSES

SEVERE CASES CAN CAUSE GASTROENTERITIS, CYSTITIS, AND, LESS COMMONLY, NEUROLOGICAL DISEASE.

CONJUNCTIVITIS

PINK EYE CAN CAUSE EYE IRRITATION, INFLAMMATION, AND PHOTSENSITIVITY. ONE OF THE MOST COMMON EYE CONDITIONS.

PARVO VIRUS

S ≡

RESPIRATORY ILLNESSES, MILD

ADENOVIRUSES MOST COMMONLY CAUSE RESPIRATORY ILLNESS. CASES INCLUDE THE COMMON COLD AND CROUP. (COUGHING, CONGESTION, ETC.)

RESPIRATORY ILLNESSES, ACUTE

SEVERE RESPIRATORY ILLNESSES INCLUDE BRONCHITIS AND PNEUMONIA. MILITARY RECRUITS ARE AT HIGHER RISK FOR ACUTE ILLNESS.

ADENO VIRUSES

D ≡
VACCINES FOR TYPES 4 & 7 ONLY.

HEPADNA VIRUS

ⓧ D ○

THE FAMILIES OF DNA VIRUSES

THERE ARE ABOUT 21 FAMILIES AND 66 GENERA OF DNA VIRUSES. MANY DNA VIRUSES MUST ENTER THE HOST CELL'S NUCLEUS IN ORDER TO REPLICATE. THE PHYLOGENETIC RELATIONSHIPS BETWEEN MOST VIRUSES, INCLUDING DNA VIRUSES, ARE NOT WELL UNDERSTOOD.

GINGIVO-STOMATITIS

CAUSES INFECTED GUMS OR MOUTH. SYMPTOMS INCLUDE BAD BREATH, FEVER, MALAISE, OR SORE MOUTH. COMMON IN CHILDREN.

KERATO-CONJUNCTIVITIS

HSV-1 CAN CAUSE INFECTION OF THE CORNEA AND CONJUNCTIVA. THIS CAN LEAD TO CORNEA SCARRING OR BLINDNESS.

HSV-1

ⓧ D ≡

HHV-6 & HHV-7

ⓧ D ≡

HHV-8

ⓧ D ≡

KAPOSI SARCOMA

OCCURS IN HIV-AIDS & TRANSPLANT PATIENTS. CAUSES NEOPLASM OF ENDOTHELIAL CELLS. DARK NODULES, AND VASCULAR PROLIFERATIONS.

HSV-2

ⓧ D ≡

SHINGLES

VZV IS LATENT IN THE DORSAL ROOT OR TRIGEMINAL GANGLIA. VZV REACTIVATION CAUSES SHINGLES, A RASH ON ONE SIDE OF THE FACE OR BODY.

THE STRAINS OF HERPESVIRUSES (A DNA VIRUS)

THERE ARE MORE THAN 100 KNOWN HERPES VIRUSES, BUT ONLY 8 ARE SPECIFIC TO HUMANS (SHOWN HERE). A 9TH TYPE, THE SIMIAN B VIRUS, CAN ALSO OCCASIONALLY INFECT HUMANS. HERPES VIRUSES ARE CONTAINED IN A UNIQUE 4-LAYERED STRUCTURE.

BRANCHING FILAMENTS

ACTINOMYCES AND NOCARDIA BOTH FORM LONG BRANCHING FILAMENTS THAT RESEMBLE FUNGI. ACTINOMYCES IS TREATED WITH PENICILLIN AND NOCARDIA IS TREATED WITH SULFONAMIDES.

POSITIVE GRAM STAIN (PURPLE OR BLUE)

A GRAM STAIN DIFFERENTIATES BETWEEN BACTERIA BASED ON DIFFERENCES IN THE CELL WALL. GRAM POSITIVE BACTERIA RETAIN A VIOLET DYE TO APPEAR PURPLE OR BLUE.

NEGATIVE GRAM STAIN (PINK)

THE CELL WALLS OF GRAM NEGATIVE BACTERIA RETAIN RED DYE TO APPEAR PINK. GRAM-STAIN RESULTS CAN THEN BE OBSERVED TO IDENTIFY THE SHAPE AND DISTRIBUTION OF THE BACTERIAL COLONIES.

PRESENCE OF RODS. BACILLI SHAPE

ROD-SHAPED BACTERIA ARE GENERALLY LONG AND CYLINDRICAL. ROD SHAPED BACTERIA CAN BE FOUND IN MANY DIFFERENT SPECIES IN BOTH GRAM + AND GRAM - BACTERIA.

AEROBE VS ANAEROBE TEST

ANAEROBES ARE NORMAL FLORA IN THE GI TRACT. BUT THEY ARE USUALLY PATHOGENIC ANYWHERE ELSE. ANAEROBES LACK CATALASE OR SUPEROXIDE DISMUTASE AND ARE DIFFICULT TO CULTURE.

ANAEROBIC RODS INCLUDE:

CLOSTRIDIUM: FORMS SPORES. CLOSTRIDIUM IS AN OBLIGATE ANAEROBE WHILE LISTERIA IS A FACULTATIVE ANAEROBE.

LISTERIA MONOCYTOGENES: GROWS AT LOW TEMPERATURES. CAN

COCCOID RODS

HAEMOPHILUS INFLUENZAE



SMALL GRAM- RODS. PRODUCES IGA PROTEASE. CULTURES ON CHOCOLATE AGAR WITH V (NAD+) AND X (HEMATIN) FACTORS.

PASTEURELLA



FORMS PAIRS OR SHORT CHAINS. NON-MOTILE AND DO NOT FORM SPORES. CAUSED BY INFECTED ANIMAL BITES.

BRUCELLA



AEROBIC. NON MOTILE. UREASE +. CAUSES BRUCELLOSIS. MOSTLY TRANSMITTED FROM UNPASTEURIZED DAIRY.

BORDETELLA PERTUSSIS



ENCAPSULATED AND NON-MOTILE BACTERIA WITH OUTER PILI. STRICT AEROBE.

PRESENCE OF RODS. BACILLI SHAPE

ROD-SHAPED BACTERIA ARE GENERALLY LONG AND CYLINDRICAL. ROD SHAPED BACTERIA CAN BE FOUND IN MANY DIFFERENT SPECIES IN BOTH GRAM + AND GRAM - BACTERIA.

LACTOSE FERMENTER

LACTOSE FERMENTERS GROW IN PINK COLONIES ON MACCONKEY AGAR. THEY ALSO GROW AS PURPLE OR BLACK COLONIES ON EMB AGAR. E. COLI HAS A GREEN SHEEN ON EMB AGAR.

FAST FERMENTERS INCLUDE:

ENTEROBACTER INCLUDING ESCHERICHIA COLI. E. COLI HAS 4 STRAINS (EIEC, ETEC, EPEC, EHEC).

KLEBSIELLA: MUCOID COLONIES. POLYSACCHARIDE CAPSULES. NONMOTILE ROD-SHAPED BACTERIA

SLOW FERMENTERS INCLUDE:

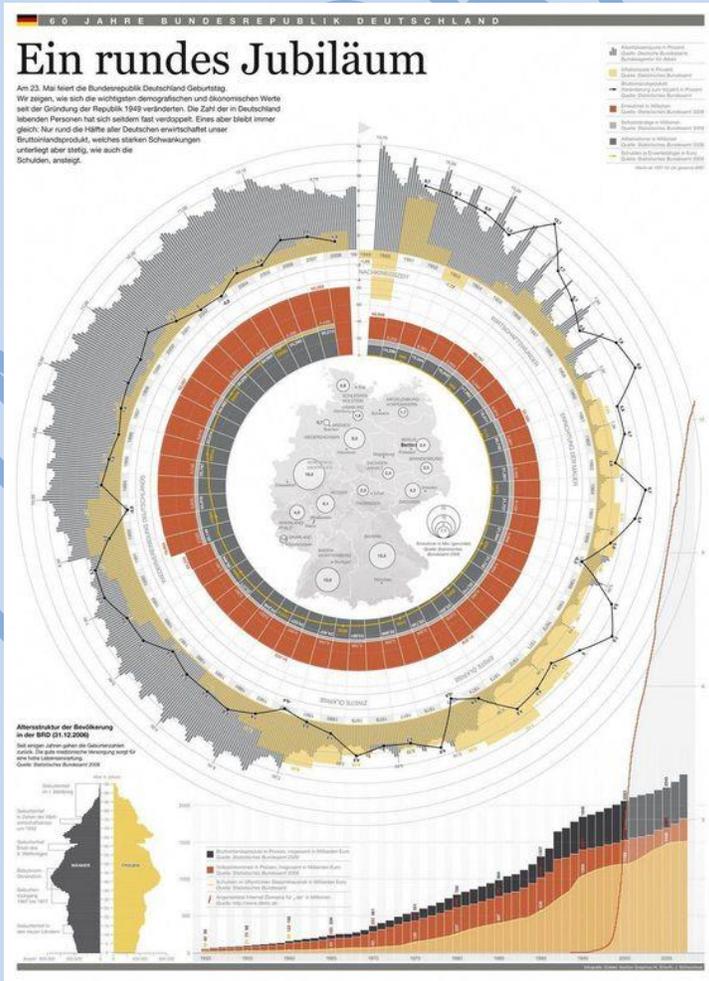
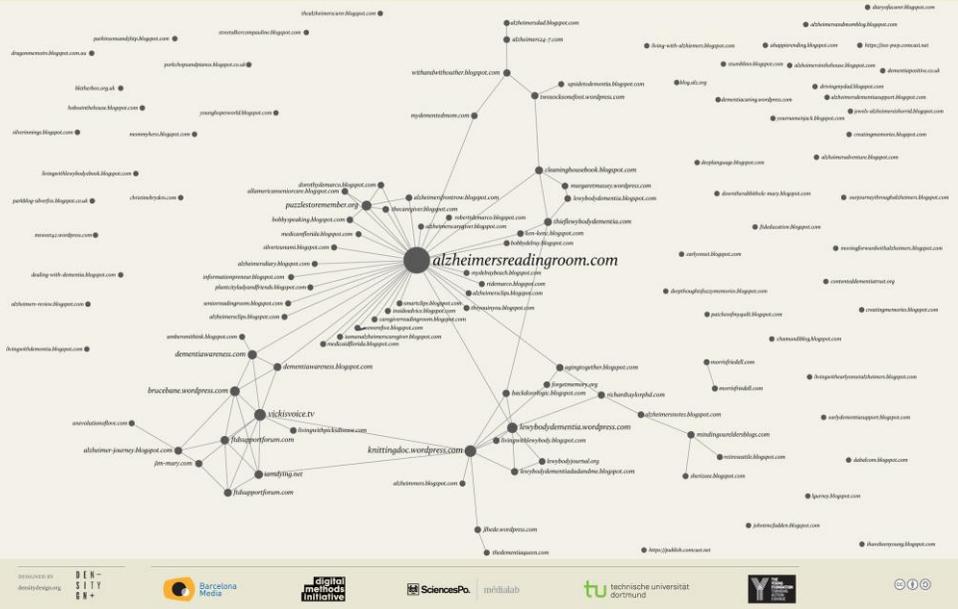
CITROBACTER: FACULTATIVE ANAEROBES WITH FLAGELLA. CAN FERMENT MANNITOL.

SERRATIA: ROD-SHAPED ENTEROBACTER WITH FLAGELLA. PRODUCES PRODIGIOSIN. A RED



WHAT ARE THE RESOURCES (HUMAN/MATERIAL/INSTITUTIONAL...) THAT HELP PEOPLE TO LIVE WELL WITH DEMENTIA?
Relations between 120 dementia related blogs.

TABLE 1A2

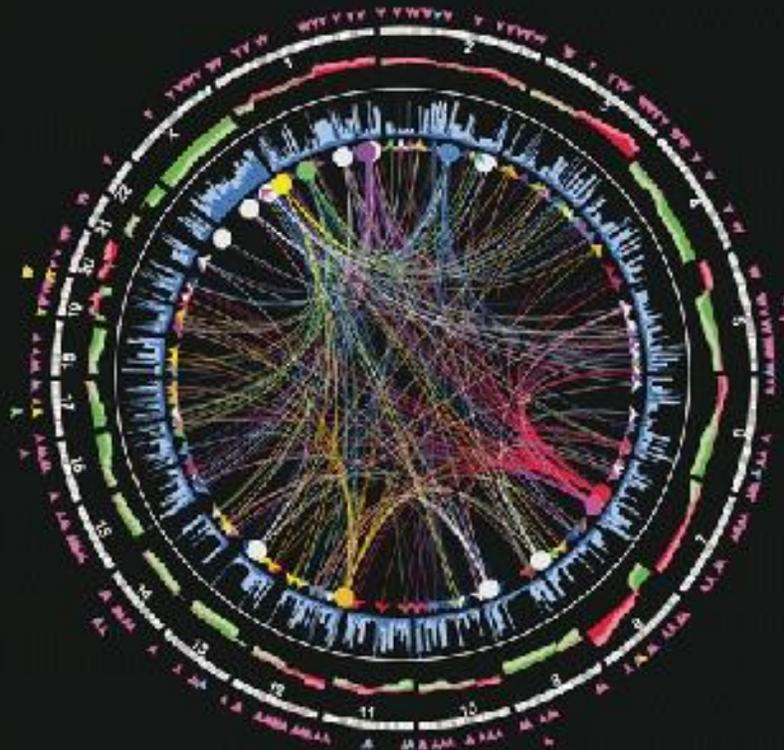


Cancer Cell

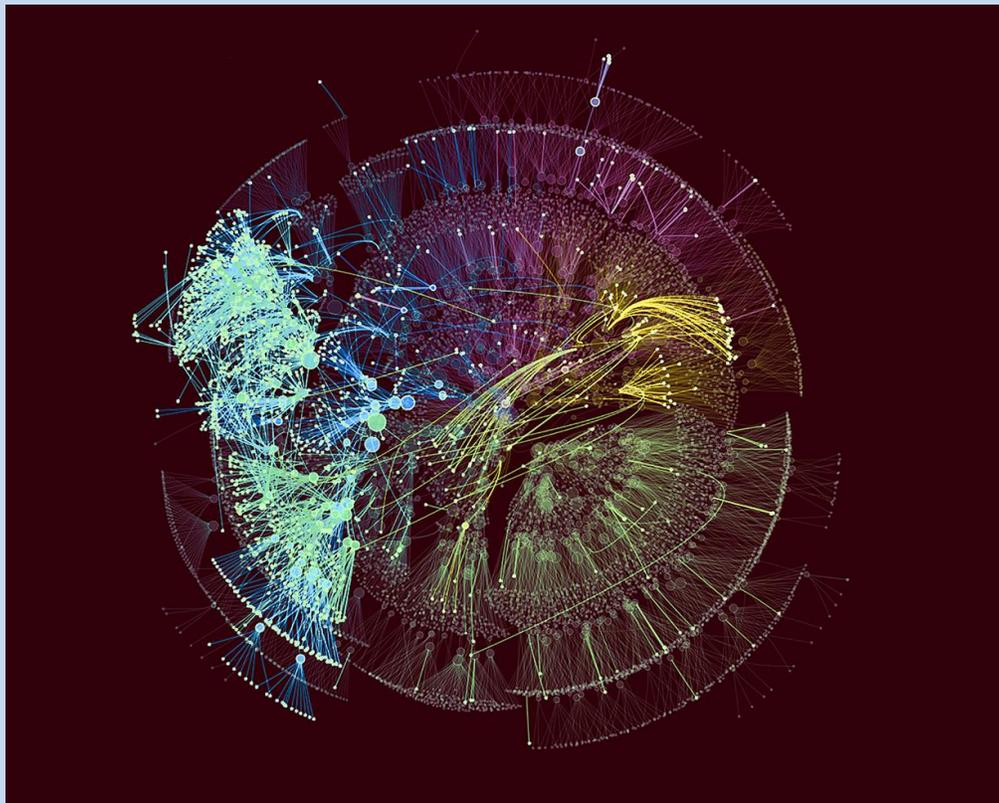
Volume 23
Number 2

February 11, 2010

www.cell.com/cancer



A Master MicroRNA Network for EMT in OvCa



SOLVING THE CANCER DILEMMA

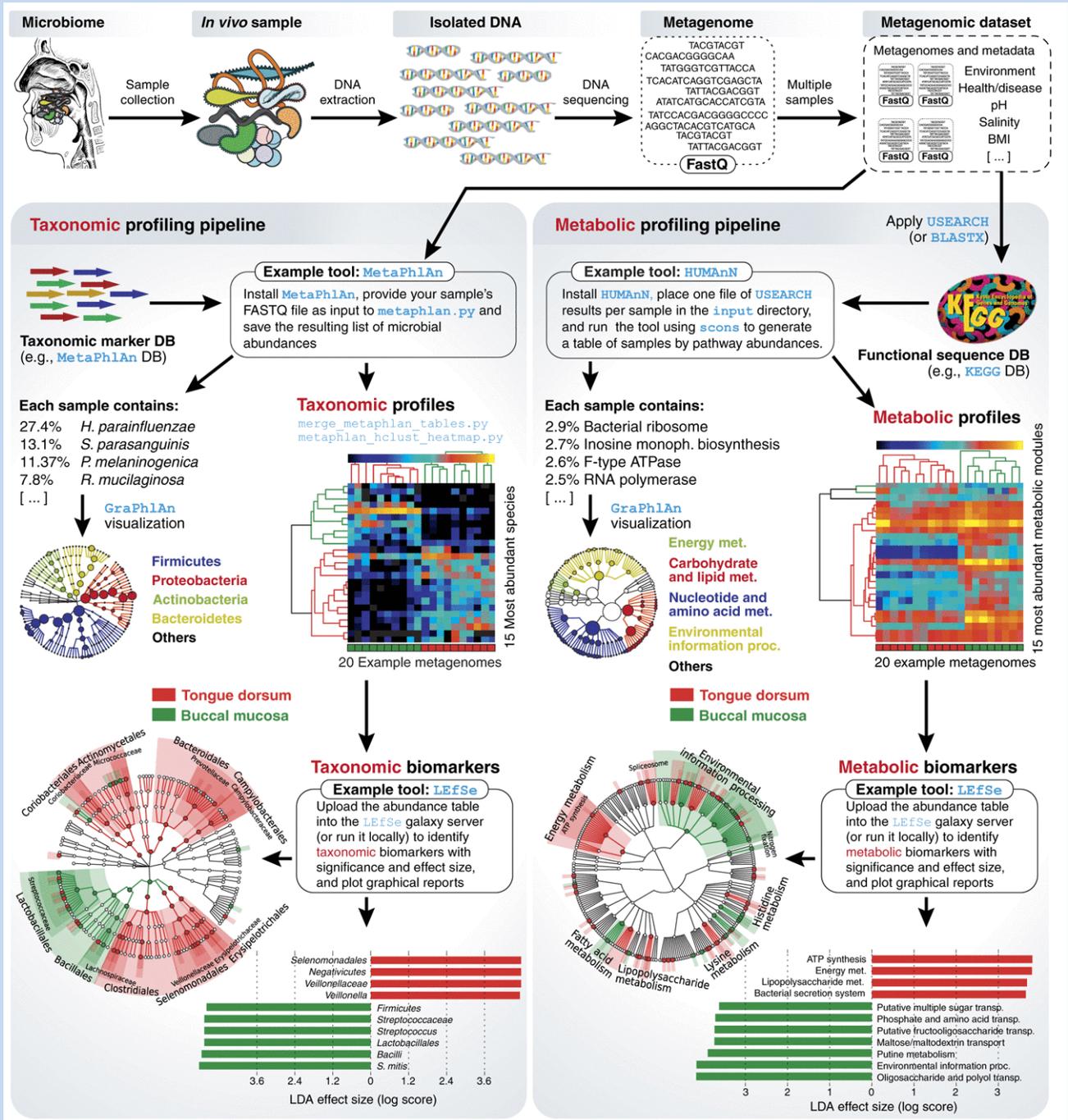
BY SHARON ROYCE, THE UNIVERSITY OF CHICAGO

In the 19th and 20th centuries cancer was a rare disease. Today it hits one in three people. Why the difference? The answer is we now live longer.

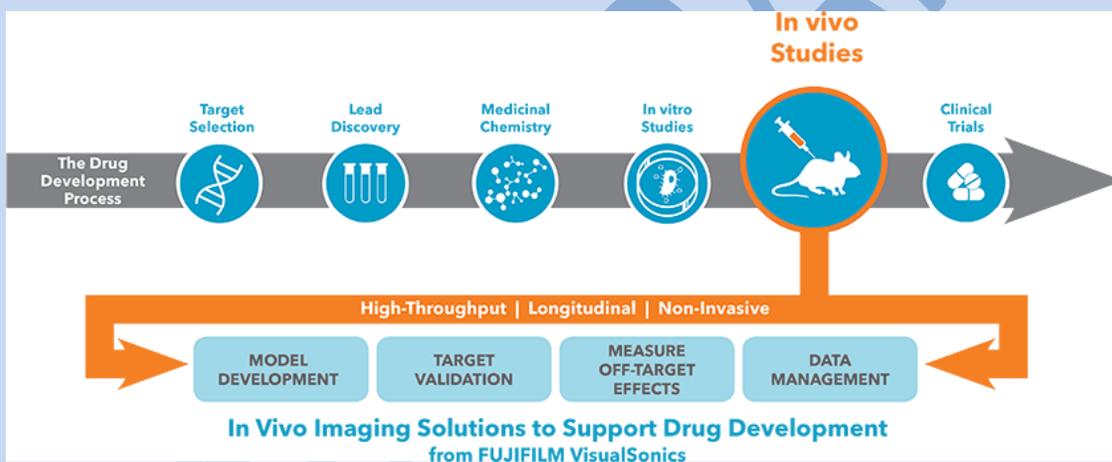
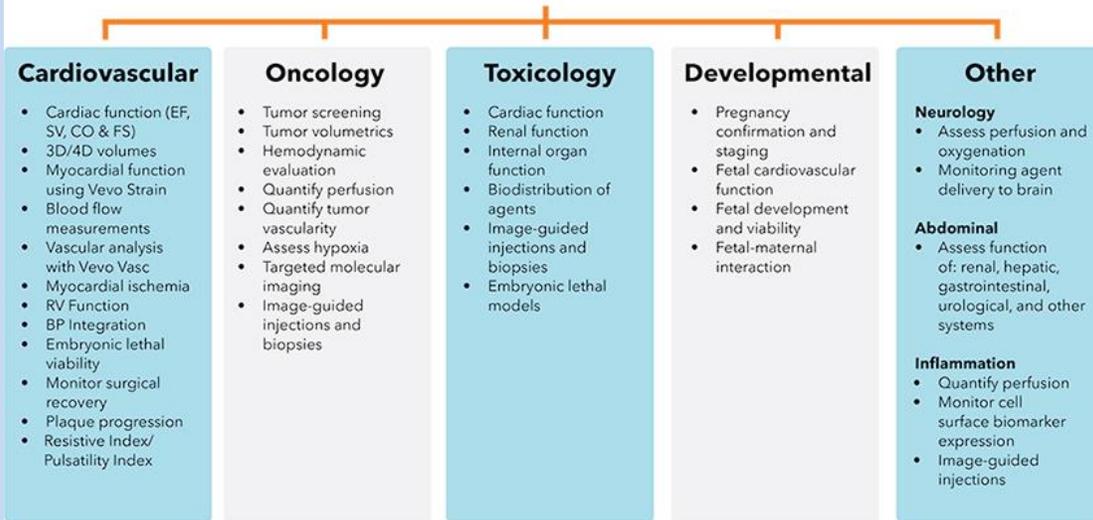
Cancer is mainly a disease of older people. In centuries past, people often died young, or in their prime from diseases such as tuberculosis, diphtheria, whooping cough, and other illnesses. But we've conquered all of those with vaccinations and antibiotics. We now live into our seventies, eighties, and even nineties. Some of us live to 100.

Unfortunately, as we age we increase our chances of getting some form of cancer. The preferred treatment is surgery, radiation, or anti-cancer chemotherapy, all of which can be ineffective and produce serious side effects. But now a revolutionary anti-cancer regimen is emerging—the modern supercomputer. At the forefront of this approach is Steven James (MS'94), professor of Molecular Biology and Biochemistry at MIT, and associate director of the BC Cancer Agency's Genome Sciences Centre.

APRIL 2014 | MAGAZINE 23



Ultra High Frequency Ultrasound and Photoacoustics for Drug Development from FUJIFILM VisualSonics



Successful applications in drug discovery

- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none"> Target identification and prioritization based on gene-disease associations Target druggability predictions Identification of alternative targets (splice variants) | <ul style="list-style-type: none"> Compound design with desirable properties Compound synthesis reaction plans Ligand-based compound screening | <ul style="list-style-type: none"> Tissue-specific biomarker identification Classification of cancer drug-response signatures Prediction of biomarkers of clinical end points | <ul style="list-style-type: none"> Determination of drug response by cellular phenotyping in oncology Precise measurements of the tumour microenvironment in immuno-oncology |
|---|---|--|--|

Required data characteristics

- | | | | |
|---|---|---|--|
| <ul style="list-style-type: none"> Current data are highly heterogeneous; need standardized high-dimensional target-disease-drug association data sets Comprehensive omics data from disease and normal states High-confidence associations from the literature Metadata from successful and failed clinical trials | <ul style="list-style-type: none"> Large amounts of training data needed Models for compound reaction space and rules Gold standard ADME data Numerous protein structures | <ul style="list-style-type: none"> Biomarkers: reproducibility of models based on gene expression data Dimension reduction of single-cell data for cell type and biomarker identification Proteomic and transcriptomic data of high quality and quantity | <ul style="list-style-type: none"> Pathology: well-curated expert annotations for broad-use cases (cancer versus normal cells) Gold standard data sets to improve interpretability and transparency of models Sample size: high number of images per clinical trial |
|---|---|---|--|

Hospital System

MARCO BARRIERTI
CHIARA BENEDETTI
VALENTINA CERUTI
MANUELA CIANCILLA
SARA DEAMBROSIS
ELOISA PAOLA FONTANA
GABRIELE MUSELLA



The hospital a system suitably created for the care and the reinstatement of the user, fundamental subject about which trials are divided to more or less visibly and flows of information, materials, data and people. Therefore, the map is totally centred on the users of the system, from which some vectors - corresponding to the direct access of the users to the sectors of the structure - are diffused: the reading sense is oriented towards right this way, where the processes and actors semicircle is placed; as a matter of fact, inside it are represented the processes and the operating subjects taken back inside the structure. The different nature of the exchanges is pointed out by the different colouring of the lines, following the radial disposition, at the end of every process you reach the area dedicated to the representation of communication and of exchanges between different sectors of the hospital. At a second level, it has been placed a second semicircle, a less specific representation of the system, that therefore shows - always with radial reading sense, consistently his corresponding right - in first place the flows between the departments, visible exchanges from the user and as easily detachable of type "many to many"; in second place a couple of data concerning every department: the height of the columns corresponds to the flow of users, while the width of them shows the amount of resources absorbed by the specific department. Once finished this sense of reading, taking into consideration a vision more of set of this area, it is visible the hierarchic organization of the system, where beneath the general direction, which is resources reach and he is responsible for distribution of them, appear administrative, sanitary and management directions, disposed according to their relative competence areas.

