THE A-SQUARE TECHNOLOGY GROUP AND NASCENT APPLIED METHODS & ENDEAVORS SOFTWARE ENGINEERING AND INFORMATION MANUFACTURING PROCEDURAL HIERARCHY SUPPORT DOCUMENTATION

Software Engineering and Information Manufacturing
Procedural Hierarchy Support Documentation

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(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

Software Engineering and Information Manufacturing Procedural Hierarchy Support Documentation

Section One – Introduction (5'-> 3')

A. Executive Summary
B. Press Release
C. DNA Mapping & Virtual Intelligence

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

Carnegie Mellon's Procedural & Organizational Development Proposals within NAME's IBOS [DOSA/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, Strategical, Tactical, Financial and Logistical Market Forces)