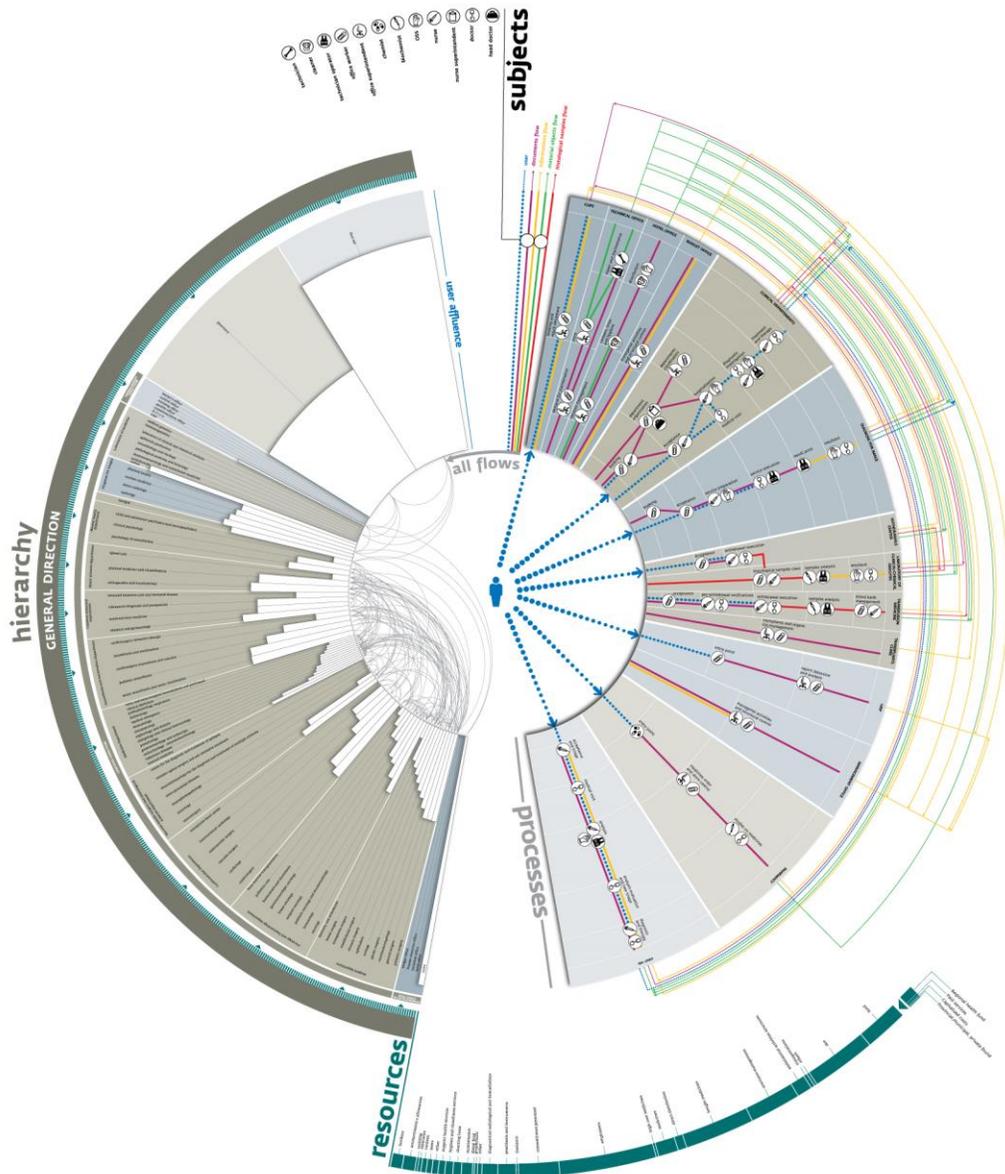
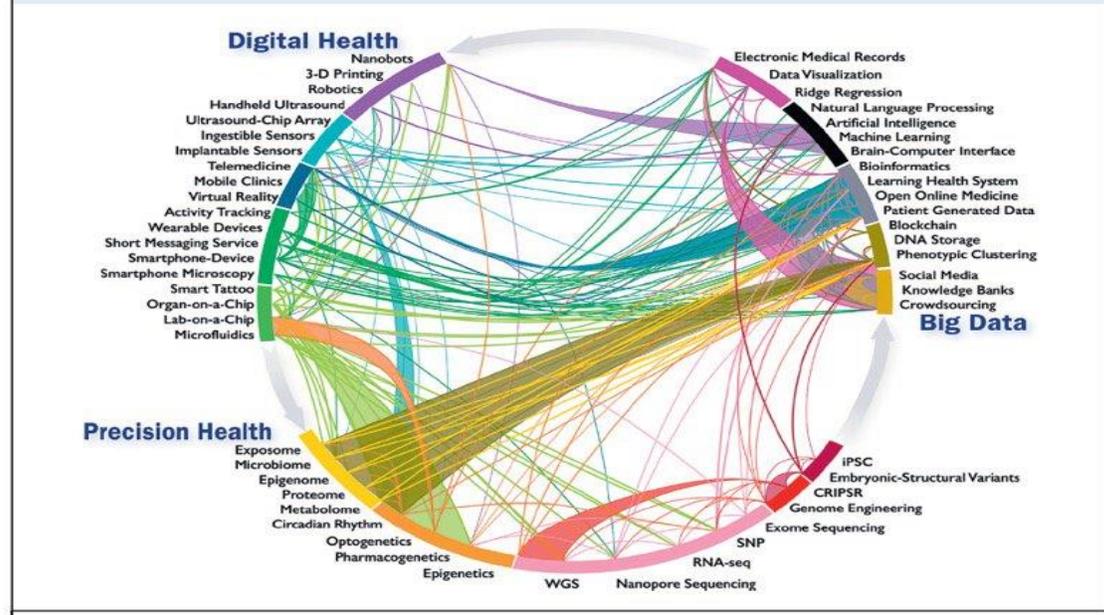
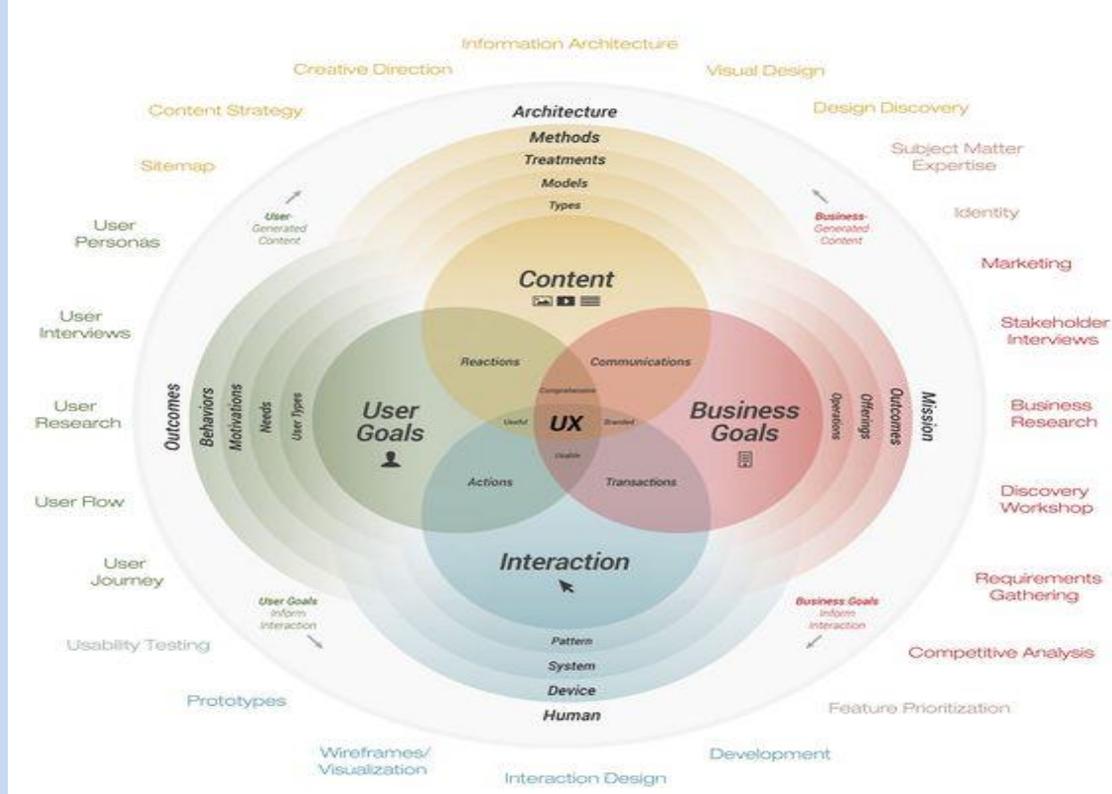


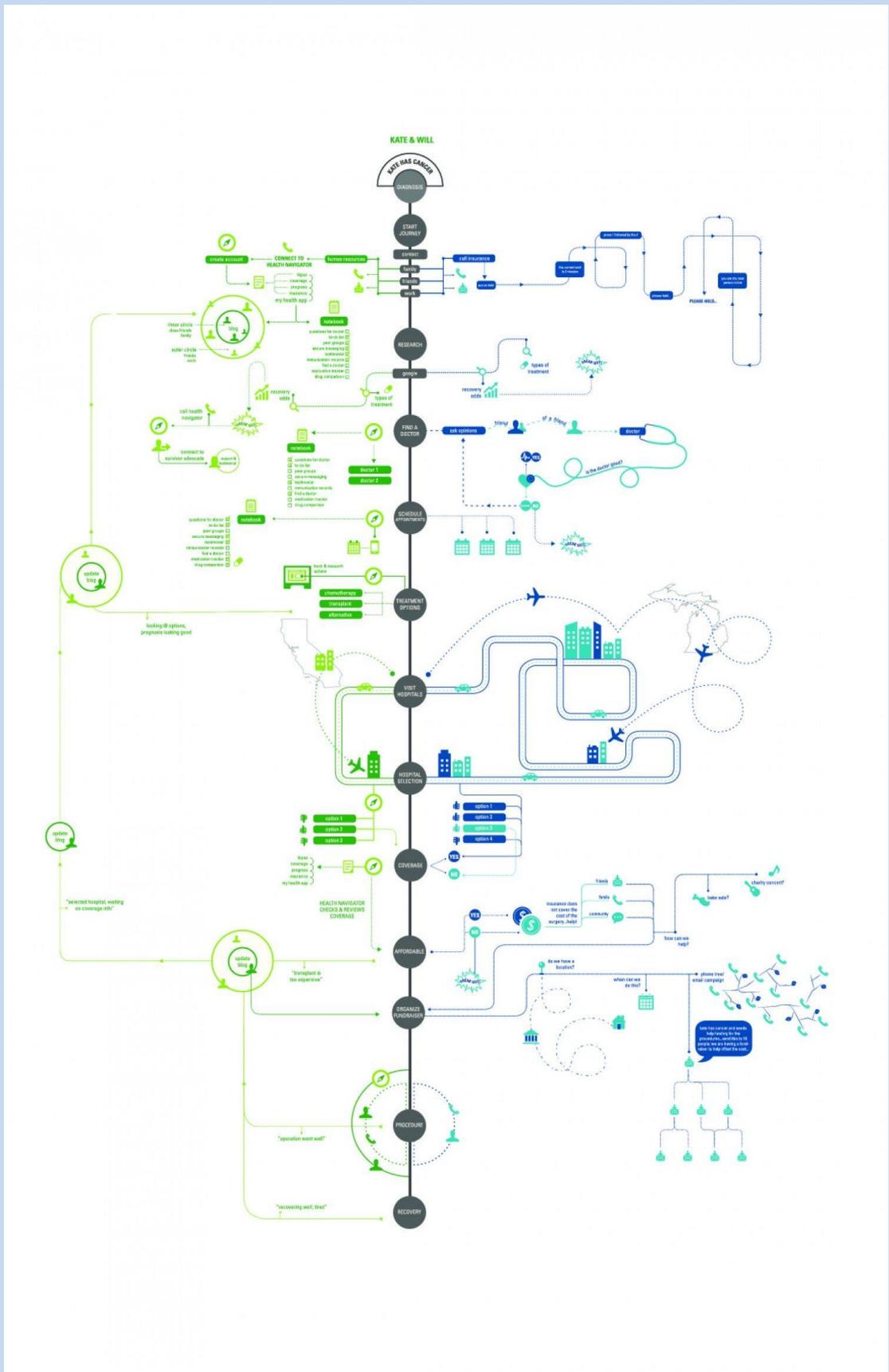
FIGURE 1 New Innovations in Healthcare



CUBI User Experience Model

Corey Stern, August 2014 (v1.0) - cubiux.com





CITIES WE LIVE IN

NATIONAL URBANIZATION PROPORTIONS, & TOP 500 BIGGEST URBAN AREAS IN 2015.

Urbanization means simply the process of a city that is expanding caused by not only an increase in population but also new workers moving from suburban or rural areas to urban areas. The expansion results in the growth of the city outward and upward, and thus it turns into metropolises that encompasses a hub that connects residential districts and commercial districts. Metropolis is the larger size than just a city as an administrative or legal status, so it can be seen as an agglomeration of urban areas.

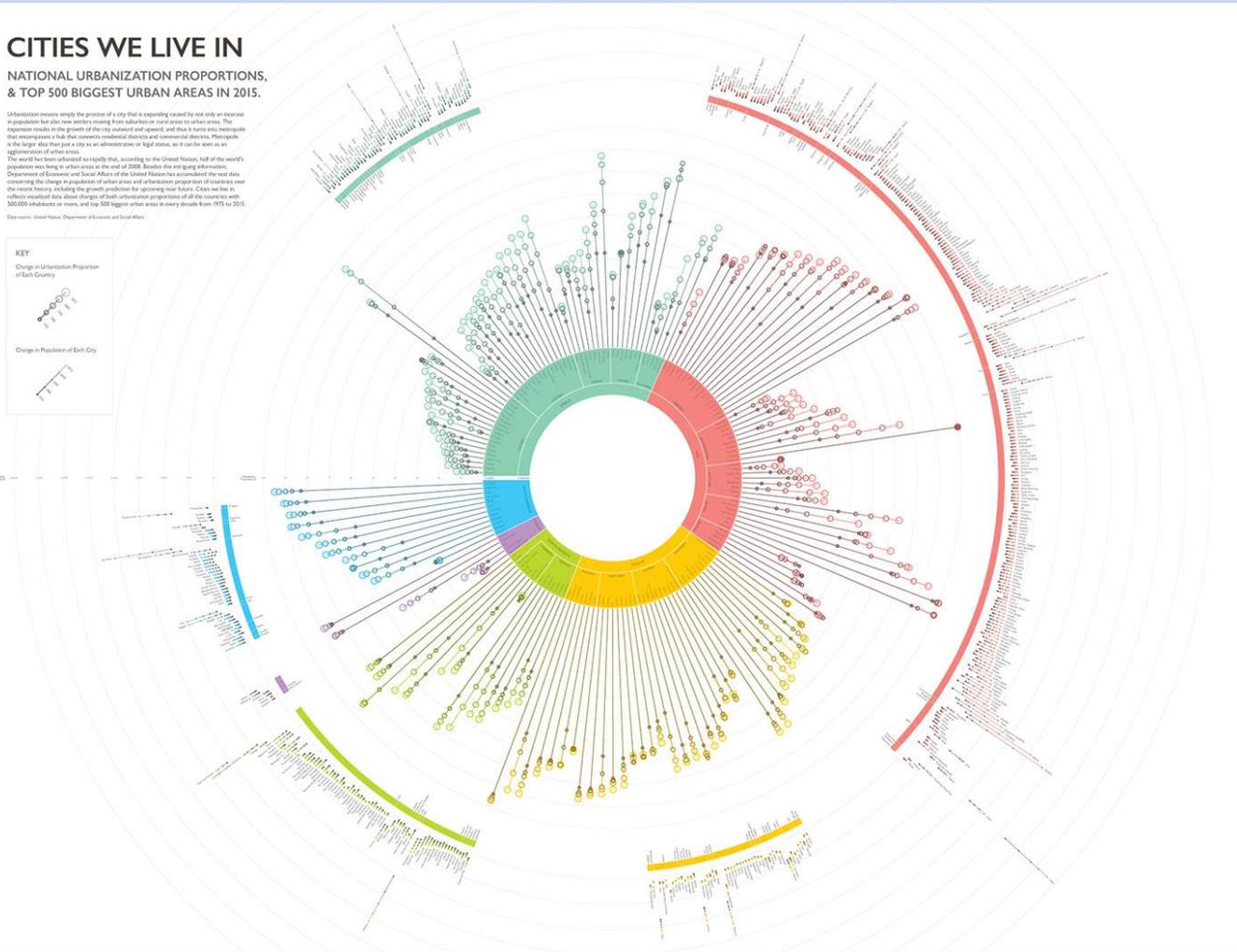
The world has been urbanized so rapidly that, according to the United Nations, half of the world's population was living in urban areas at the end of 2008. Besides the foregoing information, Department of Economic and Social Affairs of the United Nations has accumulated the vast data concerning the change in population of urban areas and urbanization proportion of countries over the recent history, including the growth projection for upcoming near future. Cities we live in reflects resultant data about changes of both urbanization proportions of all the countries with 500,000 inhabitants or more, and top 500 biggest urban areas in every decade from 1975 to 2015.

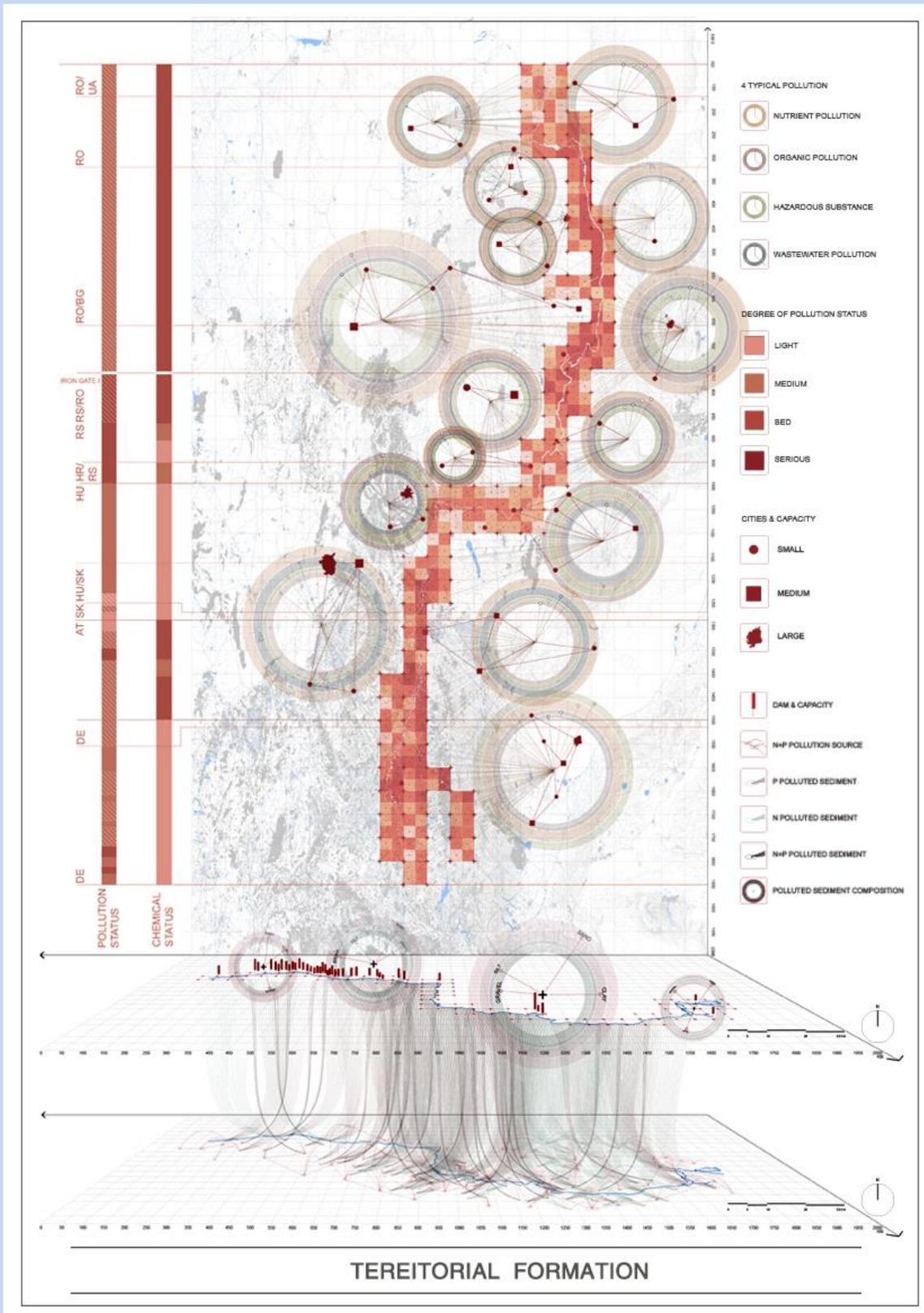
Data source: United Nations, Department of Economic and Social Affairs

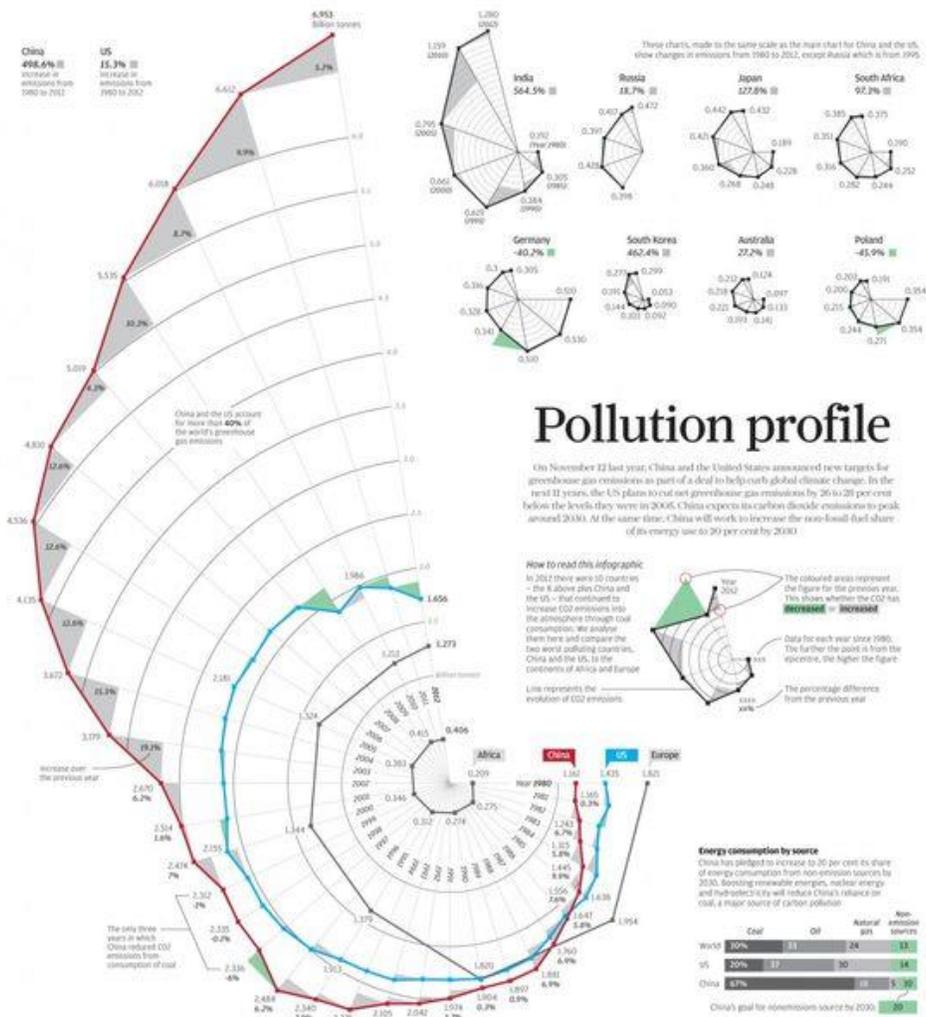
KEY

Change in Urbanization Proportion of Each Country

Change in Population of Each City





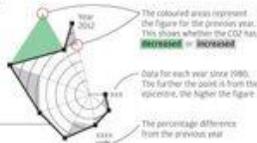


Pollution profile

On November 12 last year, China and the United States announced new targets for greenhouse gas emissions as part of a deal to help curb global climate change. In the next 12 years, the US plans to cut net greenhouse gas emissions by 26 to 28 per cent below the levels they were in 2005. China expects its carbon dioxide emissions to peak around 2030. At the same time, China will work to increase the non-fossil fuel share of its energy use to 20 per cent by 2030.

How to read this infographic

In 2012 there were 30 countries - the 8 above plus China and the US - that combined to increase CO2 emissions into the atmosphere through coal consumption; we analyse them here and compare the two most polluting countries, China and the US, to the continents of Africa and Europe.



Energy consumption by source

China has pledged to increase to 35 per cent its share of energy consumption from non-emission sources by 2030. Boosting renewable energy, nuclear energy and hydroelectricity will reduce China's reliance on coal, a major source of carbon pollution.

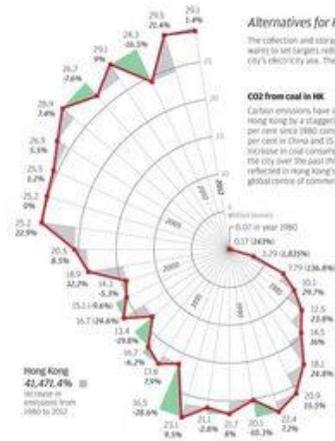
| | Coal | Oil | Natural gas | Non-emission sources |
|---|------|-----|-------------|----------------------|
| World | 10% | 31 | 24 | 35 |
| US | 20% | 37 | 30 | 14 |
| China | 97% | 1 | 1 | 1 |
| China's goal for non-emissions source by 2030 | | | | 35 |

Alternatives for Hong Kong

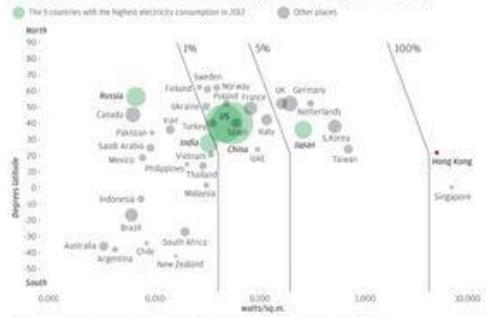
The collection and storage of solar energy and wind power require large areas of land. Hong Kong simply does not have. The Hong Kong government therefore wants to set targets reducing electricity use in commercial and residential buildings to slash carbon emissions. Buildings currently account for 90 per cent of the city's electricity use. The Environment Bureau is expected to release a 10-year energy saving roadmap early next year.

CO2 from coal in HK

Carbon emissions have increased in Hong Kong by a staggering 40,000 per cent since 1990 compared to 500 per cent in China and 15 in the US. The increase in coal consumption to power the city over the last three decades is reflected in Hong Kong's position as a global centre of commerce and trade.



Percentage of land needed in locations around the world to supply all their electricity from renewable energy



Sources: US Energy Information Administration, World Bank, APEC, AFD, Statistical Review of World Energy

WPP Graphics: Alberto Gualdi

A Core Set of Global Environmental Indicators

1990 - 2005

Notes

Energy Supply: This index is a measurement of energy intensity and efficiency, with a lower value indicating higher efficiency.

Renewable Energy: The supply index is calculated by comparing the current value to 1990. The index for 1990 is 100, so a current index of 125 indicates that renewable energy use has grown by 25%.

Red List Index: The index represents whether the conservation status of a group of species is getting better or worse, where the index for 1988 is 100.

ODP - Ozone Depletion Potential: CFCs have a potential of 1, HCFCs a potential of 0.005-0.2, and Methyl Bromide a potential of 0.51.

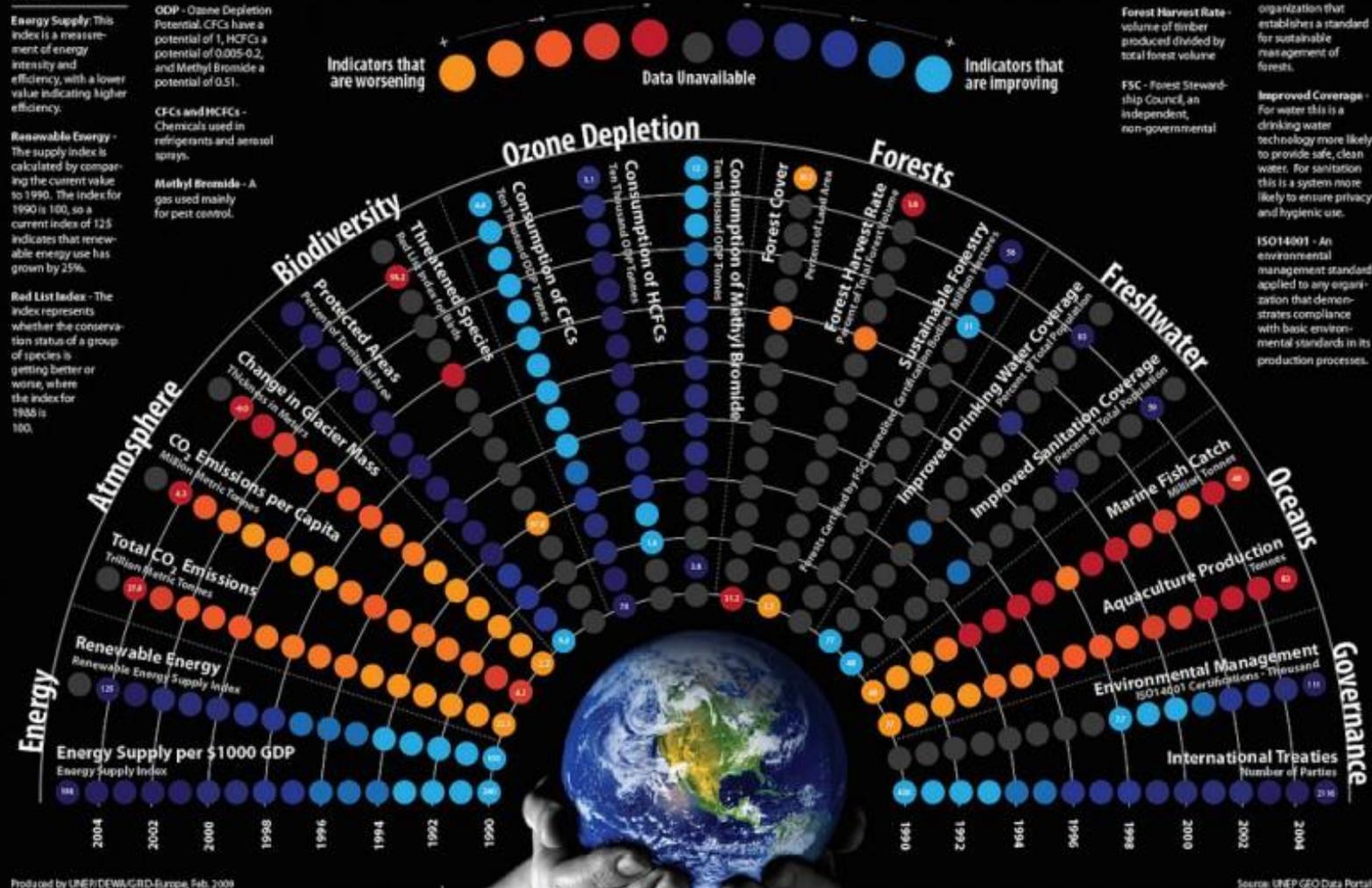
CFCs and HCFCs: Chemicals used in refrigerants and aerosol sprays.

Methyl Bromide: A gas used mainly for pest control.

Indicators that are worsening

Data Unavailable

Indicators that are improving



Forest Harvest Rate: volume of timber produced divided by total forest volume

FSC - Forest Stewardship Council: an independent, non-governmental

organization that establishes a standard for sustainable management of forests.

Improved Coverage: For water this is a drinking water technology more likely to provide safe, clean water. For sanitation this is a system more likely to ensure privacy and hygienic use.

ISO14001: An environmental management standard applied to any organization that demonstrates compliance with basic environmental standards in its production processes.

Infrastructure Investing



Utilities

- Electric
- Gas
- Water



Global Communications

- Telecom Providers
- Mobile Towers
- Cable & Fiber Systems



Energy Infrastructure

- Wind & Solar Farms
- Oil & Gas
- Distribution



Transportation & Logistics

- Trains, Planes, Trucks, Barges, Ships
- Software & Warehouses



Enablers

- Products & Services for the Infrastructure Industries



Utilities



Share of US New Electric Generation by Fuel Type²

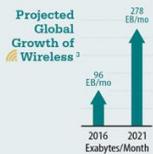


Wind and solar power accounted for more than 60% of new electricity generation in 2015 and 2016.

GROWTH DRIVERS

- Electric Vehicles
- Growth of US Renewables
- Abundance of US Oil & Gas
- Smart Grid Technology

Global Communications



5G Value Chain R&D & Capex Forecast⁴ 2020-2035



GROWTH DRIVERS

- Explosive growth of 5G
- IoT and its impact on e-commerce

Energy Infrastructure



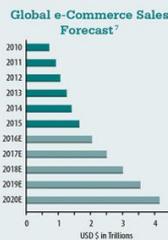
Projected Net US LNG Exports⁶



GROWTH DRIVERS

- Need for increased electric transmission
- Need for more O&G transmission
- Need to upgrade aging infrastructure

Transportation & Logistics



Rising US Parcel Shipment Trend⁸



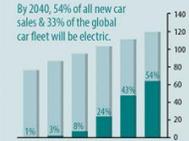
GROWTH DRIVERS

- Smart warehouses
- e-Commerce boom
- Cloud-based logistics-as-a-service
- Delivery disruptors and innovators

Enablers



Rising Global EV Light-Duty Vehicle Sales¹⁰



GROWTH DRIVERS

- Big Data
- 5G & IoT
- Increased automation of everything

Miller Howard INVESTMENTS

- Sources:
- 1 Rocky Mountain Institute.
 - 2 US Federal Regulatory Commission.
 - 3 Cisco IVM Global IP Traffic Forecast, 2016-2021.
 - 4 IHS, 2017.
 - 5 McKinsey Global Institute Analysis; US Chamber of Commerce; Citi Research.

- 6 EIA, AEO 2016; JTC.
- 7 eMarketer, Prologis Research.
- 8 Kollner Partners.
- 9 IHS, 2016.
- 10 Bloomberg New Energy Finance.

INVESTMENT PRODUCTS: ARE NOT FDIC INSURED • MAY LOSE VALUE • ARE NOT BANK GUARANTEED

This report represents Miller/Howard Investments' views. The statistics and projections cited in this report have been provided by sources generally considered to be reliable, but its accuracy, completeness, and interpretation cannot be guaranteed. Opinions and estimates offered constitute Miller/Howard Investments' judgment and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. This material is solely informational. The information and analyses contained herein should not be considered a recommendation to buy or sell any security, nor should it be intended as tax, legal, or investment advice, and may not be suitable for your specific circumstances; accordingly, you should consult your own tax, legal, investment, or other advisors, at both the outset of any transaction and on an ongoing basis, to determine such suitability. The material may also contain forward-looking statements that involve risk and uncertainty, and there is no guarantee they will come to pass.

All investments carry a certain degree of risk, including possible loss of principal. It is important to note that there are risks inherent in any investment and there can be no assurance that any asset class will provide positive performance over any period of time.

Any investment returns—past, hypothetical, or otherwise—are not indicative of future performance and none should be implied.

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Infrastructure Investor Guide Infographic: FI1801-01a

KEY PERFORMANCE INDICATORS INFOGRAPHIC

Learn more. Get certified. 

Functional Areas

Accounting

- % Billing accuracy
- \$ Cost of goods sold
- % Clients cash on revenue
- % Invoices under query
- # Days in accounts receivable

Compliance and Risk

- \$ Loss expectancy
- % Operational risk
- # Corporate governance index
- % Frequency of inventory audit
- # Turnaround time for audits

Customer Service

- # Speed of answer
- # Complaints resolved
- % Call handling time
- % Complaints resolved
- # Call abandon rate

Finance

- # Berry ratio
- % Capital acquisition ratio
- # Basic earning power ratio
- # Labor multiplier
- % Return on funds employed

HSSE

- # Lost time injury frequency rate
- \$ Energy consumption cost
- # Hours of OHS training conducted
- # Operational spills
- # Lost workdays due to accidents

Human Resources

- # Employee engagement index
- # Time to fill a vacant position
- % Employee turnover
- % Employee satisfaction
- # Training hours per FTE

Information Technology

- % Defects removal efficiency
- # SEC exceptions granted
- % LAN server availability
- # Time to market
- # Time for service request fulfillment

Marketing & Communication

- % Brand awareness
- % Net promoter score
- % Customer retention
- \$ Customer acquisition cost
- \$ Lifetime value of a customer

Procurement & Distribution

- # Inventory to sales ratio
- % Slow moving stock
- % On time delivery
- % Perfect purchase order rate
- % Inventory carrying rate

Production

- # Production schedule attainment
- # Units per man-hour
- # Maintenance backlog
- % Production schedule adherence
- % Production uptime

Project Management

- # Earned man-hours
- # Schedule performance index
- \$ Cost avoidance savings
- \$ Profit per project
- % Delivery deadlines met

Quality Management

- \$ Cost of poor quality
- % Scrap rate
- % Process efficiency ratio
- % Production first time yield
- # Rework cost

Research & Development

- \$ Cost savings due to R&D
- # Payback period of new products
- % New product success rate
- # Time to break-even
- # Time to market products

Sales

- % Share of wallet
- % Sales growth
- % Sales quota attainment
- % Lead conversion rate
- \$ Sales per labor hour

Terminology

KPI

Definition: A measurable expression for the achievement of a desired level of results in an area relevant to the entity's activity.

SMART Objectives

SMART Objective =

- Objective → Increase customers base
- +KPI → % Market share
- +Target → 20%
- +Timeframe → By Financial Year End
- +Responsible → Sales Director

Increase customers base to reach 20% market share by FY end under Sales Director leadership

KPI naming standards

KPIs - start with symbols

Value of \$ Net profit

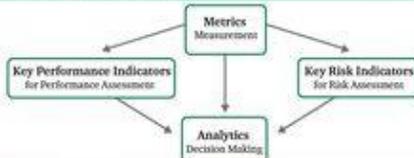
Number of # Defects

Percentage of % Budget variance

Value added by KPIs

- Clarity**
Paint a clear picture of strategy
- Focus**
Focus on what matters / requires attention
- Improvement**
Monitor progress towards the desired state

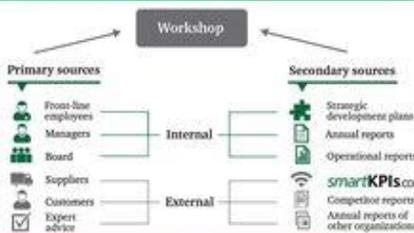
Metrics - KPIs - KRIs - Analytics



KPI selection criteria

- Relevant**
Aligned with organizational strategy; Significant for the specific domain of services
- Clearly defined**
KPIs should be described by using clear and intelligible terms. Avoid the use of management jargon
- Balanced**
Quality / Quantity; Efficiency / Effectiveness; Subjectivity / Objectivity

KPI selection workshop input



Data visualization

| Do's | Don'ts |
|------|--------|
| | |
| | |
| | |
| | |
| | |
| | |

KPI selection technique: Value flow analysis

Objective: Continuously improve skills through learning experience



KPI documentation

Name % Hospital bed occupancy rate

Definition
Measures the percentage of beds in the hospital that are occupied by patients, from overall number of hospital beds.

Calculation
Subordinate measures used for calculation
A = # Hospital beds occupied B = # Hospital beds

| Calculation formula (A/B) * 100 | Formula type Rate | Trend is good when Within range |
|---------------------------------|-------------------|---------------------------------|
|---------------------------------|-------------------|---------------------------------|

Target
Threshold example
Red: < 80% ; > 95% Yellow: 80 - 85% ; 90 - 95% Green: 85 - 90%

Industries

Call Center

- % Call setup success rate
- % Agent utilization
- % Call completion rate
- % First call resolution rate
- % Call drop rate

Customs

- # Arrival processing time
- # Entry clearance referrals
- # Work permits issued
- % Immigration refusals
- % Hit rate on high risk cargoes

Education & Training

- # National examination score
- % Attendance rate per course
- # Students to professor ratio
- % Drop-out rate
- % Student satisfaction rate

Financial Institutions

- # Insurance underwriting time
- # Insurance claim processing time
- % Cash collection rate
- % Risk coverage ratio
- % Liquidity ratio

Government - State/Federal

- \$ Gross National Product per capita
- # Healthy life expectancy
- % Unemployment rate
- # Water scarcity index
- % Health insurance coverage

Healthcare

- % Hospital bed occupancy rate
- # Daily census
- % Medication error rate
- \$ Cost per discharge
- # Laboratory one stop-account time

Hospitality & Tourism

- \$ Revenue per available seat hour
- \$ Total revenue per available room
- \$ Revenue per available customer
- % Capture rate of hotel guests
- # Length of stay in hotel

Infrastructure Operations

- # Birth occupancy rate
- # Container dwell time
- # Turnaround time
- # Container throughput
- # Arrival processing time

Real Estate/Property

- # Rent collection time
- % Cash-on-cash return
- % Occupancy rate
- # Repairs completed on time
- % Capitalization rate

Resources

- % Drilling rig utilization rate
- # Non-productive drilling time
- % Drilling success rate
- % Mining equipment availability
- # Carbon dioxide vessel efficiency

Retail

- % Same store sales growth
- # Stock rotation
- # Reorder point
- # Safety stock
- \$ Sales per unit area

Telecommunications

- \$ Subscriber acquisition cost
- % Answer success ratio
- \$ Subscriber retention cost
- % Data network availability
- % Block error rate

Transportation

- \$ Freight cost per tonne shipped
- # In-flight shudders rate
- % Revenue tone kilometers
- % Transport capacity utilization
- # Transit time

Utilities

- # Power plant load factor
- % Water quality index
- % Electricity demand growth
- % Wastewater treated
- % Capacity utilization factor

PATENT WARS

A New Age of Competition

Patents were made to encourage innovation. However, some say the current patent wars are preventing innovation as more and more money is spent on patents and related lawsuits instead of research and design.

A patent must be new, useful and non-obvious.

1 THE INVENTION OF PATENTS

A patent is a set of exclusive rights granted by the government to an inventor for a limited period of time in exchange for the public disclosure of an invention. The procedure, requirements, and the extent of exclusive rights have varied over time and place.

The patent for the telephone is considered to be the most valuable patent ever granted.

In 500 BC, the ancient Greek city of Sybaris (now in Italy) awarded those who created refinements in luxury.

In 1623, England declared that patents could be granted for "projects of new invention." Later, a written description of the invention was required.

In 1790, the first patent was granted to Samuel Hopkins for a method of producing "potash," an ingredient used in making gunpowder.

Created in 1791, the modern French patent system would grant inventors patents without examinations.

2 APPLICATION PROCESS

1 An invention is created.

2 The inventor files a written application, which contains a description of how to make and use the invention. A claim to the exclusive right the applicant wants may also be included.

3 The application is filed with a "patent pending" status.

4 The application must meet the patentability requirements. If requirements are not met, the applicant is given a chance to respond.

5 Once granted, the patent is subject to fees.

6 Patent protection lasts around 20 years

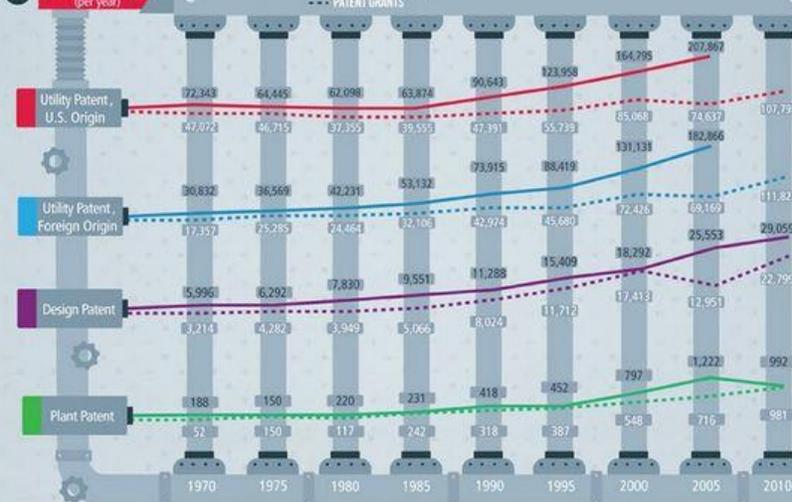
3 PROS AND CONS

Every potential patent owner should consider if the patent is going to be more valuable than the cost of preparing and filing it. When applying for a patent, pros and cons should be evaluated in order to make an informed decision.

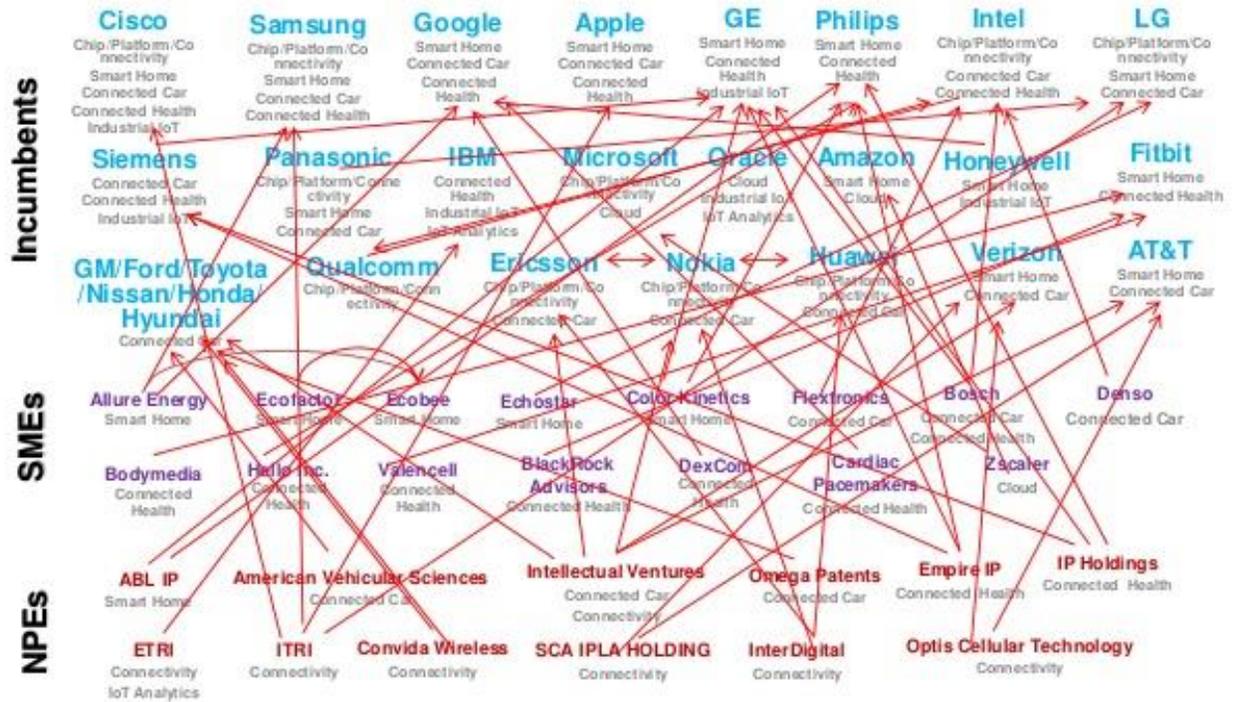
- PROS**
- Keep others out of the market
 - Restrict competitors
 - Make money
 - Retain the right to practice invention
 - Give your product credibility

- CONS**
- Costs are expensive
 - Liability
 - May interfere with innovation
 - They've been called "a restraint of trade"
 - Market yourself
 - Encourage inventors to share their ideas
 - Research and design investments are more efficient

4 PATENTS APPLIED (per year)



Internet of things (IoT) Patent Wars 2020 Scenarios Infographics



Refs

- [Internet of Things \(IoT\) Patent Landscape and Innovation Leadership 4Q 2015](#)
- [Internet of Things \(IoT\) Patent Disputes Risk Assessment](#)
- [Post-Smartphone \(Wearable & IoT Devices\) Patent Wars Started: How To Prepare?](#)

The Genetic and Molecular Socioeconomic Applications of Procreative Game Theorems

Demonstrating how common Card and Board Games are used to simultaneously convey the numerical analogies involved in the application of Procreatively Modeling Global Market Economies within modern times of monetary thought are as follows;

Ground Zero - Domino Tile Double Blank/The starting point at the roll of the Dice/The Thirty-Six Stratagems of Global Economic Marketing Warfare

Dice - Domino Tile Blank One/The Thirty-Six Stratagems Chapter 1: **Winning Stratagems** of Global Economic Marketing Warfare

Dominoes - Domino Tile Blank Two/The Thirty-Six Stratagems Chapter 6: **Defeat Stratagems** of Global Economic Marketing Warfare

Backgammon - Domino Tile Blank Three/The Thirty-Six Stratagems Chapter 5: **Proximate Stratagems** of Global Economic Marketing Warfare

Chess - Domino Tile Blank Four/The Thirty-Six Stratagems Chapter 3: **Attacking Stratagems** of Global Economic Marketing Warfare

Checkers - Domino Tile Blank Five/The Thirty-Six Stratagems Chapter 4: **Chaos Stratagems** of Economic Marketing Warfare

Poker - Domino Tile Blank Six/The Thirty-Six Stratagems Chapter 2: **Enemy Dealing Stratagems** of Economic Marketing Warfare

And sometimes on occasion the **Card Game 21** or **Blackjack**, as in the analogy of using a deck of cards to track the movements of the **G-20** Major Economies as their activities relates to or overlaps and moves both horizontally and vertically through the PDA & CPDA worksheet's **Static Processes** numbering 1-20.

The abstract stratagems and tactics involved in the **Procreative Modeling of Global Economies** will initiate a twofold series of events. ***First*** of these events consists of the simultaneous application of several common board games. Their unique numerical structures establishes a relationship with the sequential arrangements within the documents relevant to the conceptual mapping of those technologies used by this educational network to personalize internet content on behalf of the general populous. The technologies referenced both as an internal systems process, as well as a platform to deliver real-time real-world technology bases & educational services on the fly are a culmination of over 35 years of research & development to accomplish that very end through associative analogies.

Initially, the first point of entry into this application consists of obtaining a set of common dice. The Dice, or as in this case the #2, referencing those strategies & tactics in question whose numerical count is 1 - 6 for each dice. Each dice is also used to represent the initiation of two 6 Dimensional Regions within two distinct 48/48 Cellular Matrices as they engage in the simultaneous game play involving the development of numerous economic stratagems & tactics (e.g., 48+48=96). One DNA Matrix for the Planning & Design Approaches (PDA), and another RNA Matrix for the Consultative Planning & Design Approaches (CPDA). Within each dimension there are approximately 8 Elemental Cells or Build Objectives. Whereas, each element then becomes representative of 8 PPES Formulas used to establish synonymous grammatic relationships through XML or Thesauri Programs. It is at this point where the stated needs of individuals, groups, inter-groups, and that of a regional or global economic perspective are influenced by the introduction of Genetic Thought, New Ideas or Technologies.

All the while during this process the ninth formula PA², and it's 4 Major Corresponding Components, infuses itself into the 4 Minor Subdivisions within the structures of the rest of the formulas themselves as a whole. Namely, it's components of systems management titled; Power/Authority (PA²), Morale/Cohesion (M/C²), Norms/Standards (N/S²) and Goals/Objectives (G/O²). Whereas, each PPES formula is jointly applied toward both strategic and tactical economic thought or marketing warfare stratagems through the 6 dimensional regions of the 36 Chinese Stratagems of War. This operational analogy also establishes a connection with the 36 subject matters related to the Physiological Settings of rendering problem solving measures of effectiveness through academic thought.

Remember, that when on each and every occasion that all 9 principle parts of english speech are used to convey information or knowledge through any medium, a single Method is then executed to a total of twelve methods representing the 12 major regions of the Human Body, as each method contains 9 Subcategories that overlap the 9 major processing components of both the PDA & CPDA worksheets, combined in an effort to accomplish those set goals established in the Dictionary of Occupational Titles. Upon this action, when you multiply 9x9 you get 81 feedback interconnections that feed directly into the 81 subcomponents of those formulas listed in the word file titled Global - 3. While a similar document listed as Global - 4, attaches a search engine based Genetic Matrix to the processes of personalizing Internet content, as this technique incorporates Roget's Conceptual Thesaurus. Therefore, product and service development strategies move as a tactics, and marketing warfare tactics move as strategies within the Realms of product and services R&D.

As the dice are rolled, a player has a choice of which dice & its corresponding numerical count shall represent a particular PDA or CPDA matrix dimension. In other words, if dice (1) rolls a 3 then that number would represent PDA strategic dimension labeled as Measure. Generally, as in measures taken in relation to matrix elements or cells (1.) Purpose, (2.) Inputs, (3.) Outputs, (4.) Sequence, (5.) Environment, (6.) Human or Autonomous Agents, (7.) Physical Catalyts, and finally (8.) Information Aids. If for

instance, dice (2) rolls a 5 then it's corresponding CPDA tactical dimension label would be **Interface**, as in user interface or network interconnections. This dimension's cellular relationships would be similar to the ones referencing the Measures dimension mentioned above, therefore at this point it's subject matter bares no repeating. Once the stage has been set the dice then become an integral part of the game of Backgammon and Dominoes. For example, the game of Backgammon contains a set of dice and 15 chips that rotate counter-clockwise according to player position over the game board's 24 points. In our case, the 15 chips referencing the 15 Emperors of Rome from Augustus to Constantine I, minus one emperor who is represented by the actual player or players involved in the game.

At this point our internal systems programs utilizes the Backgammon game board's 24 points to overlap the 24 sections of the word files titled, the **Chromosomal Matrix** and **Autonomous Agent OS Feeds**. These documents represent a process of infusing the game of Backgammon with both PDA/CPDA 48 cellular matrices, as they in turn establish an interconnected causal relationship with the 24 chapters of the book **Caesar: Life Of A Colossus**. Next, the following series of events involves overlapping the 24 books of the **Torah** as an evidentiary economic footprint in the efforts against Racism and Anti-Semitism. While additionally, overlapping the 24 focal points of **CPDA** sections - A1-A4, B1-B4, C1-C4, D1-D4, and E1-E4 consecutively, as well as their corresponding interconnected overlapping relationship with the **Procreative Worksheet's Financial Elements**. As each set of 24 CPDA focal points totaling 5 processes filters through the entire sequences of events. These events then become reflective of the **16 Genetic Stages** involved with infusing over 96 (i.e., 48 forward and 48 backward chaining) matrixed search engines into a single minded effort (e.g., as in the five phases of the **PDA** worksheet or the 5 major **Hemispheres** of the human brain, as they in turn relates to the 5 component **Mindset** of **Caesar**, or any other **Persons**, **Places** or **Things** within the **Marketing Warfare** of human history). It is also at this point that the number 16 lends relevance towards the direction of incorporating 16 Roman Legions as Economic Standards under the marketing warfare auspices of numerous strategies and tactics. Case in point, the initial set of 16 **Roman Legions** from the Early Empire as 16 Roman Emperors. The secondary set of Early Empire Legions as the 16 Genetic Stages. The third set of legions, Legio I - Legio XXX as CPDA sections - AAF-AAT, ACG-ACV, ADH-ADW and AEI-AEY. While the final set of 16 Roman Legions represents CPDA sections, B1 - E4 as each of their individual internal five phases facilitates over 400 **Roman Generals**, whose individual mindset is maintained through 5 poker cards in a game of Texas Hold'em.

Similarly, during this same series of events the game of Dominoes comes into play by way of having it's game rules and numerical pips implemented as matching tactics or counter-measures to the sum total of each roll of the Dice at the start and heart of this analogous procreative game play. In other words, if the sum total of the roll of the dice is 1 and 1 or craps, then a player has a choice between playing the tile listed as Blank 2 or Double 1s as the spinner. This in turn initiates a counter-move whose actions determines a corresponding counter counter-move in and of itself, with the clear objective being the random selection of approximately 36 **AAA** approaches toward

manipulating all six games as a whole. For instance, domino tile 5/2 representing those Economic Adaptive Autonomous Agents (AAA) involved in PDA Phase - 5, Process Area - 2, Implementing and Specifying Solutions. Or in the case of the CPDA worksheet sections - A2, Phase - One. Once the Domino tiles are evenly dispersed into 14 tiles, then each tile becomes the focal point of the 14 procedural elements and dimensions of both PDA & CPDA genetic matrices.

The following steps stands in recognition of several facts or approaches at this point, and they are; (1) That the Dice as such are used to strategize a board game in particular called Backgammon. (2) That the game of Backgammon consists of the counter-clockwise rotation of 15 chips or references to the 15 Emperors of Rome. Plus, one as such representing an individual player engaged in the thoughts and actions of a particular Ancient Roman Emperor playing the game. All the while having their internal 12 descriptive Methods as **Global Information Drivers of Strategic & Tactical Innovations** (GIDSTI) move across the 6 points within 4 core Managerial Sections of the Backgammon game board (i.e., P/A, M/C, N/S and G/O). (3) That the 4 core managerial sections of the game of Backgammon, while being attached to a 24 focal point Chromosomal Matrix, is additionally comprised of the 4 initial process areas of the word files called; The Procedural (4 Vertical PDA Process Areas Down), Economic (CPDA sections - AAF-AEY), and Autonomous Economic Procedural Guidelines (CPDA Sections, B1-E4), or to simply put it the mathematical equation X³. These files list and categorizes approximately 81 subjects according to their numerical layout under the PPES formula, as representative of those numerous processes engaged in personalizing Internet content, all the while integrating over 300 variety of books that support the development of Strategic and Tactical Setup Features according to the numeric outline of a book's written subject matter.

The ***Second*** of these events broadens into the implementation of the games Checkers and Chess. Even if you're already familiar with the game board layouts for both Checkers and Chess, let me remind you that their game boards are similar in that they each contain 64 squares. As in the 64 cells of both the PDA/DNA & CPDA mRNA or tRNA genetic matrices combined. Also, 8 PDA strategic PPES Formulas X 8 CPDA tactical PPES Formulas = a 64 point observational and operational layout (i.e., Checkers as strategic & Chess as tactical operations matrixed). Once a visualization of this blueprint is perceived then one need only take the 5 or more cards dealt him or her, and apply these cards laced with 48 (64-16=48) genetic codons upon each checker or chess piece as they are played during the course of game play. Whereas, each suite of cards represents the 4 areas of systems management P/A, M/C, N/S and G/O. Remember, that each game piece in this case, other than the one considered actually in play, represents approximately 15 Roman Emperors engaged in the simultaneous application of both Checkers as an operational strategy, and Chess as a series of tactical processes. When you consider the importance of the numbers 4x16=64, then can begin to see how this particular setup provides this network with the ability to use common game play analogies to teach global markets participants how to model global economies. Simply put, 16 Roman Emperors, Checkers or Chess pieces, plus the 48 frontal cells of the game board referencing the 48 chapters of a book titled Hannibal,

equals a total of 64 possible scenarios through the game play stratagems of Checkers and/or Chess.

Henceforward, whenever a game piece in Checkers or Chess is moved from its original starting point genetic sequences are initiated, whereas a series of 20 amino acid progressions stand in recognition of the 5x4 PPES procedural layout of both PDA and CPDA worksheets. For example, there are 2 teams in a baseball game consisting of 9 players, whereas each team attempts to score the most points by rounding 4 bases. There are 9 possible winning hands in a game of Poker utilizing 4 suites of cards in a deck consisting of 52 (4 A's - $52=48$) playing cards numerically sequenced 1-10. There are 2 teams in a game of basketball consisting of 5 players each attempting to outscore their opponents by making the most baskets. Then under the auspices of the numerous Card Games in the world. The amount of players involved equates into the same Domino game sequence mentioned above. And the list just goes on and on infinitum. Finally, the numerical relationships in life in general brings about the following meaning in this network's attempts at facilitating the health and well being of All Mankind:

The number (1) means a single person, place or thing consisting of 12 internal or external methods.

The number (2) means a strategic and/or tactical relationship with a person, place or thing consisting of 12 internal or external methods.

The number (3) means a three dimensional relationship with a person, place or thing consisting of 12 internal or external methods. As in the mathematical equation X^3 .

The number (4) means the four areas of systems management Power/Authority (**P/A**), Morale/Cohesion (**M/C**), Norms/Standards (**N/S**) and Goals/Objectives (**G/O**) as they relate to the combined technology platforms; **P/A** - Internet-Based Operating Systems (IBOS), **M/C** - Distributive Operating System Architectures (DOSAs), **N/S** - Distributed Abstract Life Programs (DALPs) and the **G/O** - Integrated Autonomous Office Applications (IAOAs). The number 4 also means PDA vertical columns; Pursuing the P&D Strategy (**N/S**), Specifying & Presenting Solutions (**M/C**), Information Aids (**P/A**), and finally Arranging for Continual Change & Improvement (**G/O**). The number 4 additionally means PDA process area, Involving People, as it relates to CPDA strategic sections - A1 (**N/S**), A2 (**M/C**), A3 (**P/A**) and A4 (**G/O**) consecutively. Moreover, the number 4 corresponds with CPDA tactical sections - [B1-B4, C1-C4, D1-D4 and E1-E4] successively as established interconnections with 80 Economic Legions. The 80 Economic Legions are comprised of the 1-20 point, 5-Phase 36 AAA stratagems processed across all 4 areas of management within the PDA worksheet vertical layout, from which 144 core strategies coexist through a genetic matrix with the Global Information Drivers of Strategic & Tactical Innovations (e.g., 3 initial genetic sequences x 16 cells, codons or roman emperors = 48). The 48 set of genetic sequences as codons or cells x 3 genetic sequences each = 144. Also, 36 AAAs that are infused into a 1-20 point Integrated Framework x 4 Areas of Management within a PDA's perspective = 144). Once an analogous operational blueprint of the 80 legions of Ancient

Rome is formulated as CPDA sections - [B1-B4, C1-C4, D1-D4 and E1-E4], and as subcomponents to those formulas listed within documents Global - 3 & 4 as they are further multiplied by 144 matrixed stratagems, this format shall produce approximately 11,664 Academic Standards of Fiduciary Principles. An Academic Standard consists of 3,927 technology approaches divided into 45M Businesses Worldwide which produces the number 11,465. This total then overlaps the number 11,664 which now represents 11,465 Solution Providers, each one potentially generating approximately \$3.2B over a period of 5 years more or less.

The number (5) means the 5 phases of both the PDA and CPDA worksheets. The 5 major Hemispheres of the human brain, as it in turn relates to the 5 component Mindset of Caesar, or any other Persons, Places or Things within the Marketing Warfare of human history).

The number (6) means the 6 dimensions of Dominoes, and that of the PDA or CPDA 48 cell matrices. The 6 Orders or Sedarim of the Mishna and it's corresponding 63 Tractates, as it relates to the 64 cells of both DNA and RNA genetic matrices, as well as the 64 sections of Building a Guide to an Engineering Body of Knowledge.

The number (7) means the 7 Continents of a global economic perspective or the 7 candlestick Menorah. The 7 Articles of the United States Constitution as the 7 Kings of Rome, and the 7 hierarchical layers within the Sniffer's Guide to Network Protocols.

The number (8) means the 8 Principle Parts of English Speech (PPES) formula system as it relates to the (9th) PPES formula PA², as well as the 8x8 layout of both the board games Checkers and Chess. The ninth formula infuses the concepts of it's subroutines into each of it's component PPES predecessors, whereas $PA^2 = G^2$, $MC^2 = E$, $NS^2 = NT^2$ and $GO^2 = OT^2$. This process continues until all formulas are interconnected as the one into the single (10th) formula X³, whose structure carries all 9 formula through it's layout 4 times over giving rise to approximately 36 AAAs. Remember, that these formulas also convert themselves into the 9 major regions of both the PDA and CPDA worksheets, as well as the 9 subcategories of each Method totaling 12.

The number (9) means the 9 Principle Parts of English Speech formula system that is all inclusive of it's defined numerical relationships mentioned throughout this website.

The number (10) means Caesar's 10th Legion (i.e., X³) as a simultaneous Republican and Democratic representation of the 300 global economies by way of the following; Since the operational mindset of Gaius Julius Caesar is a combined PDA and CPDA 5 - Phase approach toward implementing problem solving measures of effectiveness through fiduciary concepts, the format of CPDA sections - A1 thru E4 in their entirety establishes on behalf of this network, a means by which the 300 CPDA components [A-1-1/AAA thru E-4-5/EYY] becomes a series of rotational elements within the Procreative Worksheet. The effects of which is the foundation of a mobile economic expeditionary force of wealth and opportunities through a series of global

monetary perspectives. Moreover, this process once it is embodied along the these guidelines by simply multiplying the 300 economic representatives by as many as their 12 or more members, shall produce approximately 3,927 technology approaches that will be the foundation to influence global markets through static cutting-edge innovations.

The number (11) means Employment Related Software Development (ERSD) as an overlap to 12 methods.

The number (12) means the twelve Global Information Drivers of Strategic and Tactical Innovations (GIDSTI), whose individual members when multiplied 12 times equals 144 Operational Grand Stratagems. It also means the 12 major regions of the Human Body. The 12 Apostles of the Body of Jesus Christ. The 12 Tribes of Israel. The combination of the Ten Commandments in the Old Testament with that of the Two Commandments in the New Testament, equals the embodiment of Mohammed. Since the nature of the very existence of Islam, and that of each & every Moslem is founded upon the combination of the two Testaments as a whole. In other words, $3 \times 12 = 36$ and $4 \times 36 = 144$.

The number (13) means the embodiment of the very nature of an individual person, place or thing referencing their 12 members (e.g., $1 + 12 = 13$). This number also represents the incorporation of the 13 chapters of Sun Tzu's the Art of War.

The number (14) means the 14 topics that are the core issues of both PDA and CPDA cellular matrices (i.e., 6 Dimensions + 8 Elements). The 14 subjects related to the analogies of Special Ops in Marketing Warfare strategies and tactics. The 14 Books of Rambam's 613 Mitzvots. And so on, and so on until a player of the Procreative Modeling of a Global Economic Perspective achieves the ability to integrate, and as a single minded entity, move all of the principles and processes mentioned as an Economic Procedural Guideline through the principles and actions of human sexuality or simple game play.

NOW DO YOU SEE WHAT THE UNIVERSE IS SEEING?

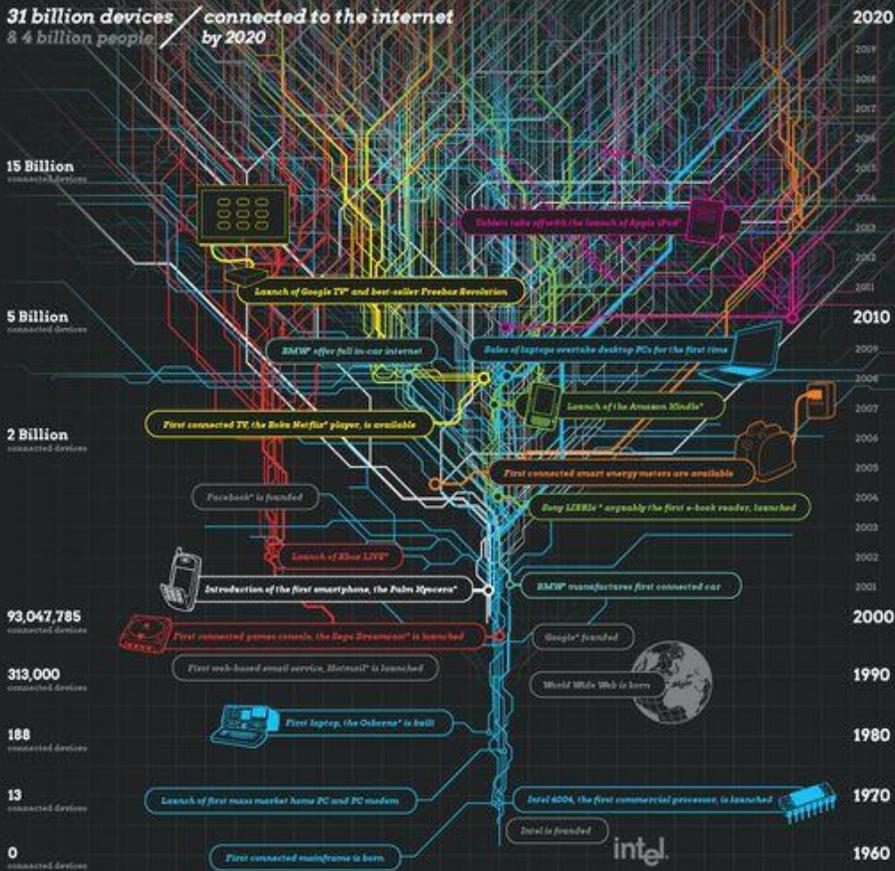
The Internet of Things

The Internet is evolving, again. Every day, billions of people connect to the Internet through billions of devices - PCs, smartphones and TVs to name just a few. While the PC remains at the centre of this evolution, Internet connectivity is now embedded into cars, fitness equipment, factory robots and vending machines. This smarter, connected world has the potential to change how we live.

Here, Intel has produced a quick snapshot of how the number of connected devices has exploded since the birth of the Internet and the PC, as well as a glimpse forward to 2020. The Internet may already be huge, but it's about to get a lot bigger.

- Mainframes, PCs & Laptops
- Smart TVs
- Tablets
- Smartphones
- E-Book Readers
- Smart Energy Meters
- Smart Coaches
- Automobiles

31 billion devices / **8.4 billion people** connected to the internet by 2020



More than one million PCs sold every day



80% of all PCs shipped today have Intel[®] Inside



The data referenced in this document came from a variety of sources. For a full list please visit: www.intel.co.uk/internetofthings
Intel is a trademark of Intel Corporation in the United States and other countries. *Other names and brands may be claimed as the property of others.



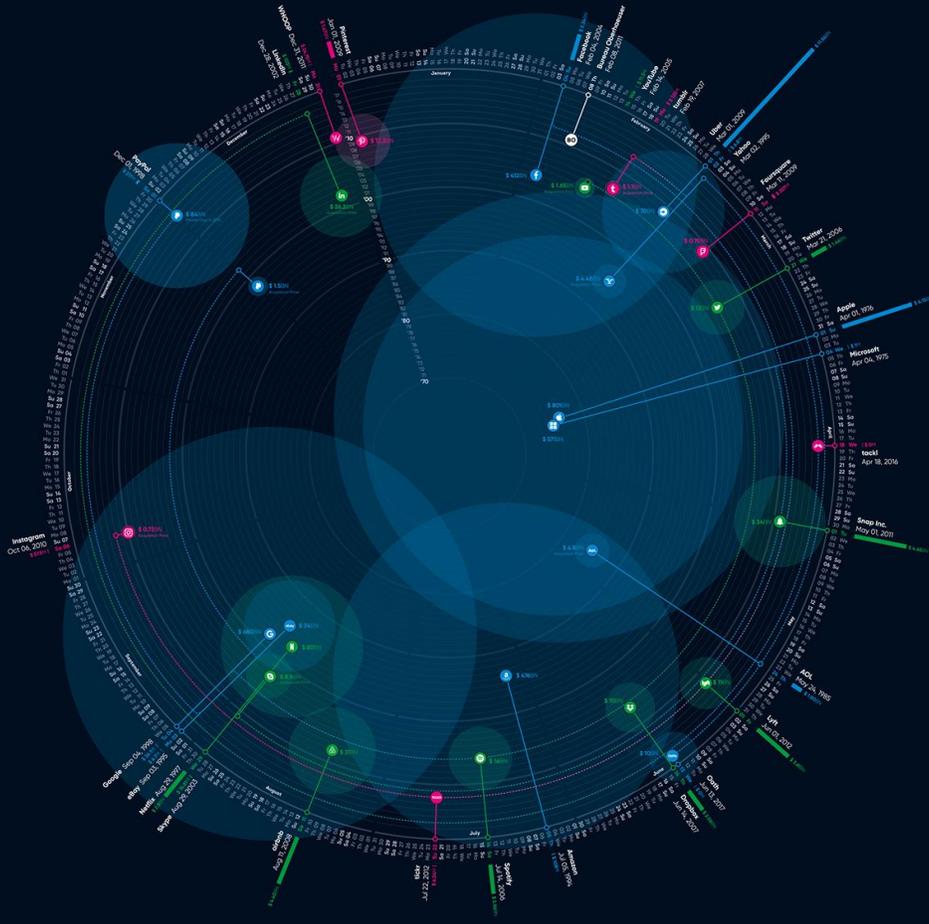
TECH STARTUP EVOLUTION

Calendar 2018

The Bureau Oberholzer Calendar 2018 shows the evolution of the most significant tech companies of our time plus some handpicked companies that we personally value the most. Features include the companies estimated market value, purchase price, number of employees, year of establishments and more.

Please note that all numbers and dates are based on estimates. Bureau Oberholzer assumes no liability or responsibility for any error or omissions in the information provided.

- Employees**
- 0 - 1000
 - 1001 - 5000
 - 5001+
- Company Details**
- Market Value
 - Acquired by
 - Funding Volume



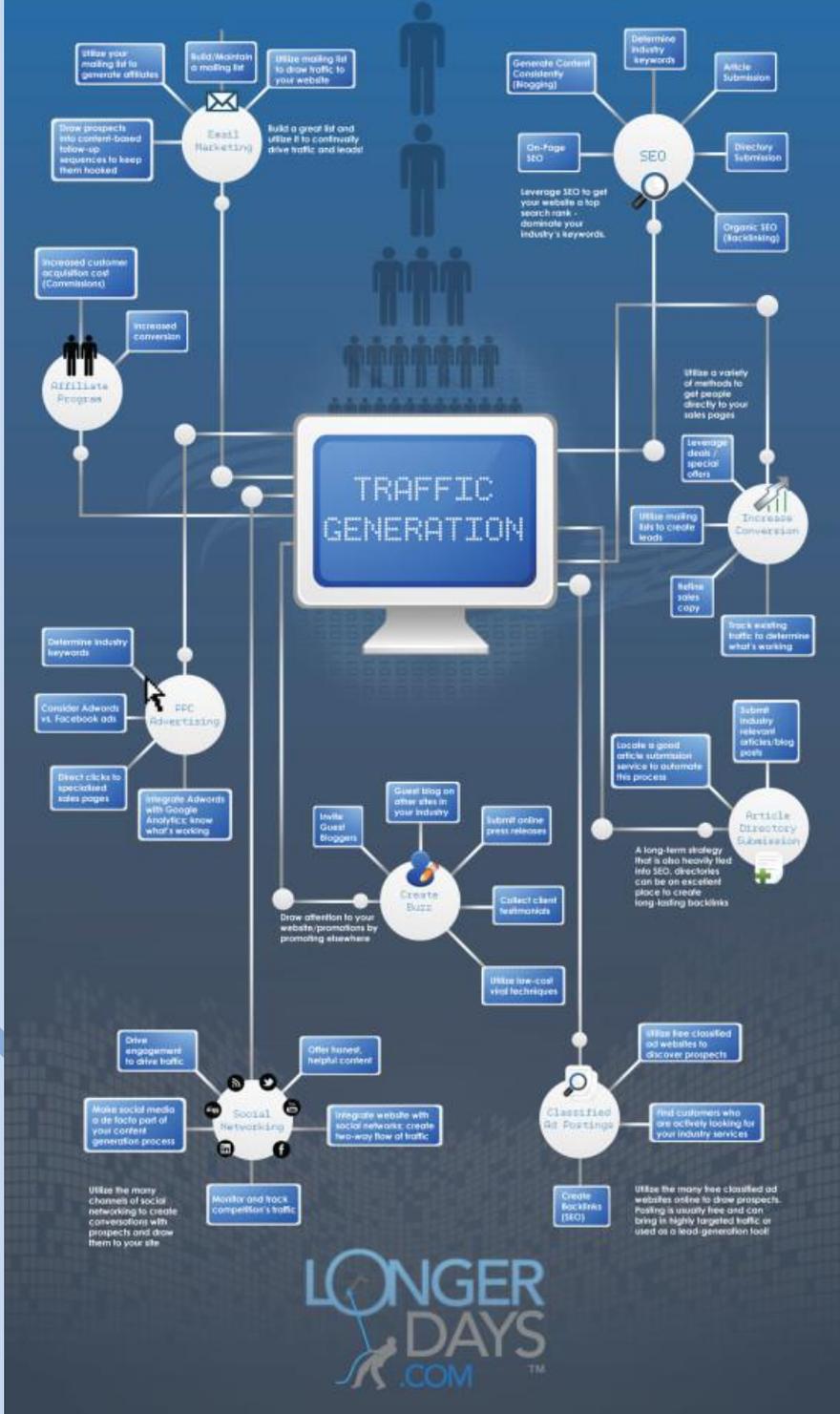
Founding Timeline



BUREAU
OBERHOLZER

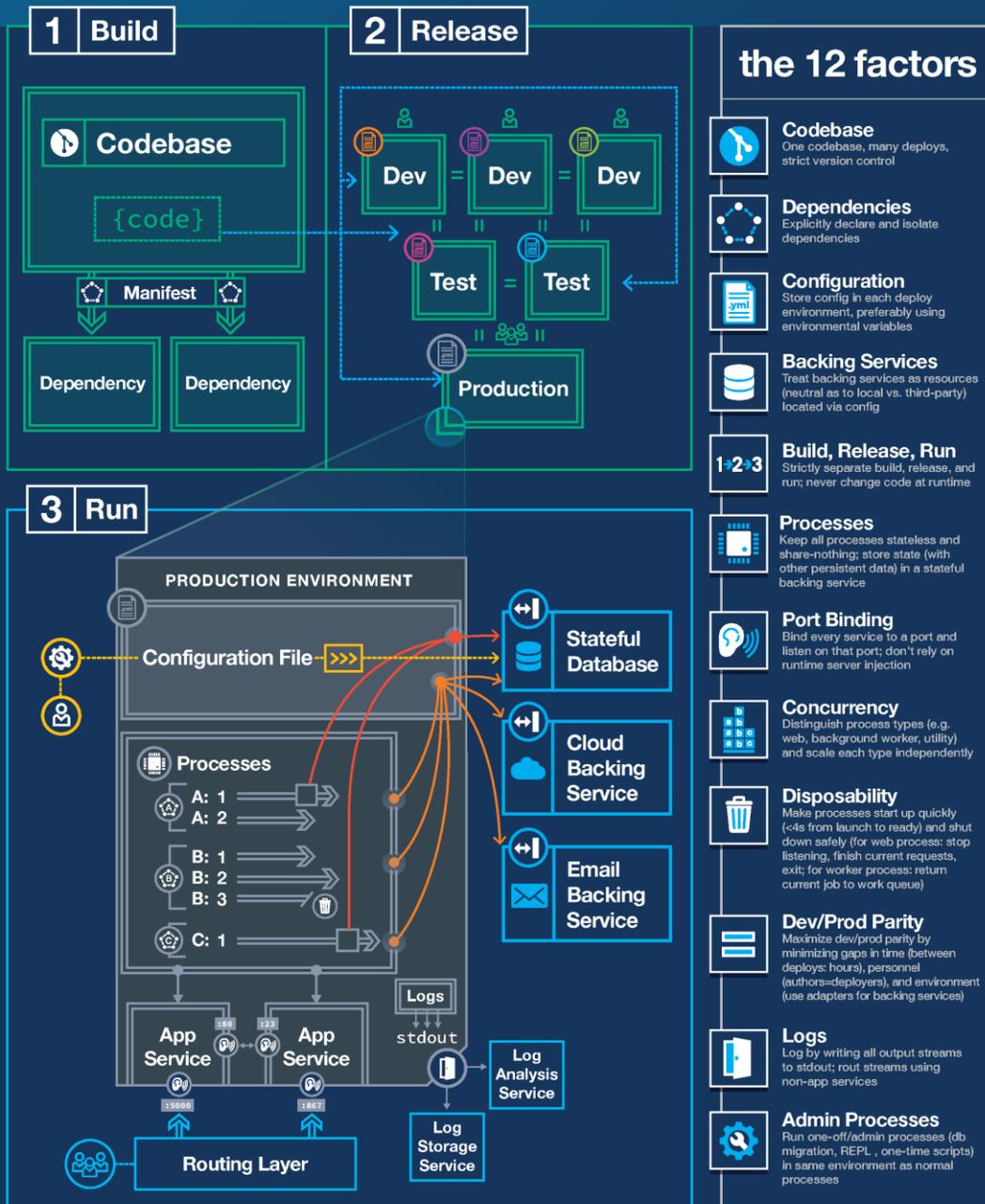
Traffic Generation Sources

by LongerDays.com



The 12-Factor App

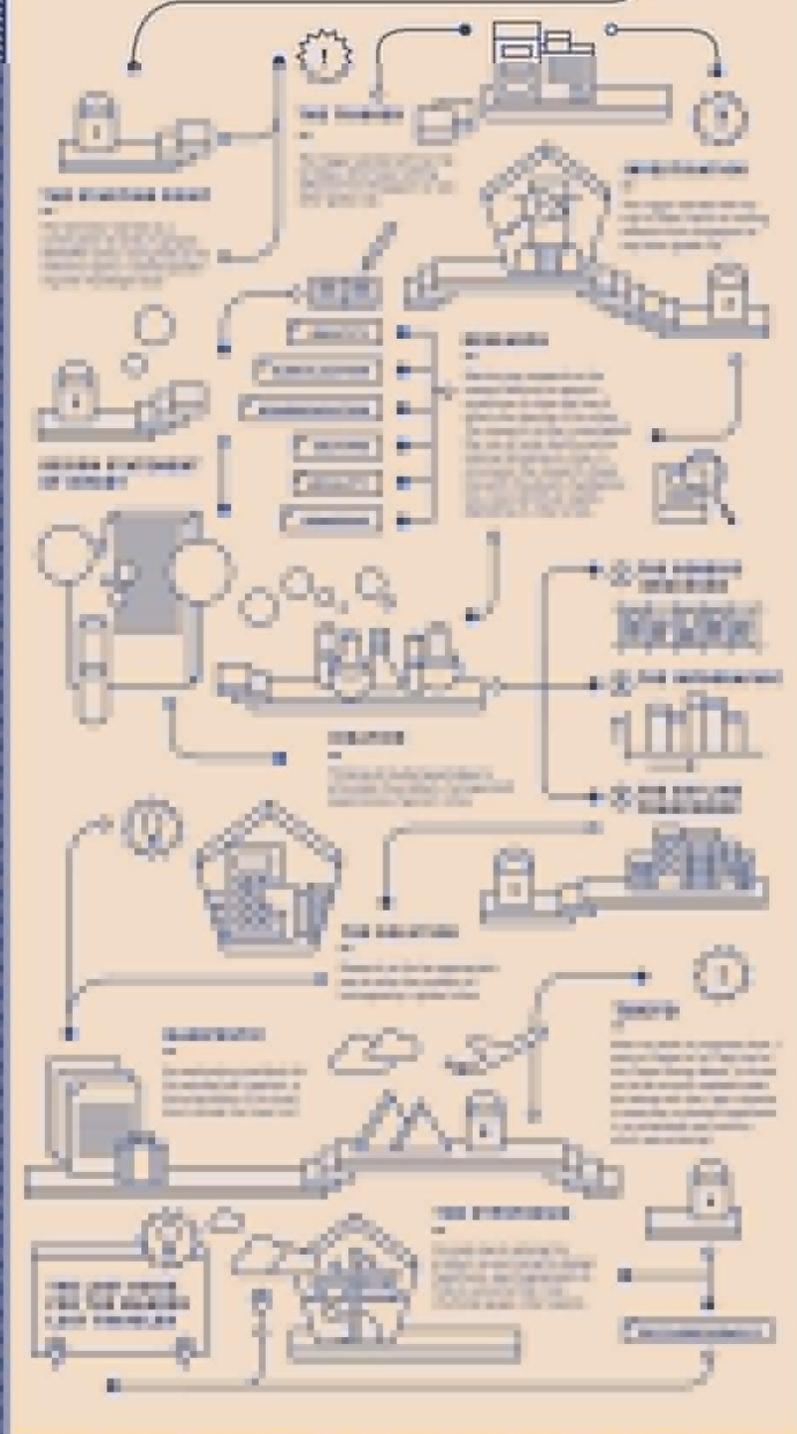
Modern web applications run in heterogeneous environments, scale elastically, update frequently, and depend on independently deployed backing services. Modern application architectures and development practices must be designed accordingly. The PaaS-masters at Heroku summarized lessons learned from building hundreds of cloud-native applications into the twelve factors visualized below.

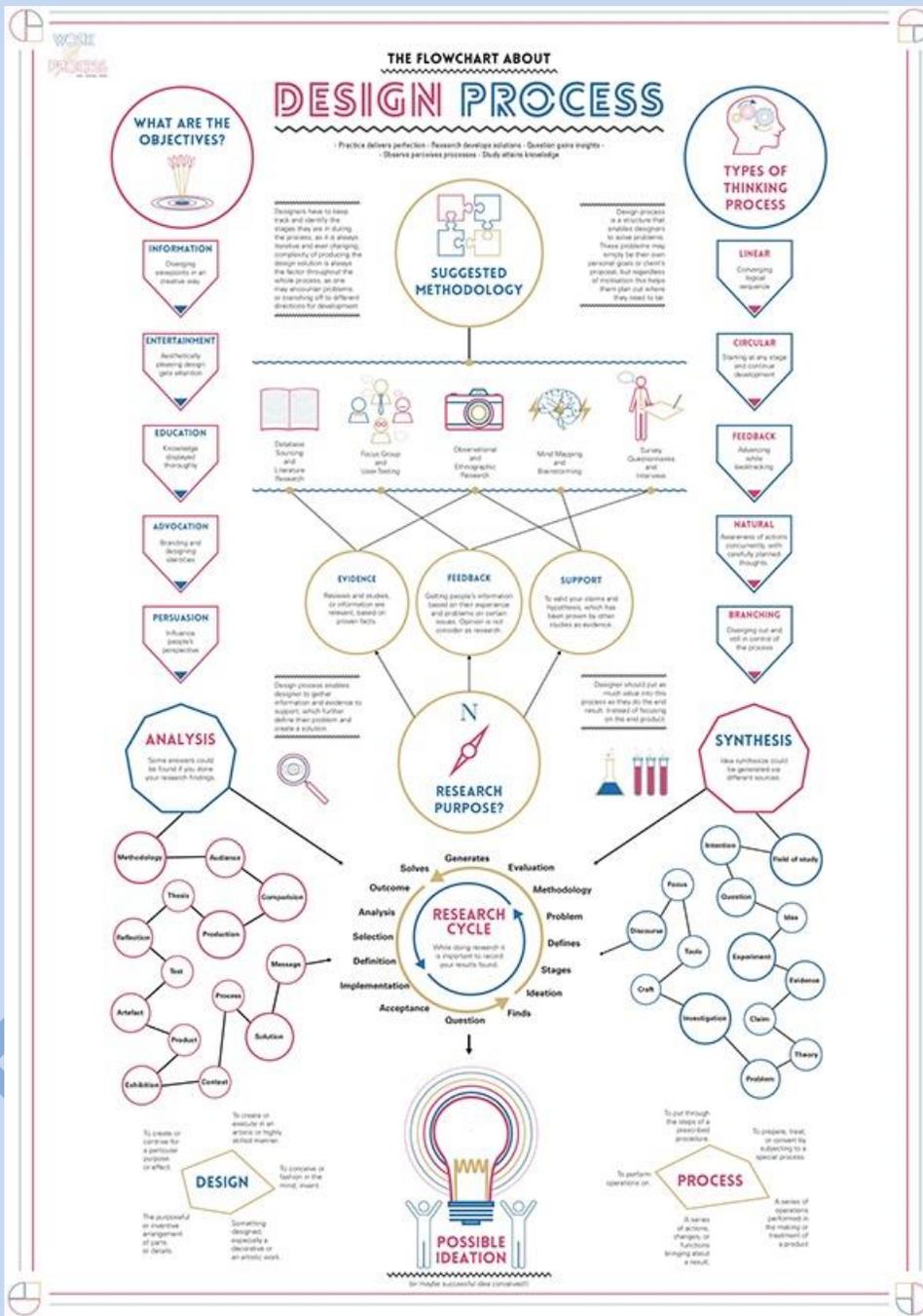


CREATED BY DZONE.COM

MY CREATIVE PROCESS

A SUMMARY OF MY DESIGN PROCESS IN SEMESTER 1

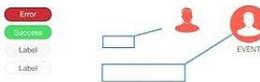
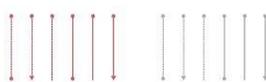
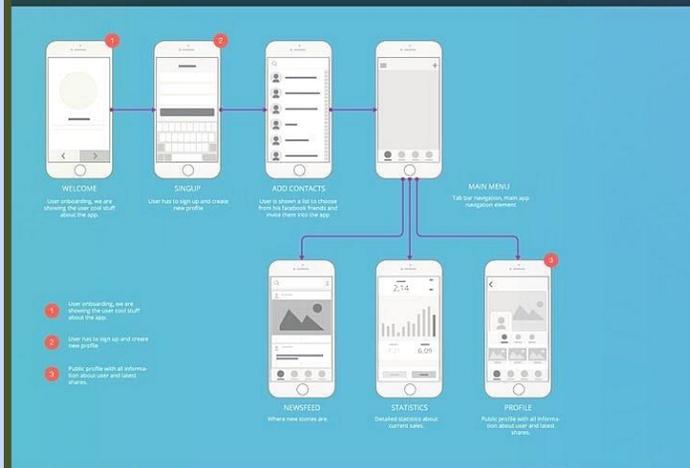


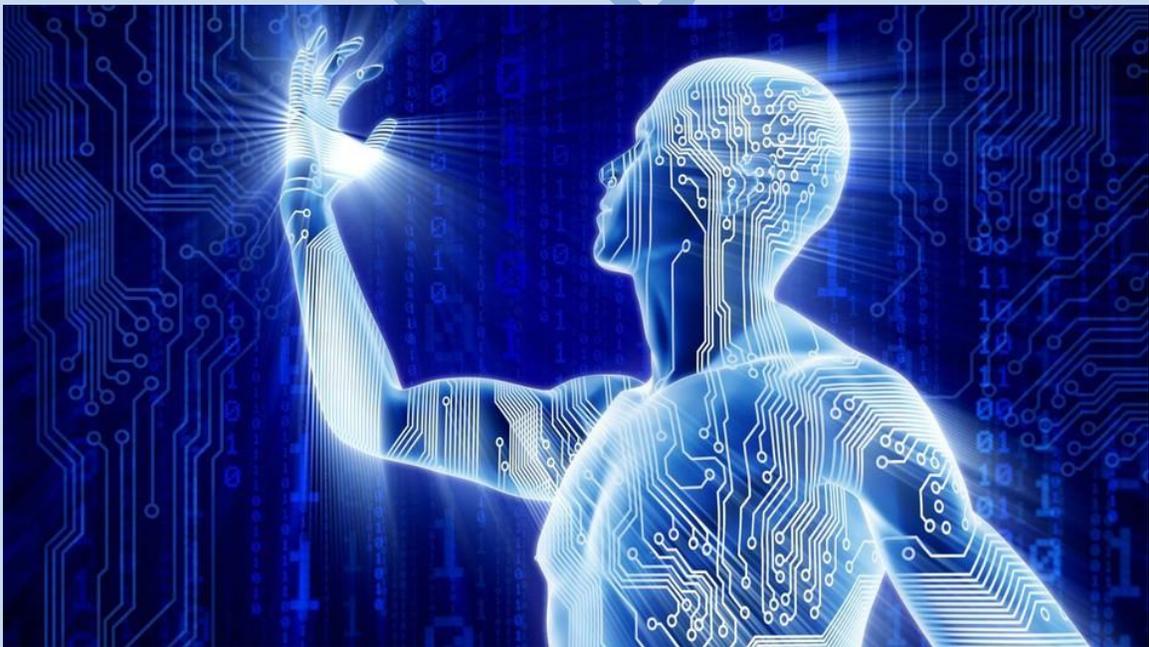
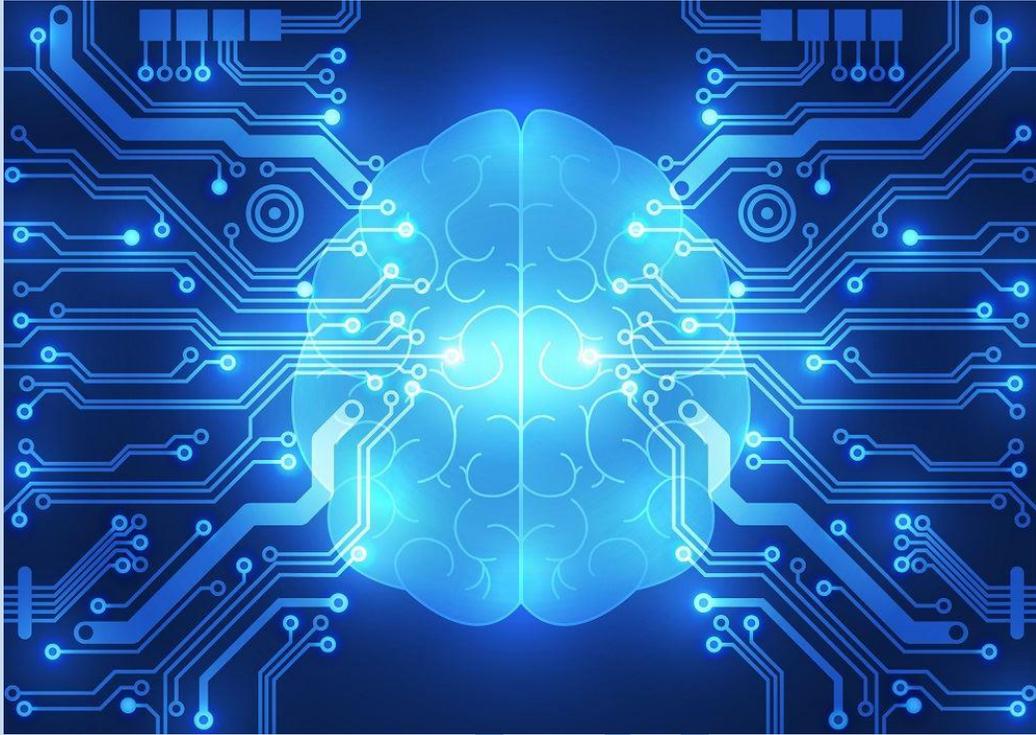


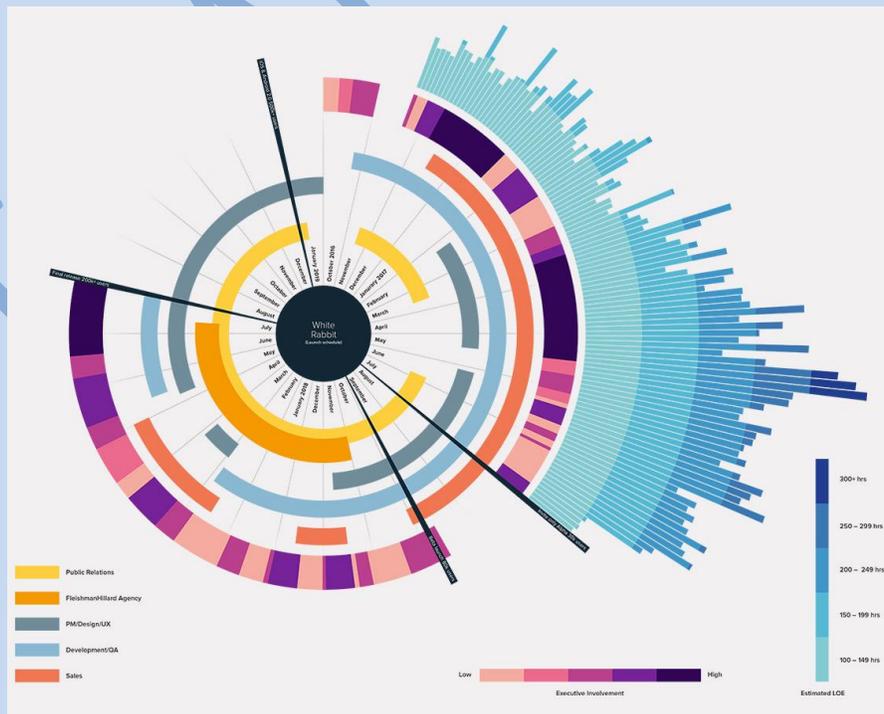
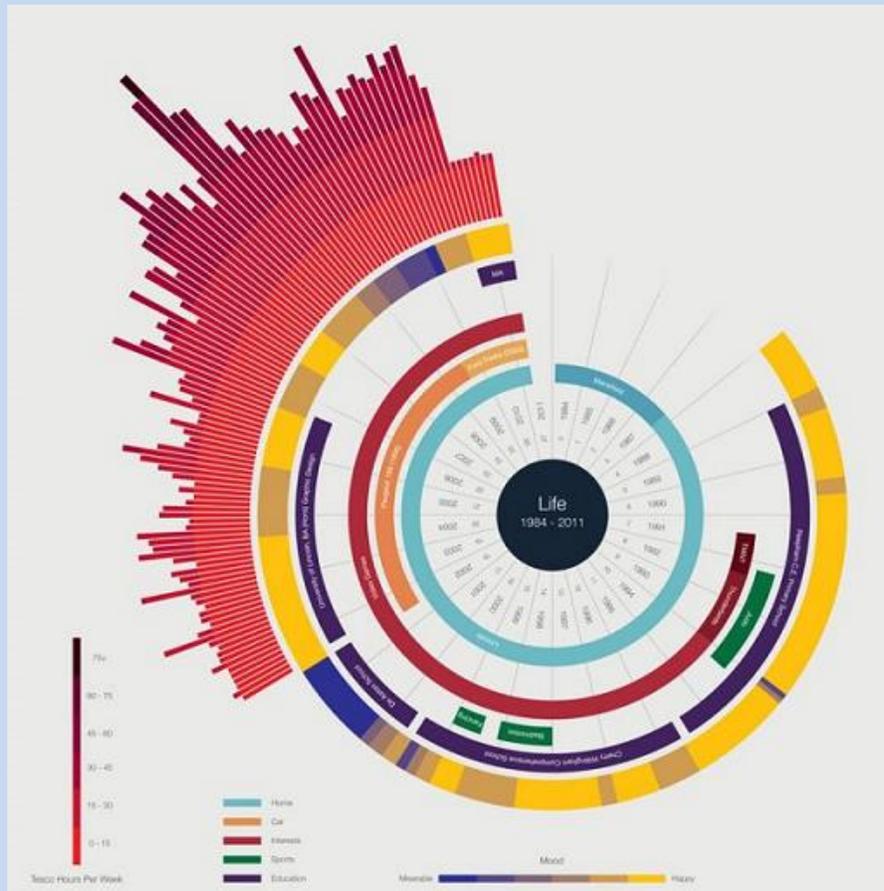


MOBILE UX FLOW

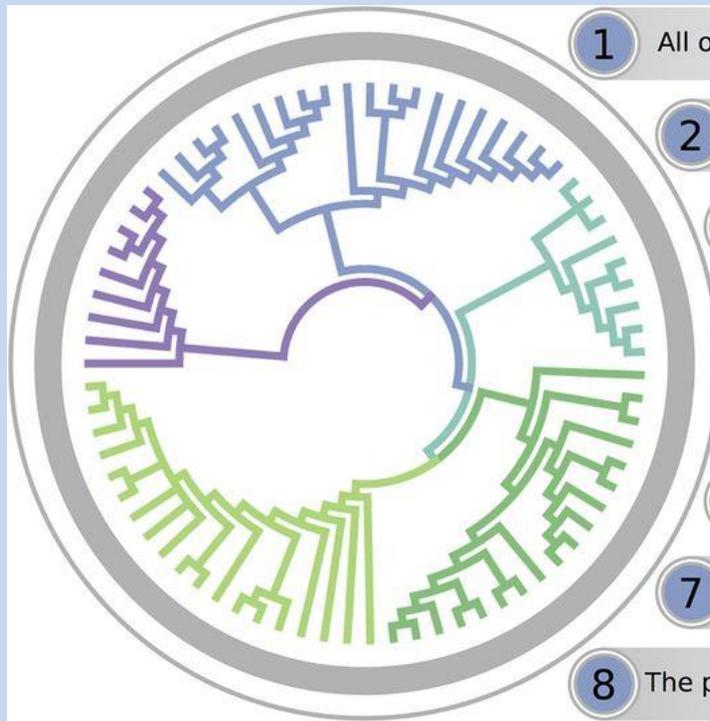
35 COMPREHENSIVE MOBILE UX MINI CARDS



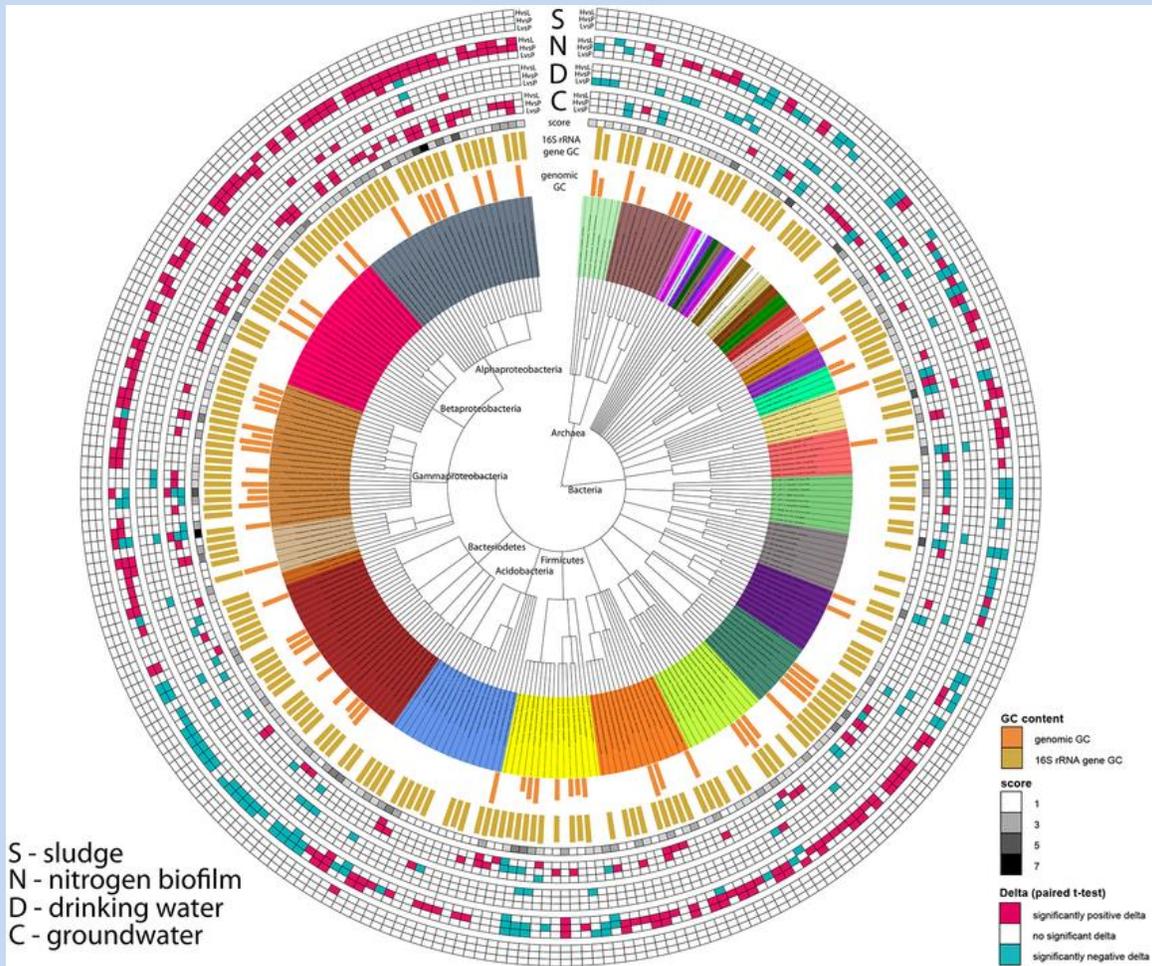


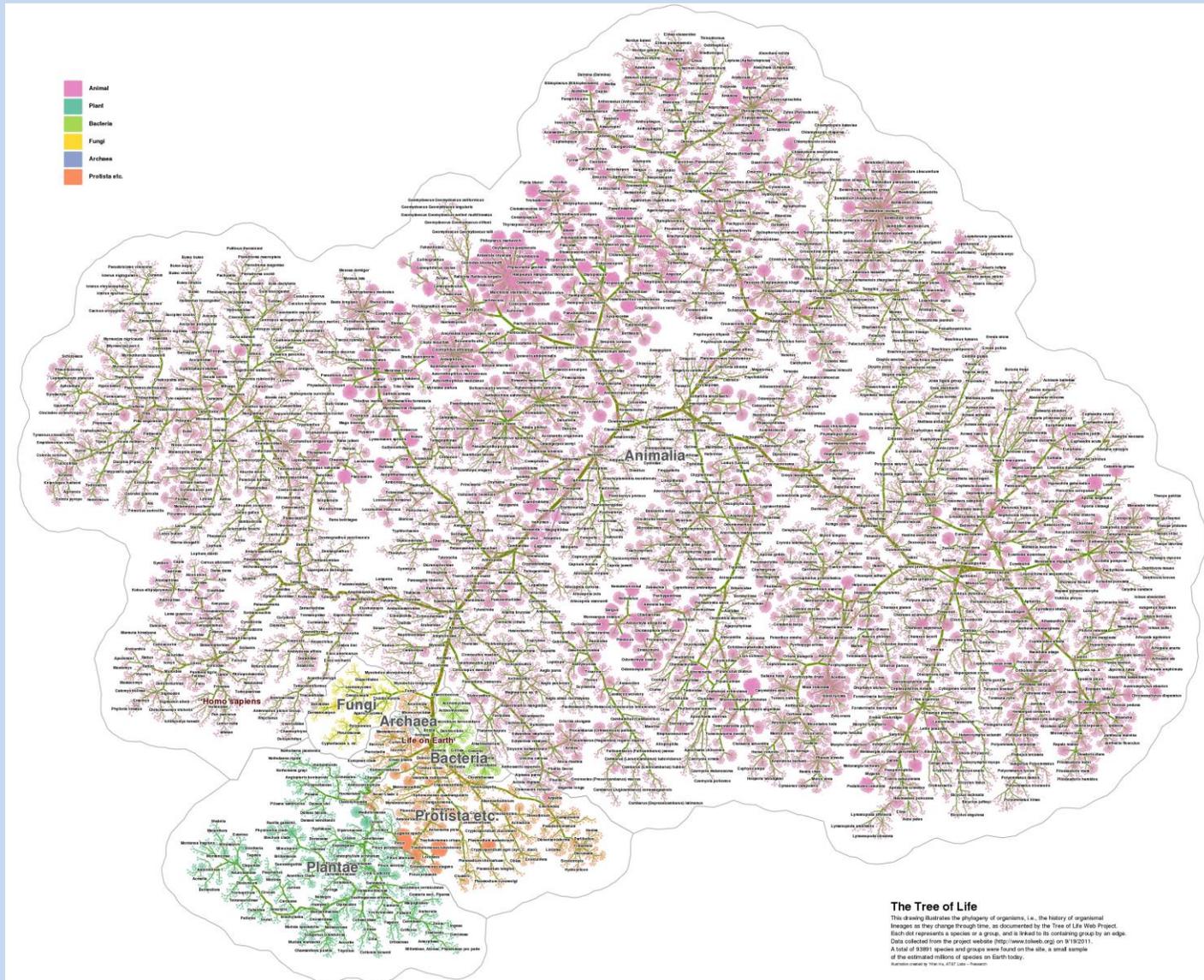






- 1 All organisms are connected by a universal phylogenetic tree.
- 2 Evolution generates nested hierarchical relationships.
- 3 Ingroup selection depends on the phylogenetic question.
- 4 Outgroup roots the tree so that time direction is known.
- 5 Species members evolve as a unit due to gene flow.
- 6 Speciation is the genetic isolation of lineages.
- 7 Multiple speciation events result in nested relationships portrayed by a tree.
- 8 The phylogenetic pattern may be recovered by the analysis of biological variation.





TAXONOMY

THE TREE OF LIFE

EUKARYOTA

The animals, plants, fungi, and protists that make up the eukaryotic world. They are distinguished by their complex cells, which contain a membrane-enclosed nucleus.

- Animals
- Fungi
- Archaeplastida
- Plantae
- Amoebozoa
- Opisthokonta
- Excavates

ARCHAEA

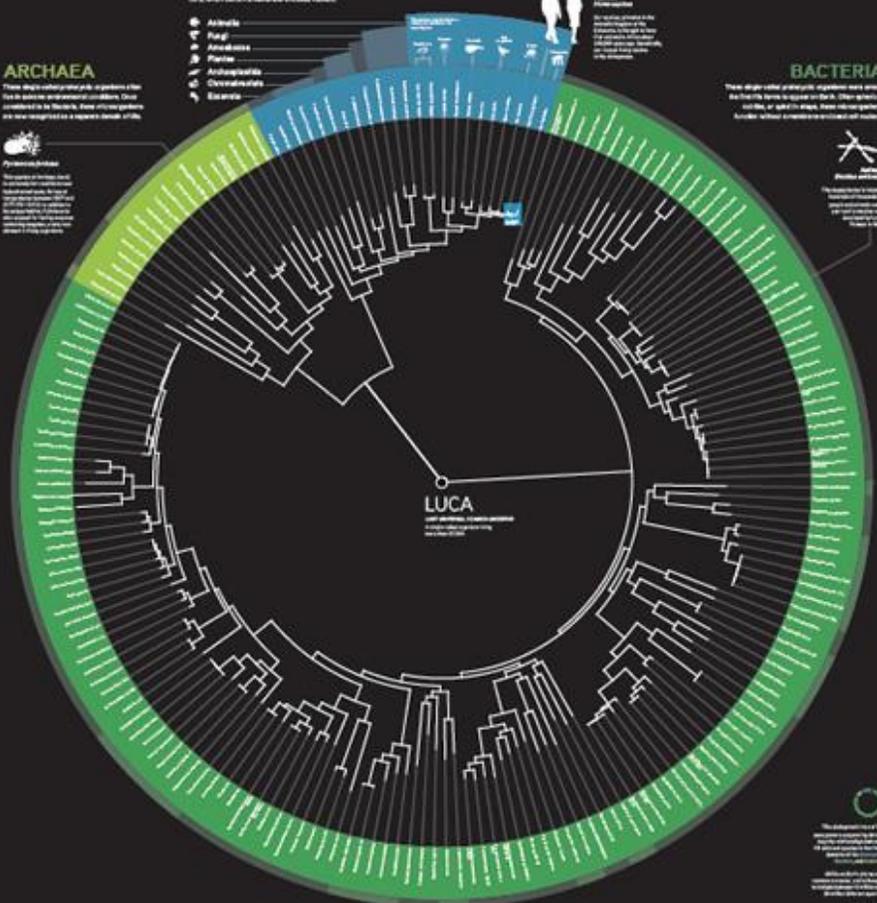
These single-celled prokaryotic organisms often live in extreme environmental conditions. They are distinguished by their cell walls, which contain unique lipids, and by their distinct genetic machinery.

Proteobacteria
The largest and most diverse group of bacteria. They are found in a wide range of environments, from deep-sea hydrothermal vents to the human gut.

BACTERIA

These single-celled prokaryotic organisms are among the most abundant and diverse forms of life on Earth. They are distinguished by their cell walls, which contain unique lipids, and by their distinct genetic machinery.

Proteobacteria
The largest and most diverse group of bacteria. They are found in a wide range of environments, from deep-sea hydrothermal vents to the human gut.

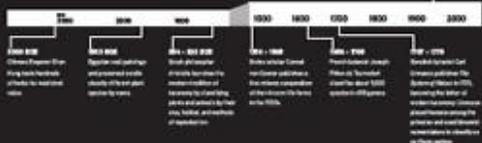


LUCA

A BRIEF HISTORY OF TAXONOMY

Thanks to the advent of writing and standardizing criteria for naming, the practice of taxonomy grew rapidly and spread from a small number of ancient civilizations to modern scientific communities and professional societies. The advent of writing was a crucial step in the evolution of taxonomy.

With the invention of the printing press, the practice of taxonomy spread rapidly and became a more professionalized activity.



BIOLOGICAL CLASSIFICATION

Biologists refer to a specific life form using the three taxonomic ranks of Kingdom, Phylum, and Class. This naming system is used to describe and communicate about life.

- Domain
- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species

ASIAN ELEPHANT



BIG HISTORY PROJECT

How to Read the Circle of Life

Primordial life begins at the center and branches out in all directions, leading to the groups of species that exist today (*colored rings*)

Outer ring: Estimated proportion of all species*

Inner ring: Proportion of the groups named to date

Each black line represents at least 500 descendant species

Dark lines: Many species have been genetically sequenced

Light lines: Few species have been genetically sequenced

Nematodes (roundworms)

Lophotrochozoa (mollusks, segmented worms, brachiopods)

Deuterostomia (vertebrates, sea stars and urchins, certain worms)

Early diverging metazoa (cnidaria, comb jellies, sponges)

Many deuterostomia (*gold*) and plants (*dark green*) are already genetically sequenced (*dark lines*) because they are culturally or economically important (such as humans!)

Fungi

Plants

Arthropods (insects, arachnids, crustaceans)

Scientists have identified about one million arthropods (*tan*); millions more remain undescribed

Experts expect that most new species to be discovered will be bacteria (*orange*) and archaea (*magenta*)

The first single-celled organism from which all life has descended arose 3.5 billion years ago

Archaea (single-celled microorganisms that tolerate extreme conditions)

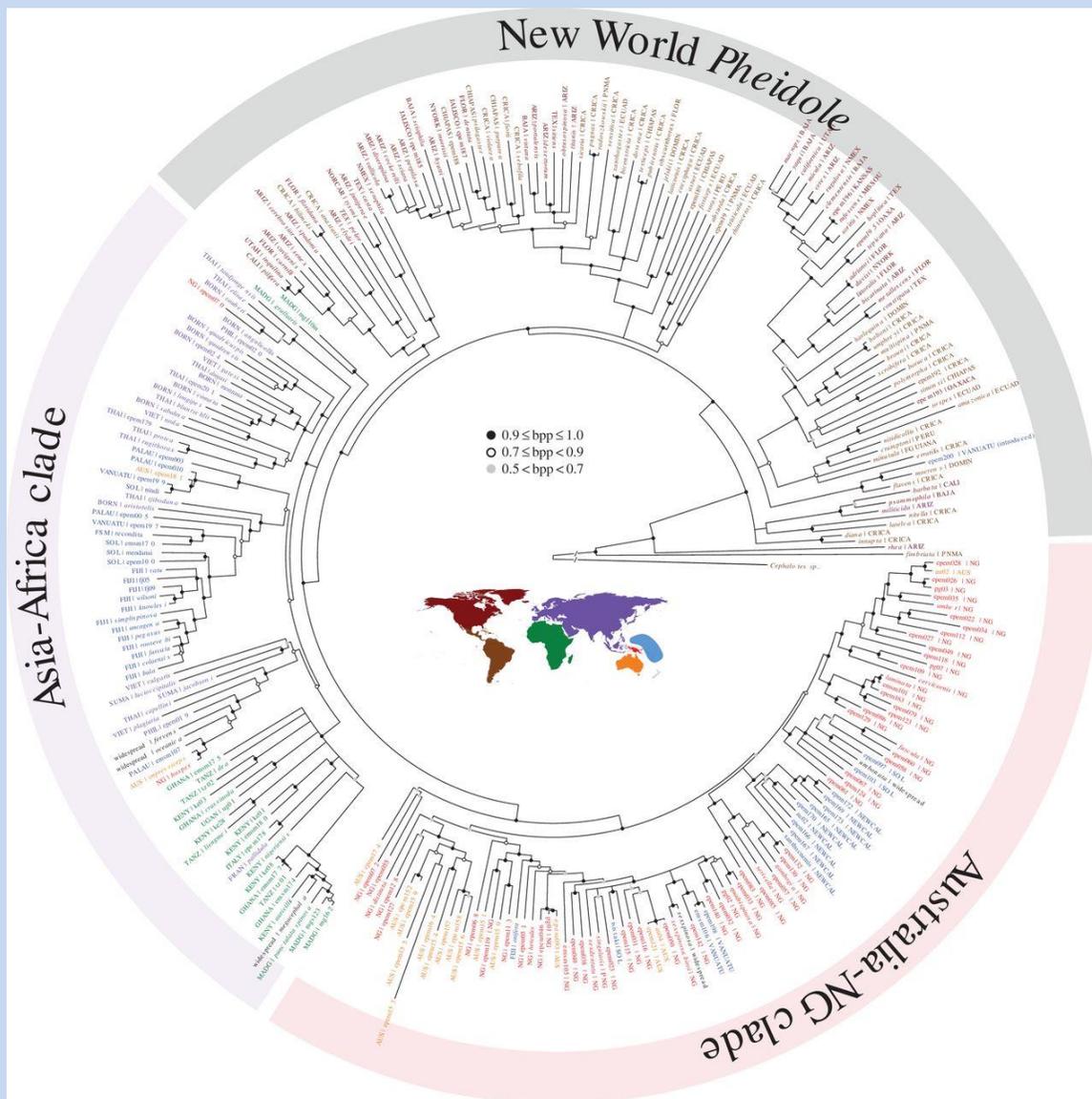
Bacteria

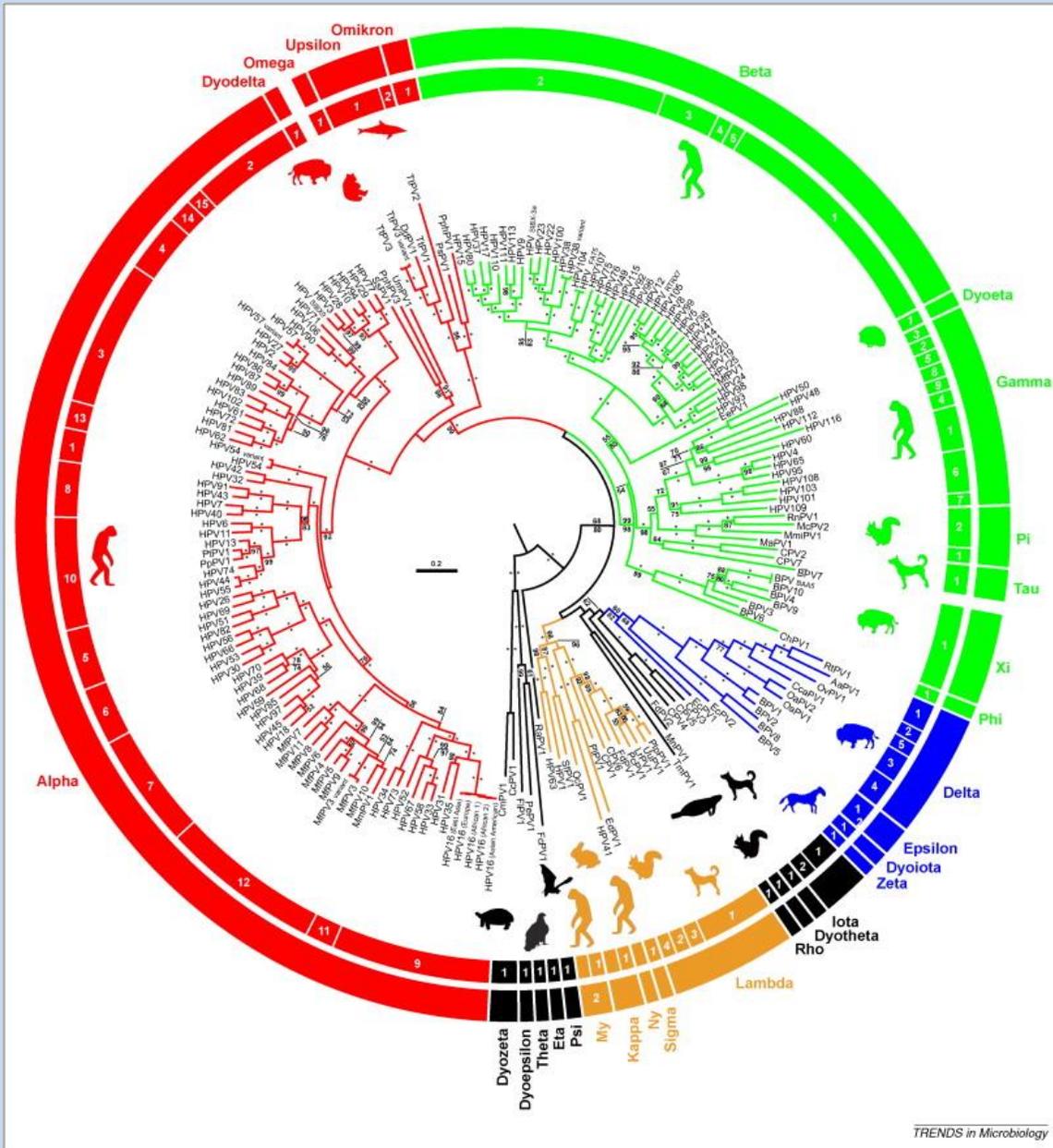
SARs† (diatoms, amoeboids, brown algae)

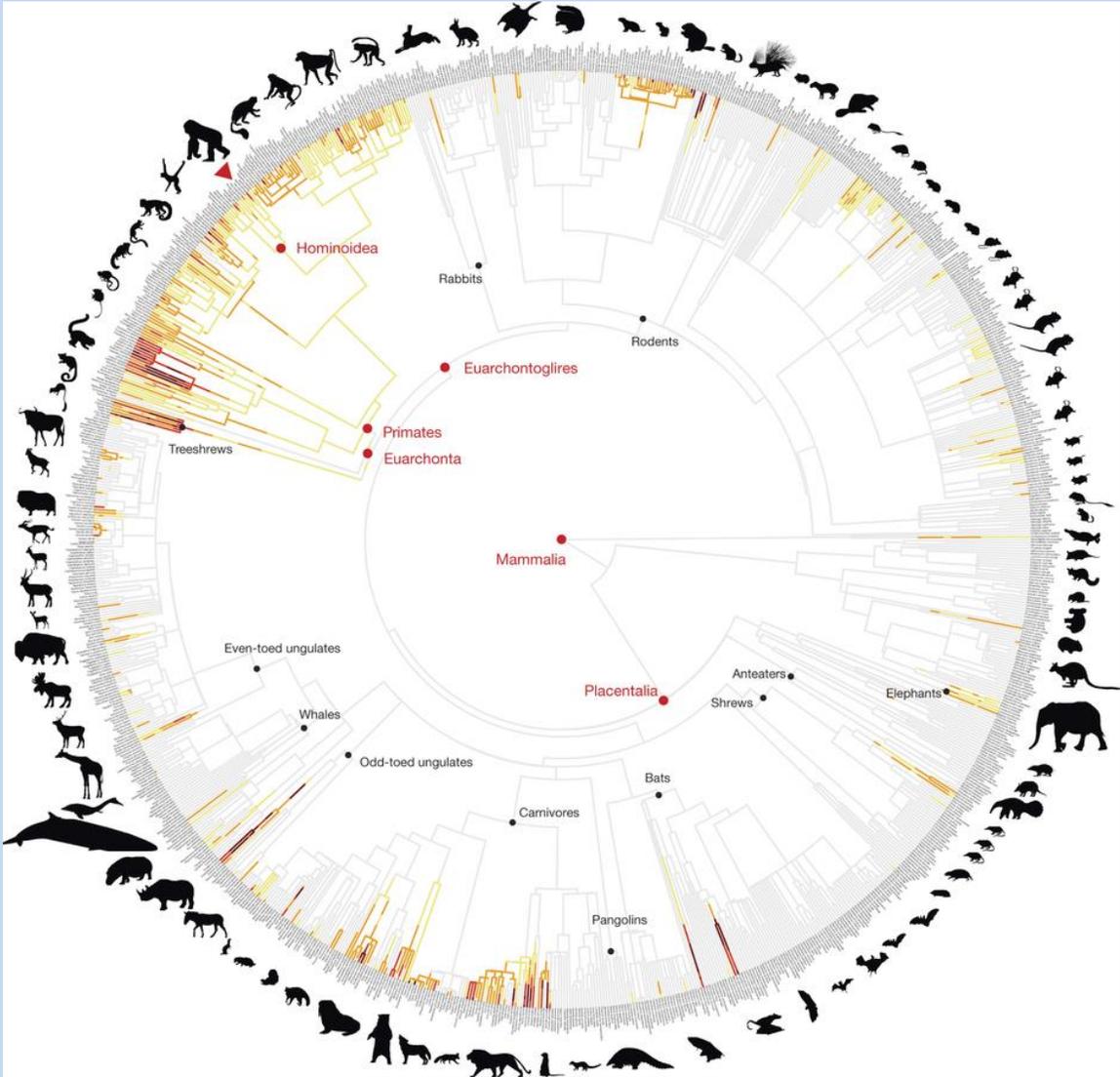
Early diverging archaeplastida (green algae, red algae)

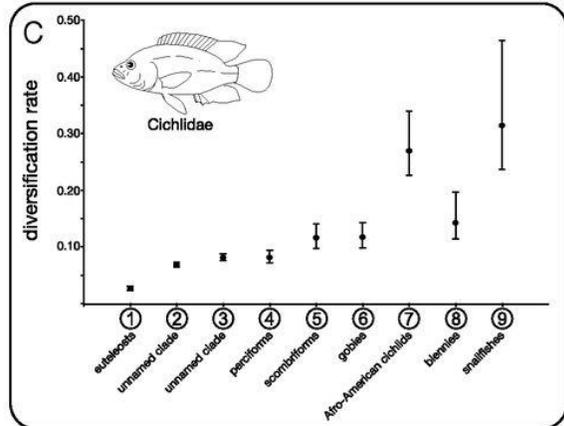
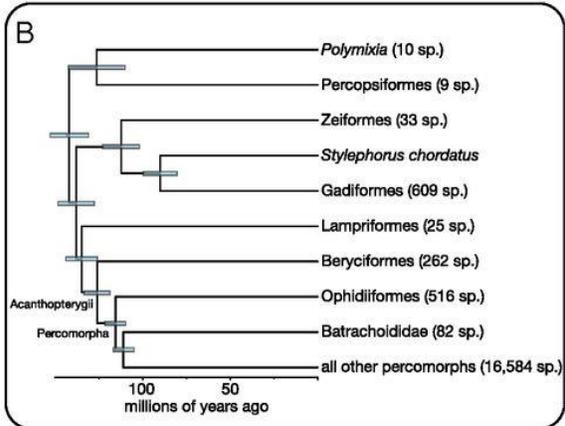
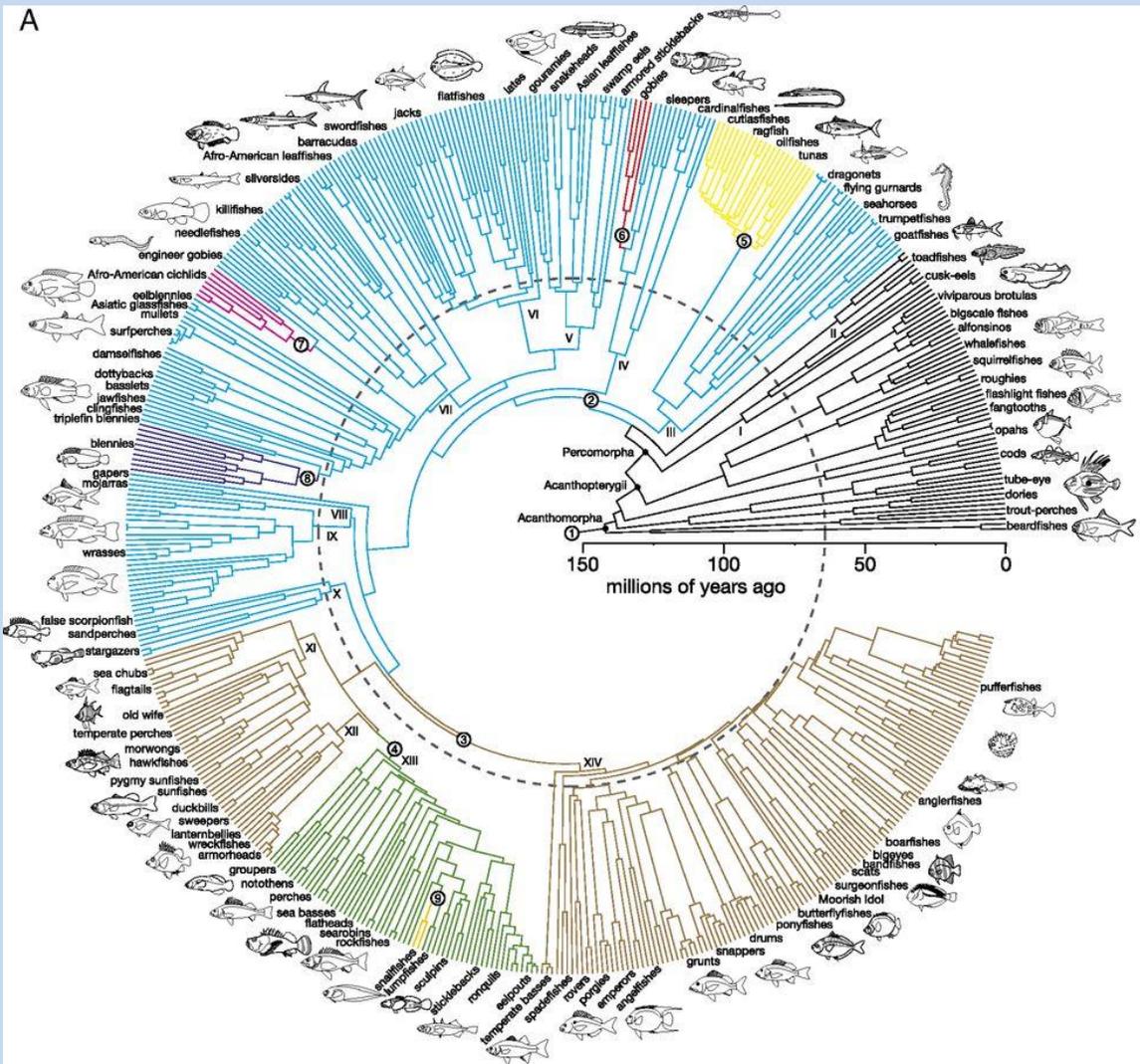
*Estimates vary widely; values shown are averages from multiple sources

†Stramenopiles, alveolates, Rhizaria

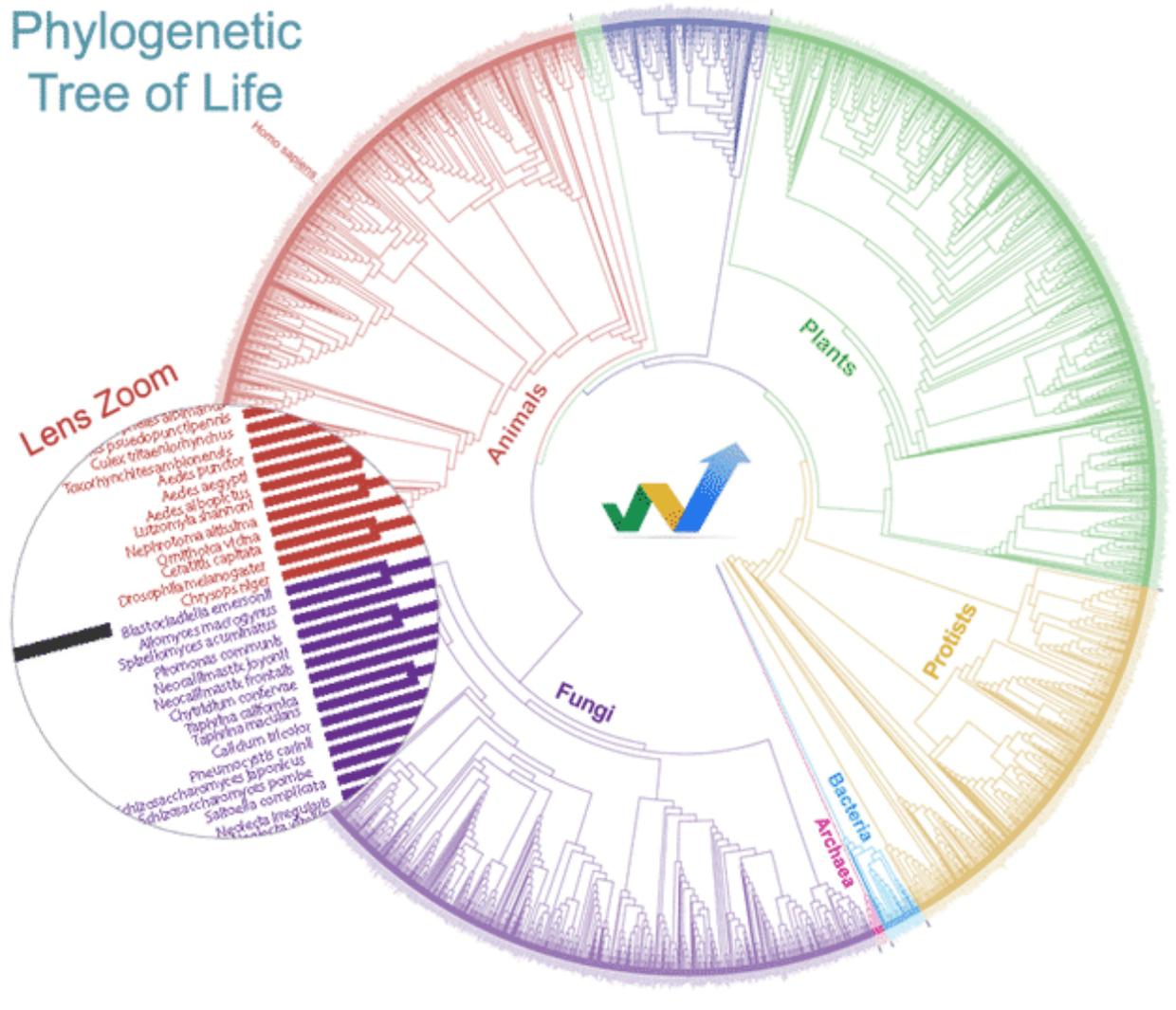


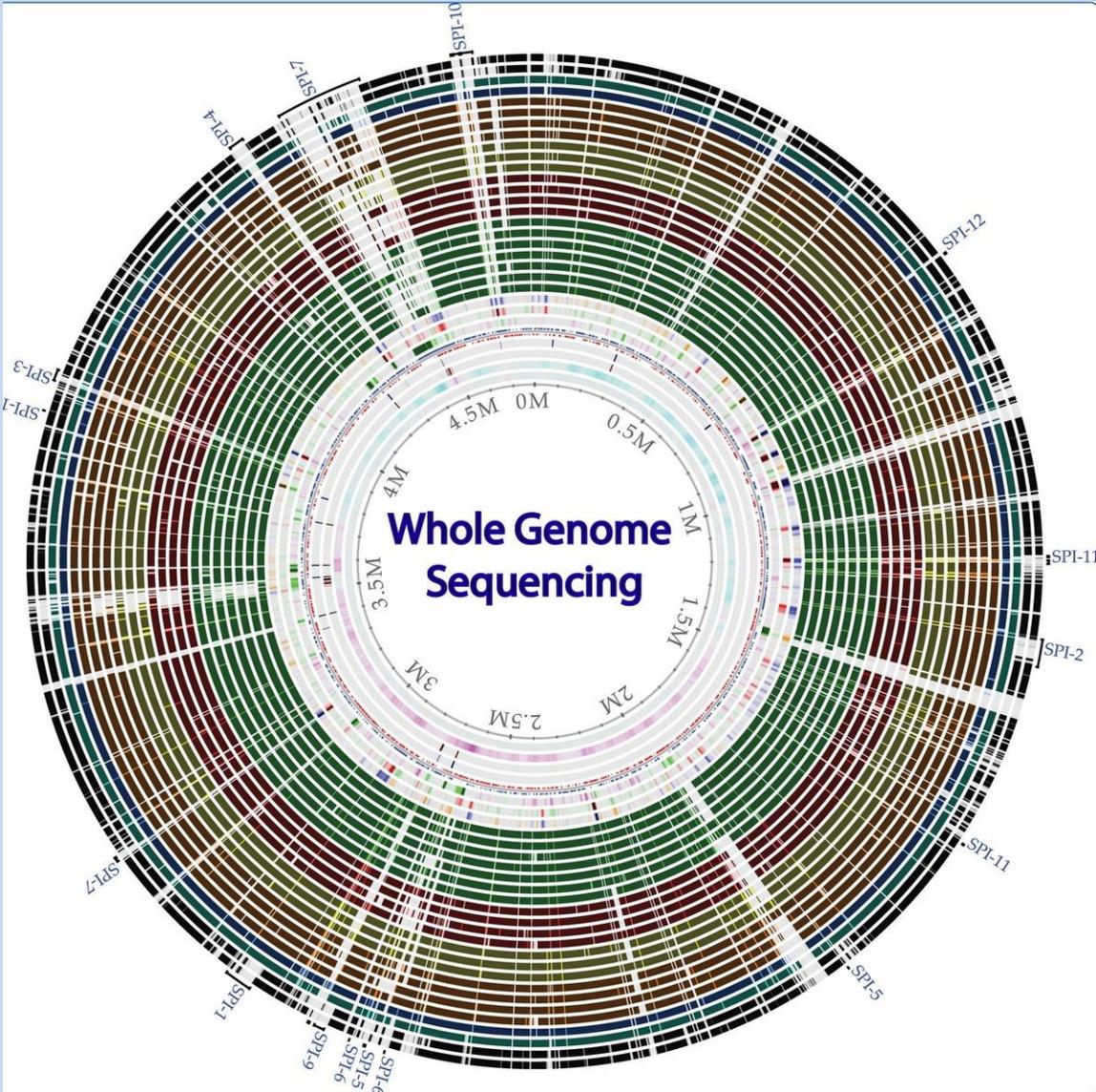






Phylogenetic Tree of Life



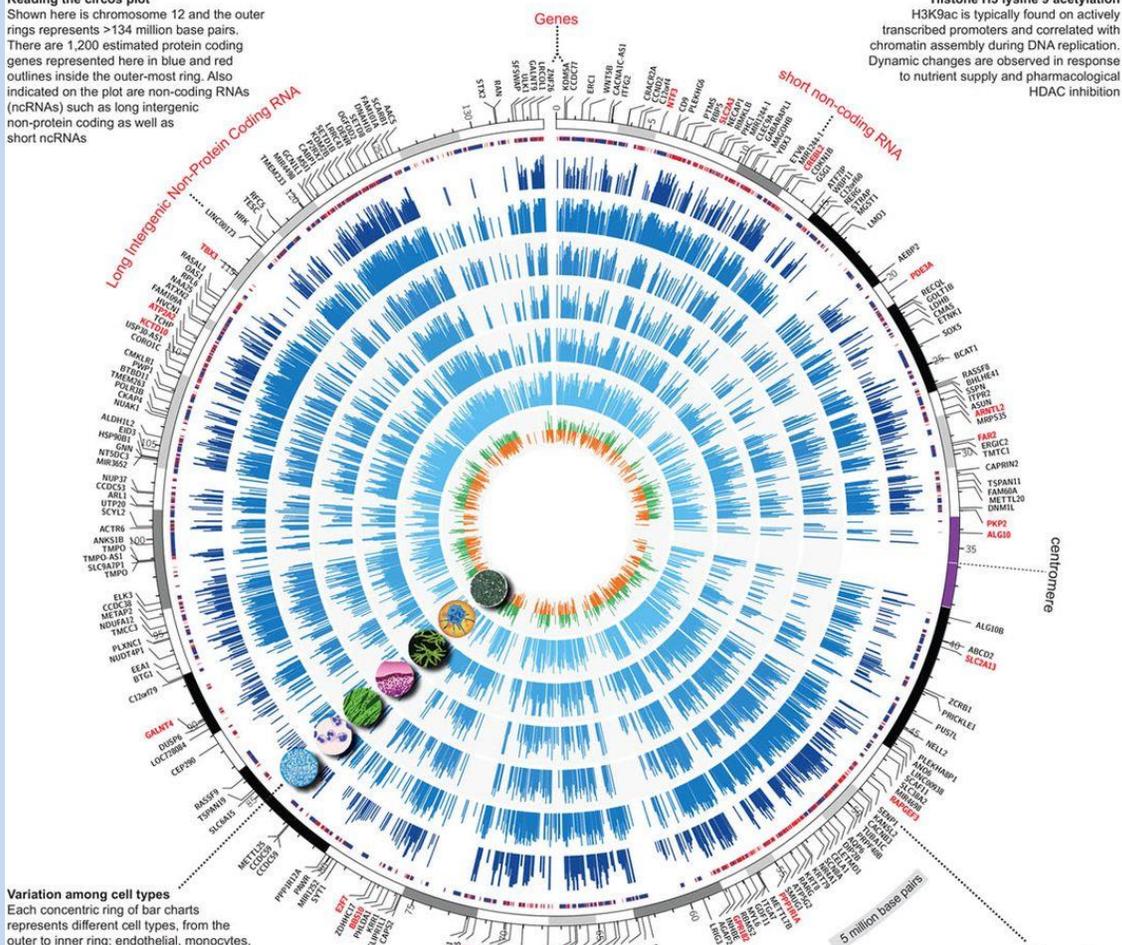


Mapping human cell types

Reading the circos plot

Shown here is chromosome 12 and the outer rings represents >134 million base pairs. There are 1,200 estimated protein coding genes represented here in blue and red outlines inside the outer-most ring. Also indicated on the plot are non-coding RNAs (ncRNAs) such as long intergenic non-protein coding as well as short ncRNAs

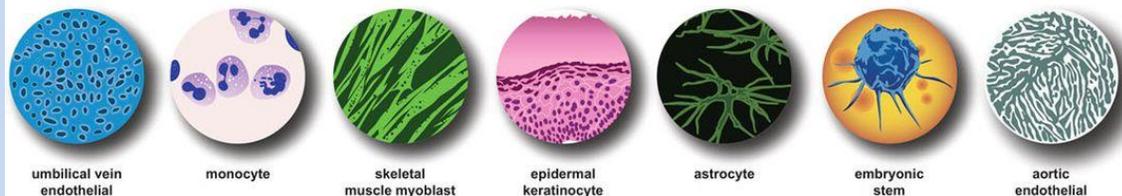
Histone H3 lysine 9 acetylation
H3K9ac is typically found on actively transcribed promoters and correlated with chromatin assembly during DNA replication. Dynamic changes are observed in response to nutrient supply and pharmacological HDAC inhibition

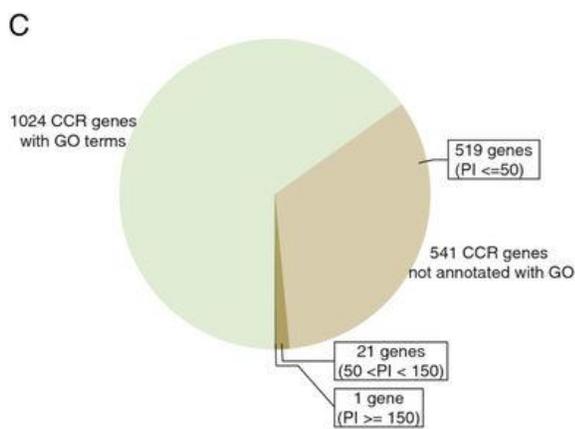
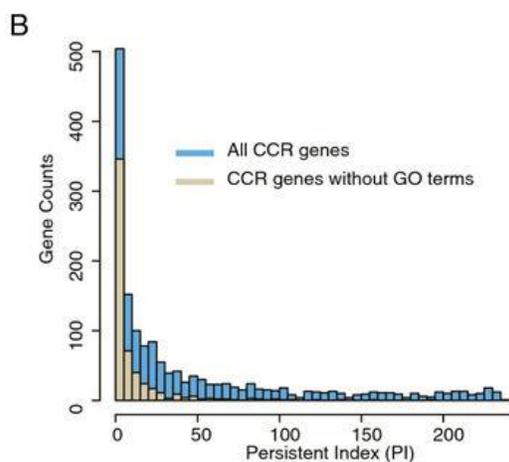
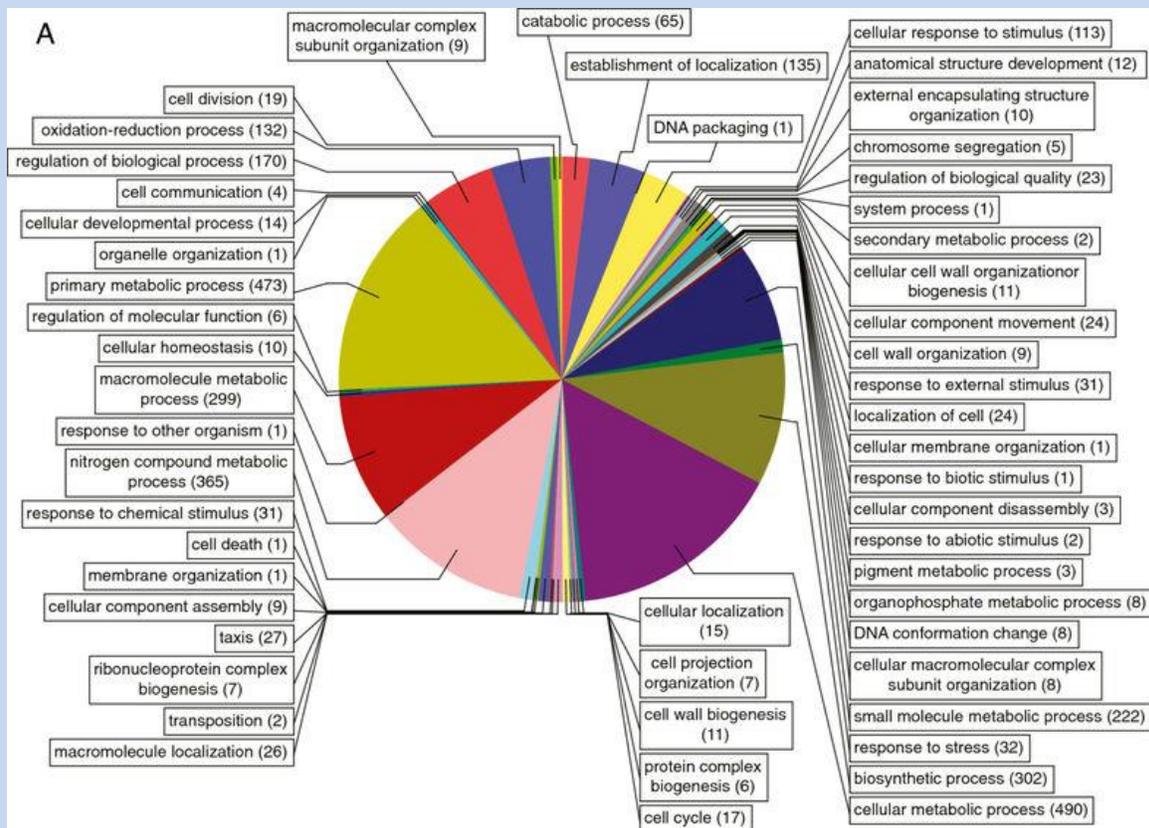


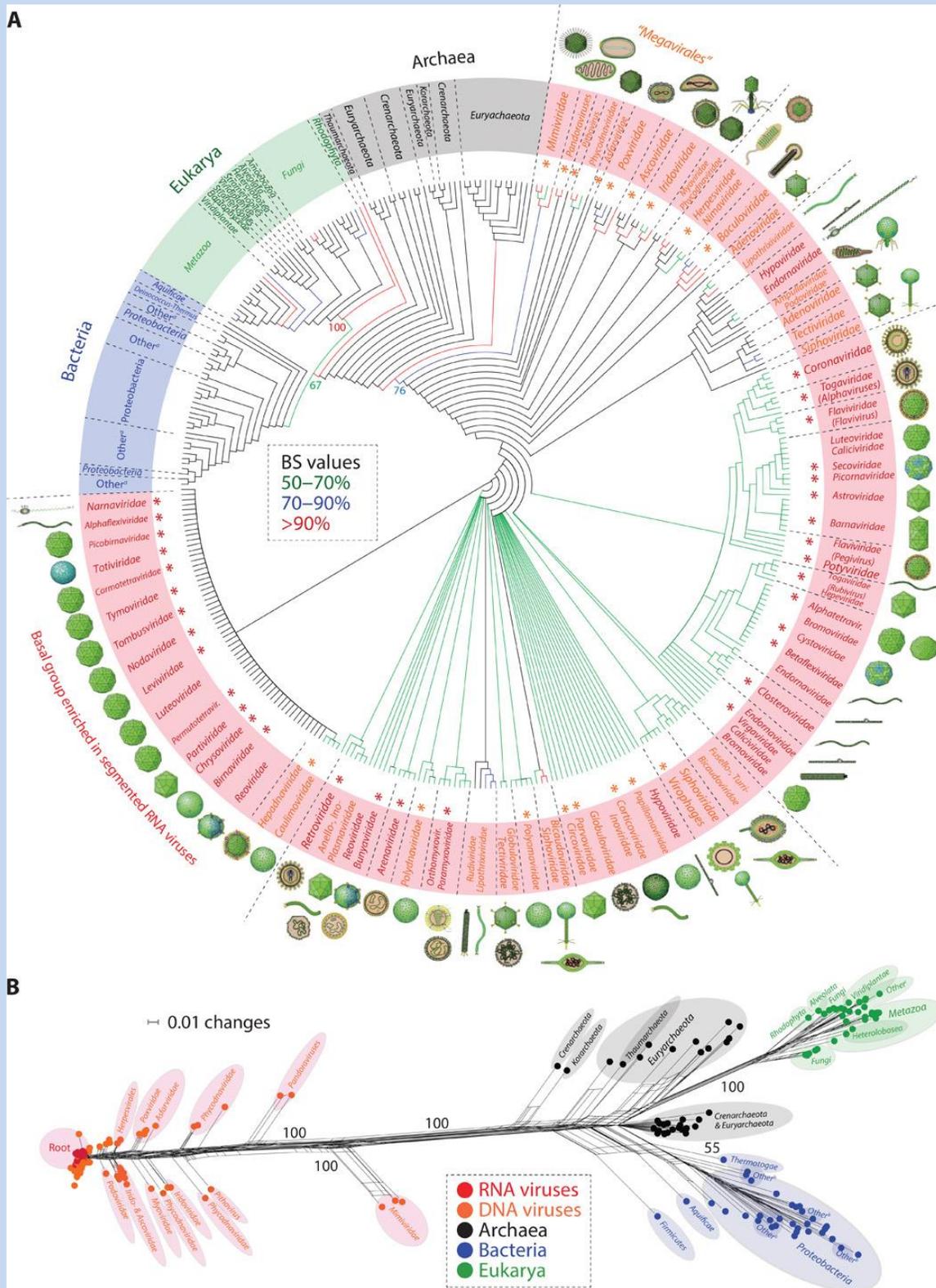
Variation among cell types

Each concentric ring of bar charts represents different cell types, from the outer to inner ring: endothelial, monocytes, myoblasts, keratinocytes, astrocytes and stem cells. ChIP-seq profiles for H3K9ac are derived from ENCODE and shown in blue. The inner most ring represent aortic endothelial cells showing acetylation (green) and deacetylation (orange) conferred by pharmacological HDAC inhibition

Gene patterns
H3K9ac signals are scored by the length of each bar chart. This is performed by Chromatin Immunoprecipitation combined with next generation sequencing (ChIP-seq)







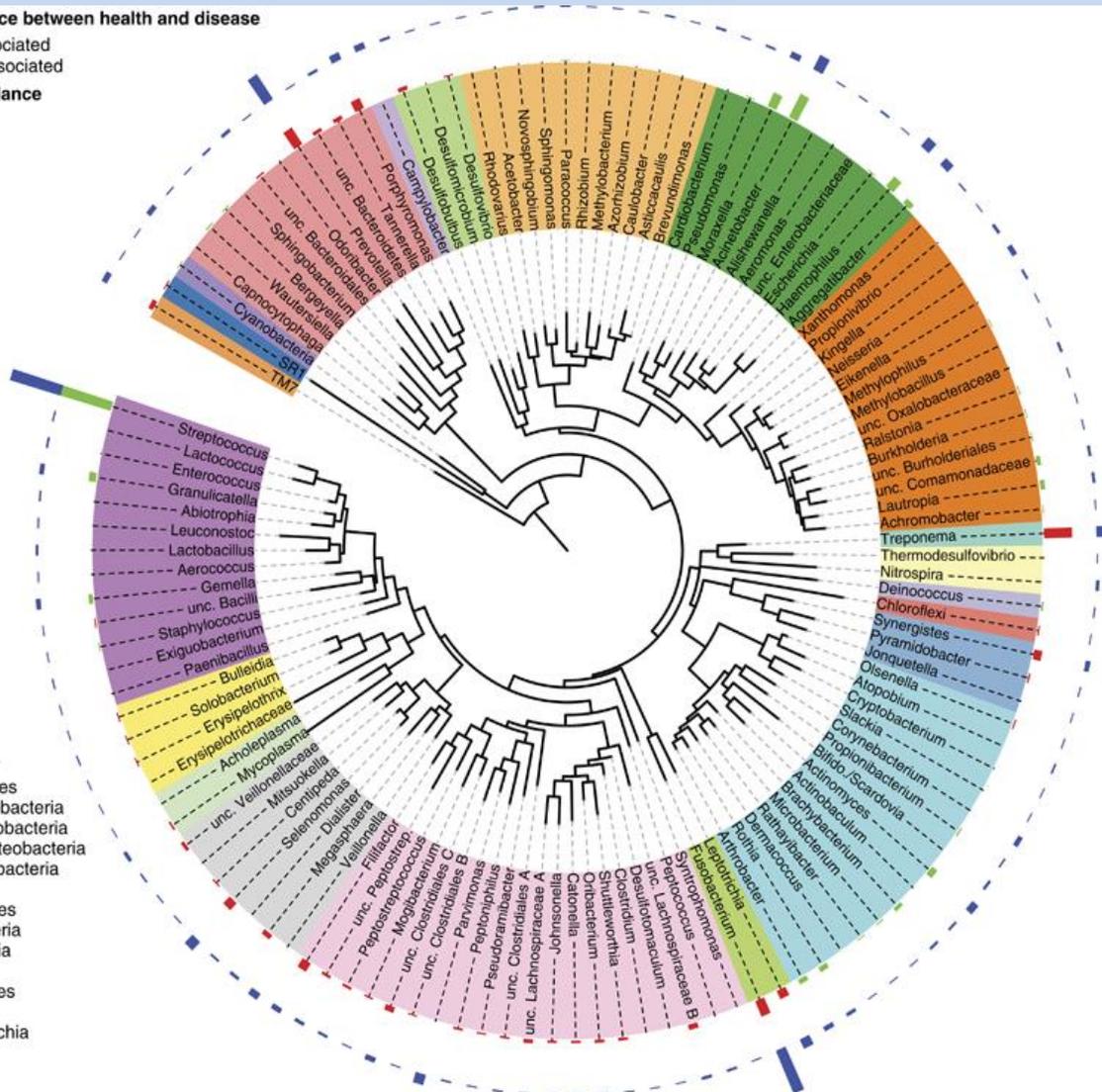
Mean difference between health and disease

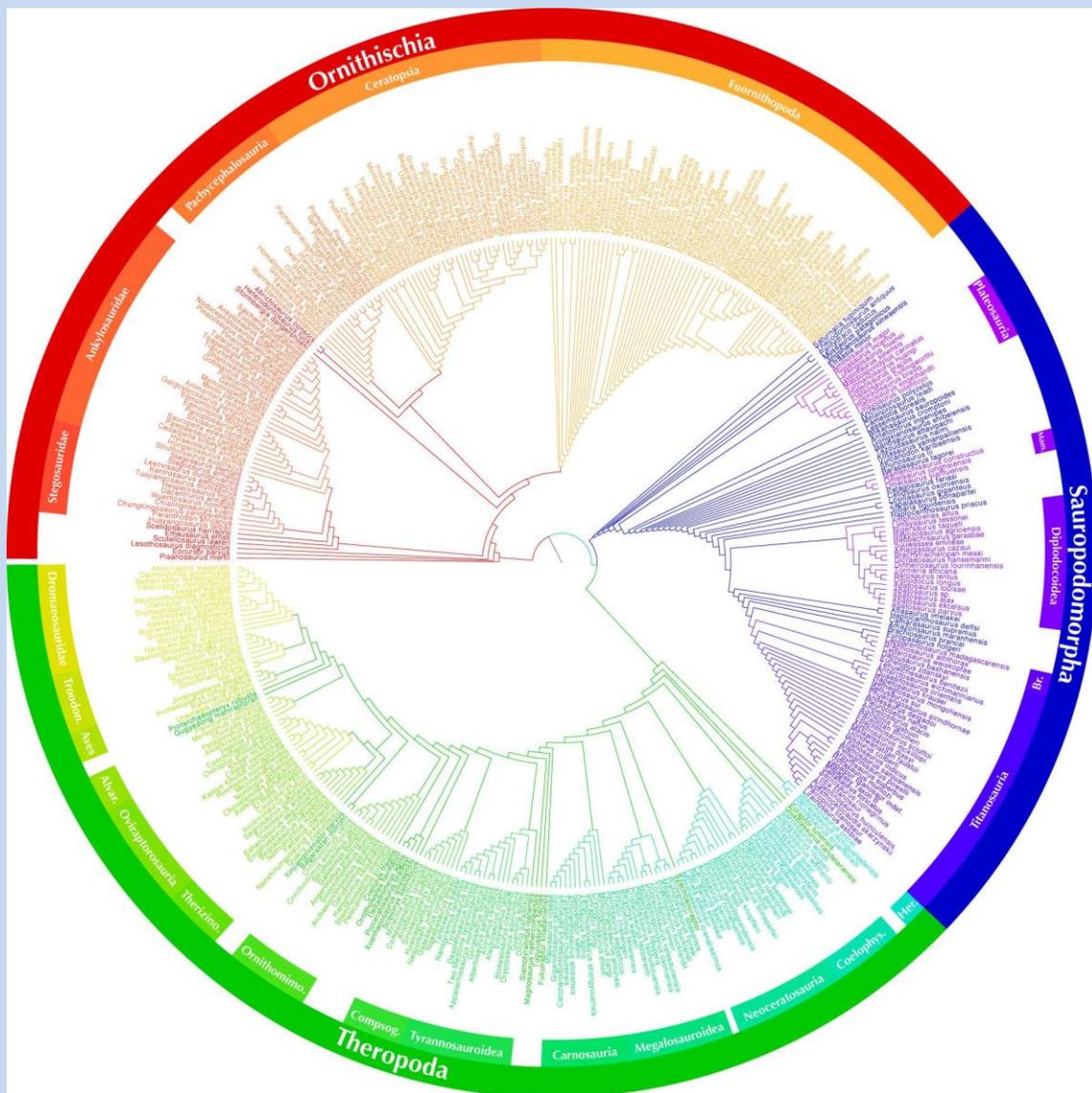
- Health associated
- Disease associated

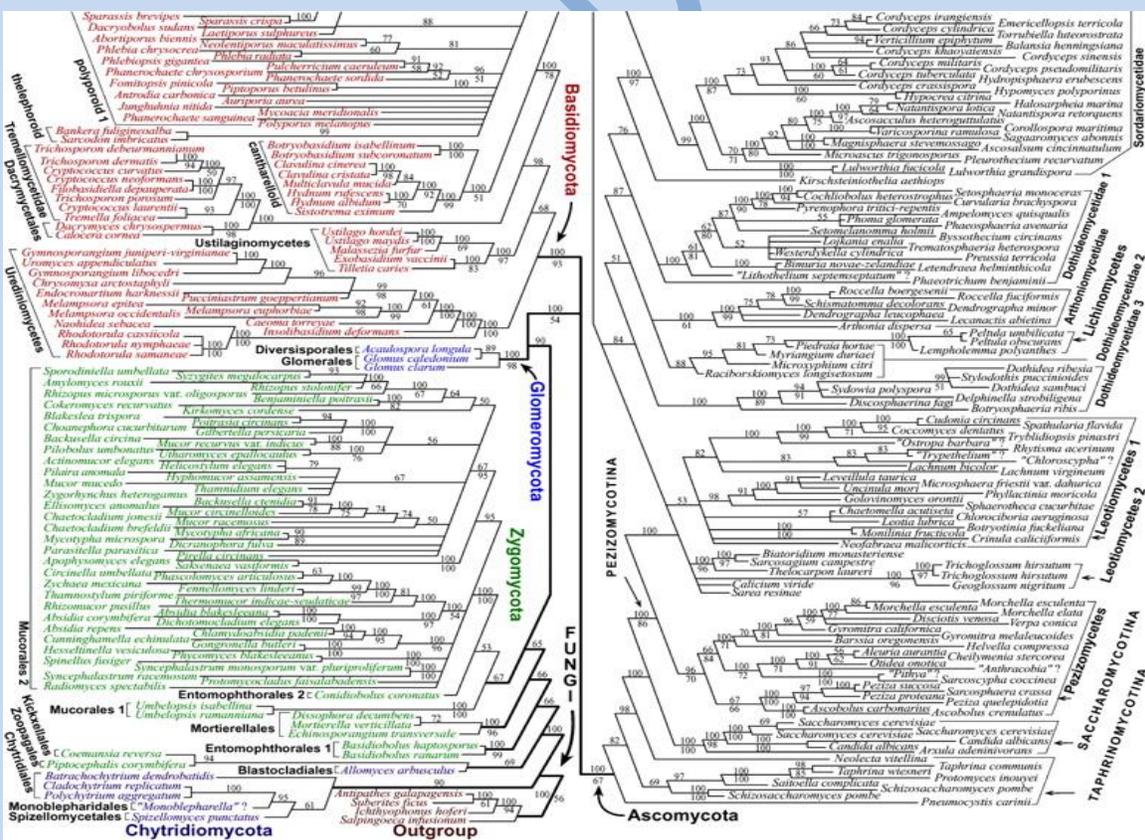
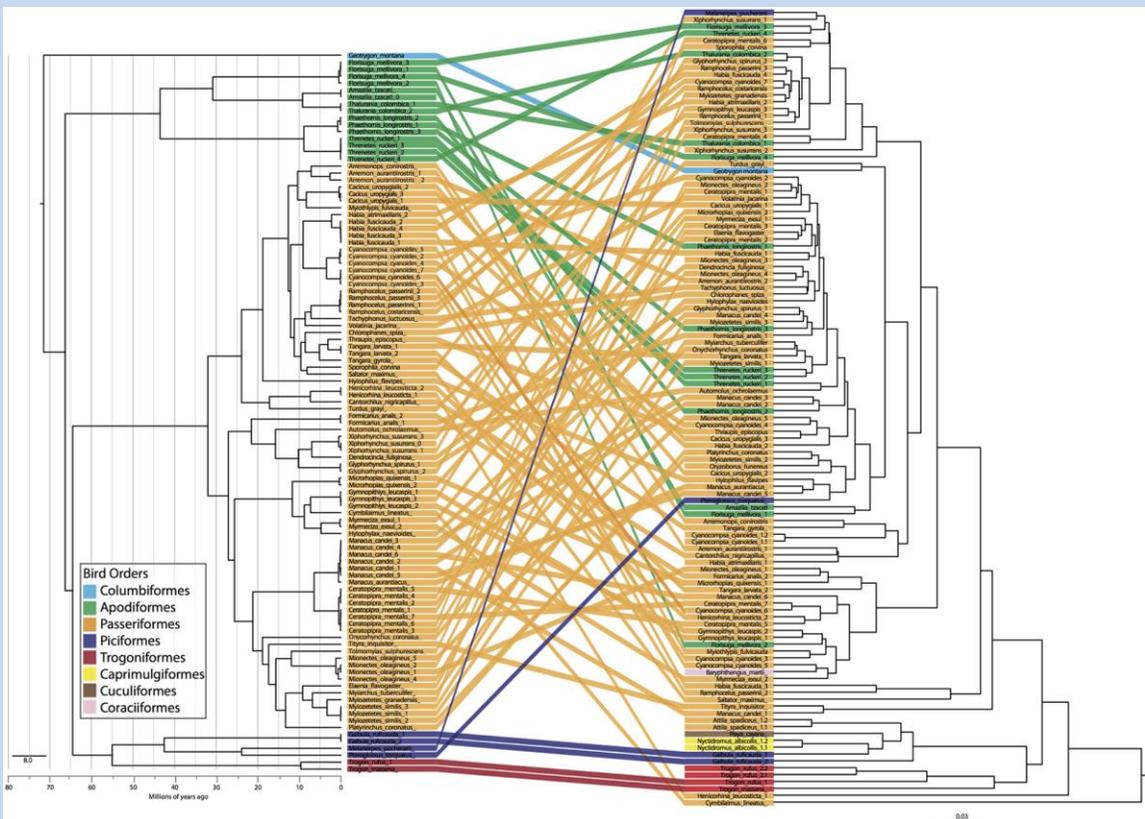
Overall abundance

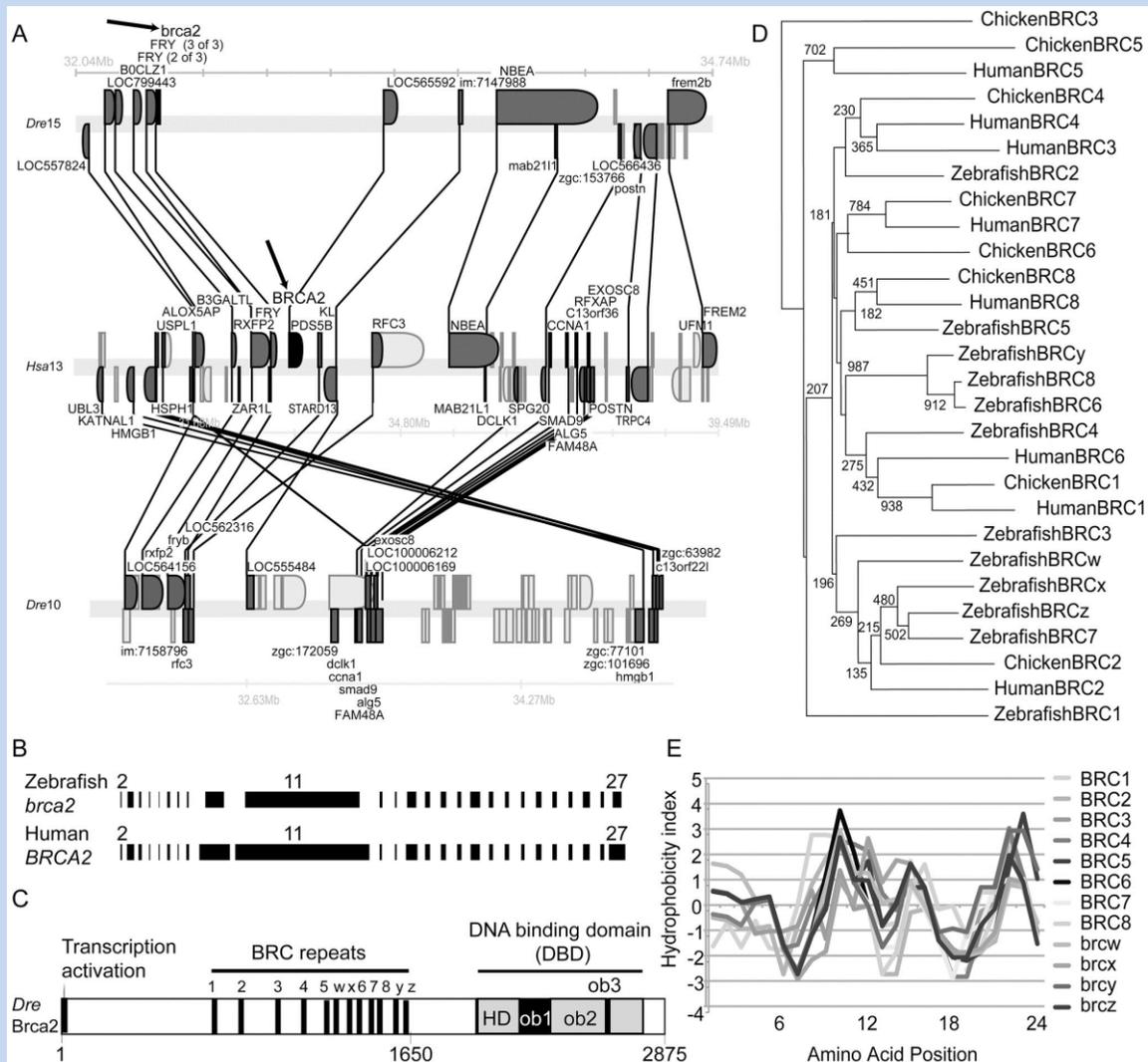
Phylum/class

- Bacteroidetes
- Deltaproteobacteria
- Alphaproteobacteria
- Gammaproteobacteria
- Betaproteobacteria
- Nitrospira
- Synergistetes
- Actinobacteria
- Fusobacteria
- Clostridia
- Negativicutes
- Mollicutes
- Erysipelotrichia
- Bacilli









Le tappe

Le tipologie

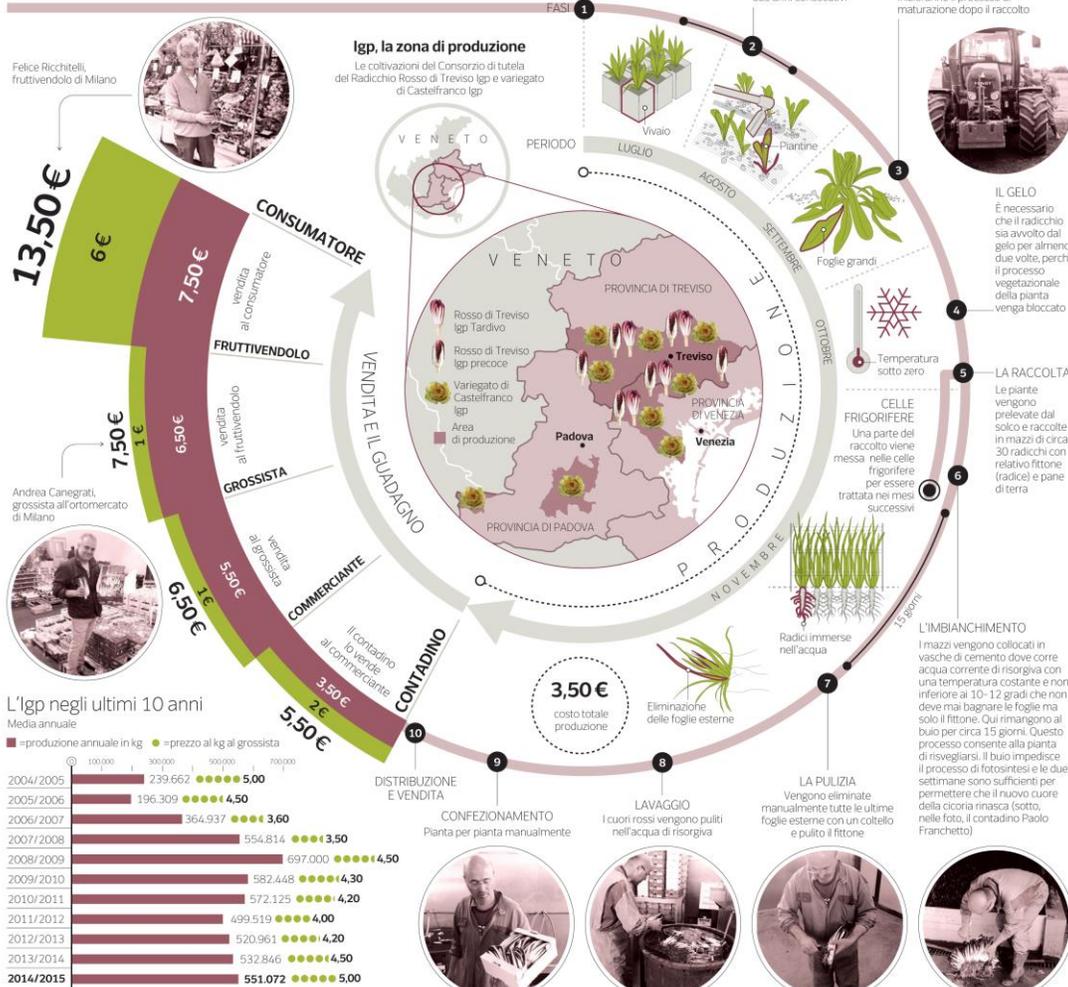
Il termine Igp (Indicazione geografica protetta) indica un marchio di origine attribuito dall'Ue a quei prodotti agricoli e alimentari di una determinata area geografica. Chi produce Igp deve attenersi a rigide produttive stabilite nel disciplinare di produzione.



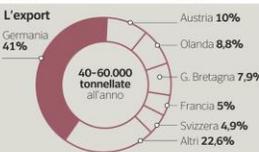
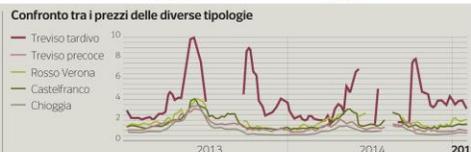
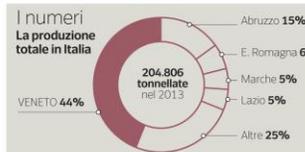
La produzione del radicchio rosso di Treviso tardivo

X = Costo
X = Ricavo
X = Prezzo di vendita

È un prodotto ortofrutticolo italiano. È l'unica cicoria che arriva solo in parte dal campo. Matura dopo il raccolto in vasche di acqua di risorgiva. Ecco tutte le diverse fasi, dalla semina al consumatore.

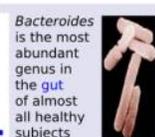
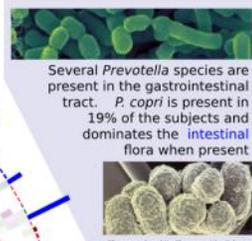


L'Igp negli ultimi 10 anni



Fonte: elaborazioni e stime Isevia su dati Istat, Regione Veneto-Veneto Agricoltura - Elaborazioni CSO su dati ISTAT - Consorzio di Tutela del Radicchio Rosso di Treviso Igp

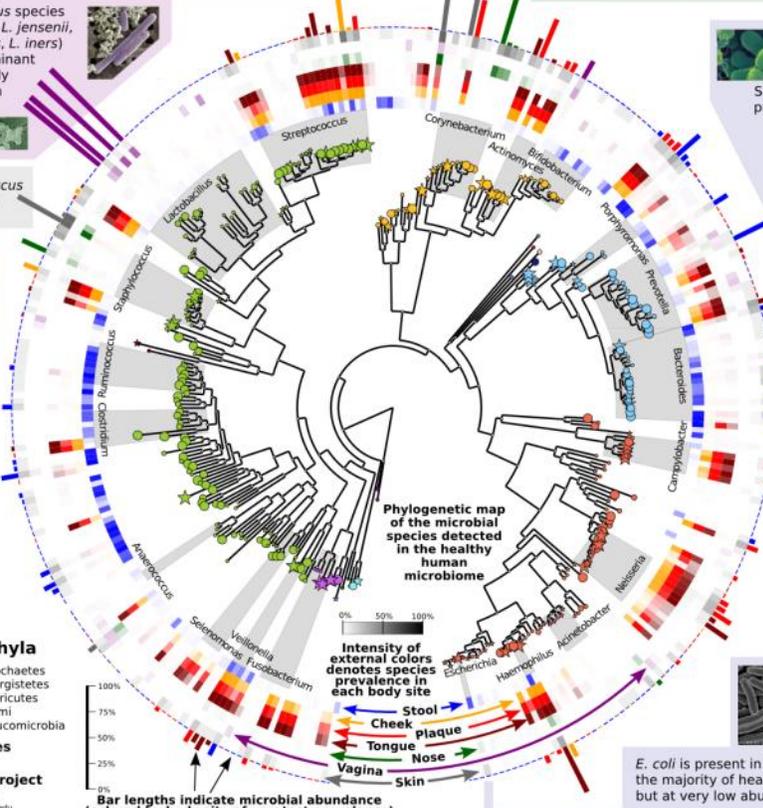
A map of diversity in the human microbiome

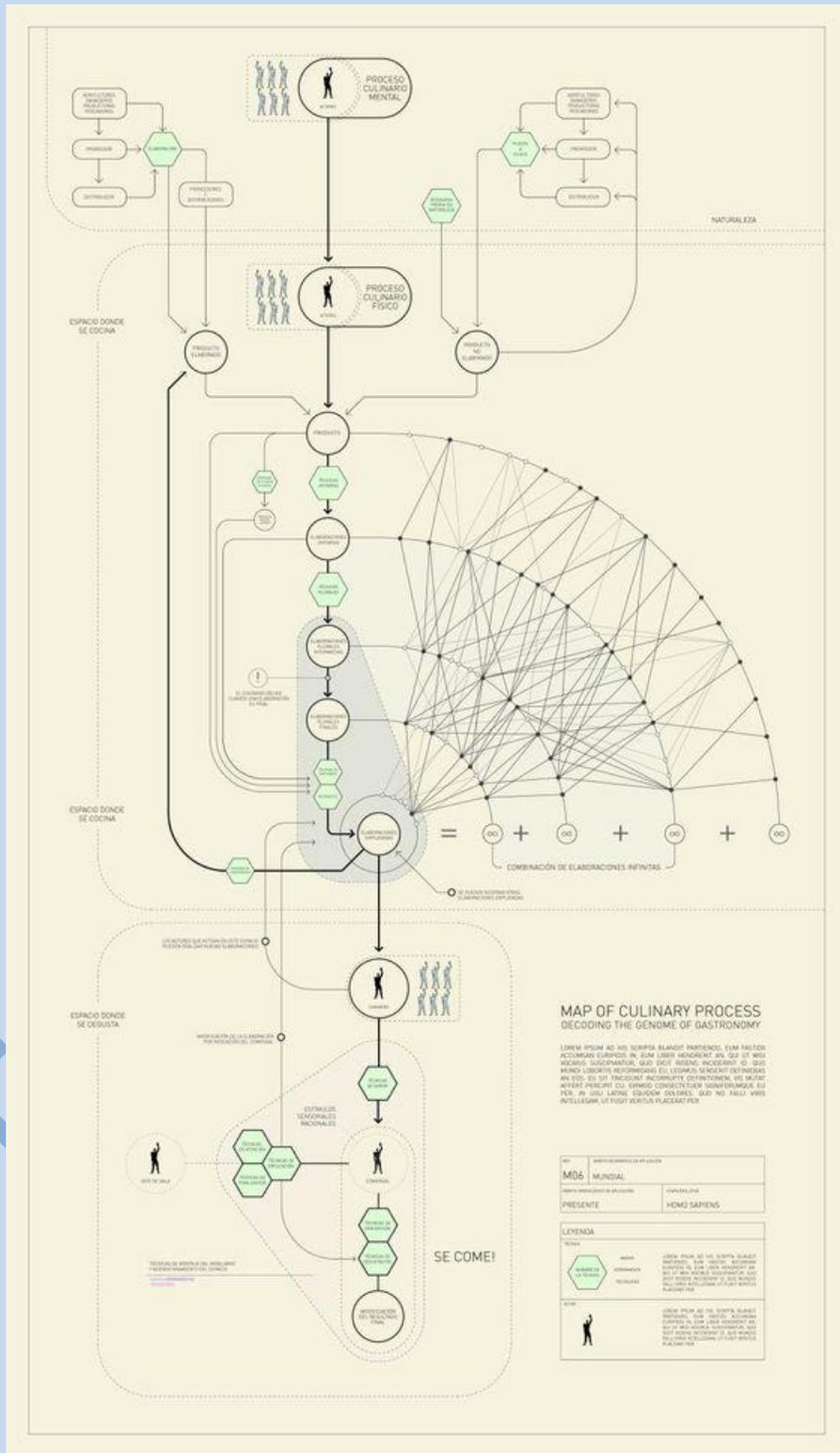


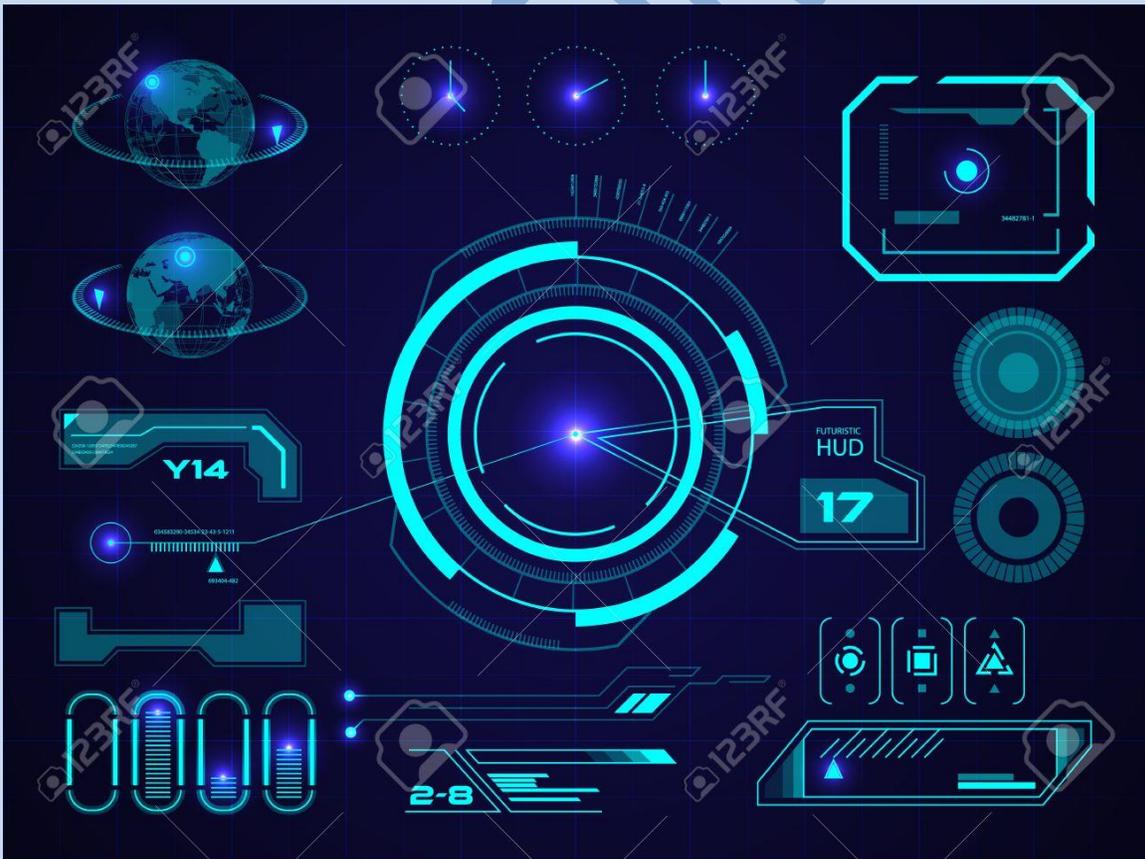
- Commensal microbes
 - ★ Potential pathogens
- The four most abundant phyla**
- Actinobacteria
 - Bacteroidetes
 - Firmicutes
 - Proteobacteria

- Low abundance phyla**
- Chloroflexi
 - Cyanobacteria
 - Euryarchaeota
 - Fusobacteria
 - Lentisphaerae
 - Spirochaetes
 - Synergistetes
 - Tenericutes
 - Thermi
 - Verrucomicrobia

National Institutes of Health Human Microbiome Project
 R. Soga & C. Huttenhower
<http://hmp.danforthcenter.org>
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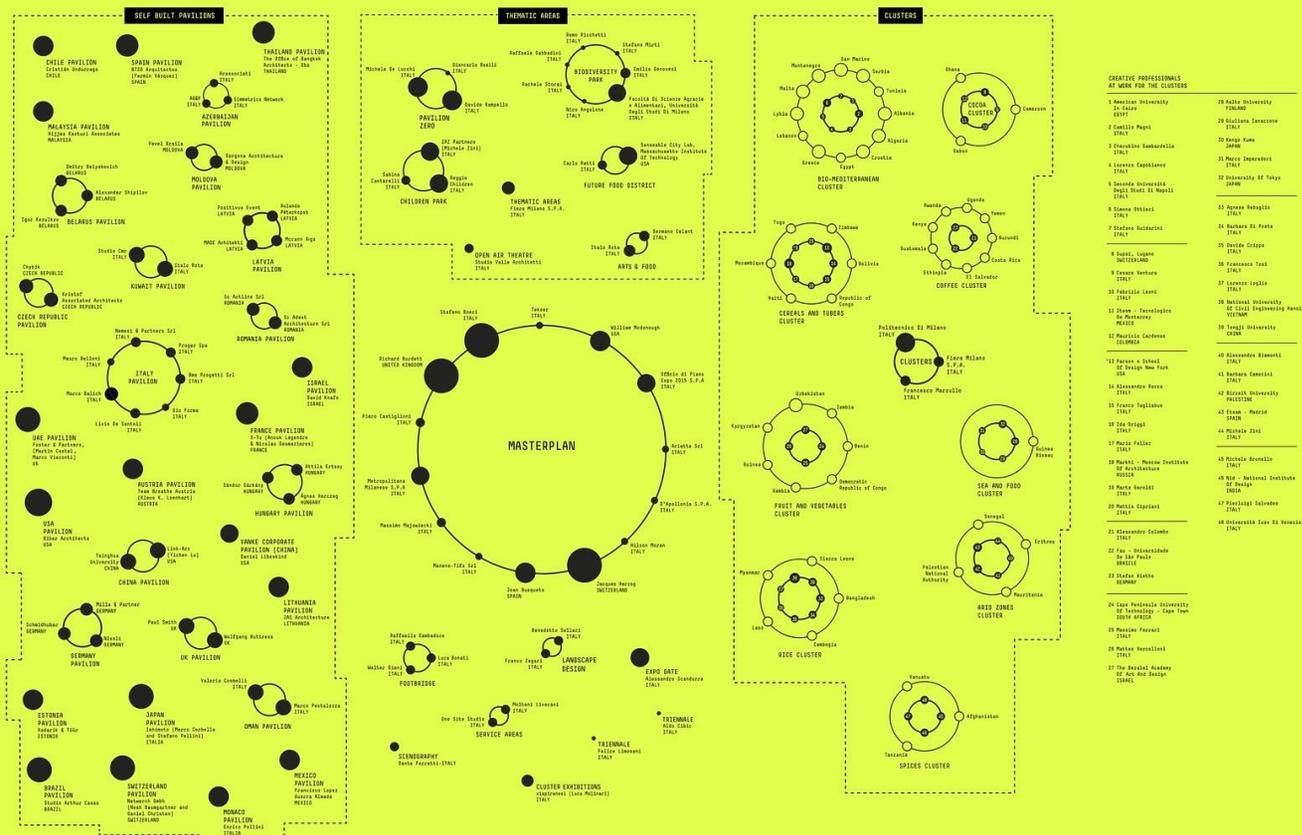
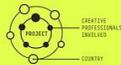
Progettisti al lavoro per EXPO 2015
Una mappa preliminare / Creative professionals at work for EXPO 2015
A preliminary map

Oltre il 90% della popolazione mondiale sarà impegnata a Milano nel 2015 per l'Expo2015. Ma quanti sono i professionisti che da tutto il mondo stanno lavorando con Expo Milano 2015 per dare forma e contenuto a questa avventura? Molti e in numero crescente giorno dopo giorno. La mappa qui presentata vuole mostrare una parte di questa avventura non semplice, e questa domanda.

Over 90% of the world's population will be concentrated in Milan in 2015 for the historical exhibition. But how many creative professionals will work with Expo Milano 2015 to give form and content to this event? The answer, day by day, and the number is growing day by day.

The map presented here is intended to provide an initial response, certainly not exhaustive, to this question.

LEGENDARY



- CREATIVE PROFESSIONALS AT WORK FOR THE CLUSTERS**
- 1 American University In Cairo EGYPT
 - 2 Caecilia Maggi ITALY
 - 3 Chankhob Sambakulchai THAILAND
 - 4 Luciano Castellano ITALY
 - 5 Giuseppe Di Stefano Napoli School Of Napoli ITALY
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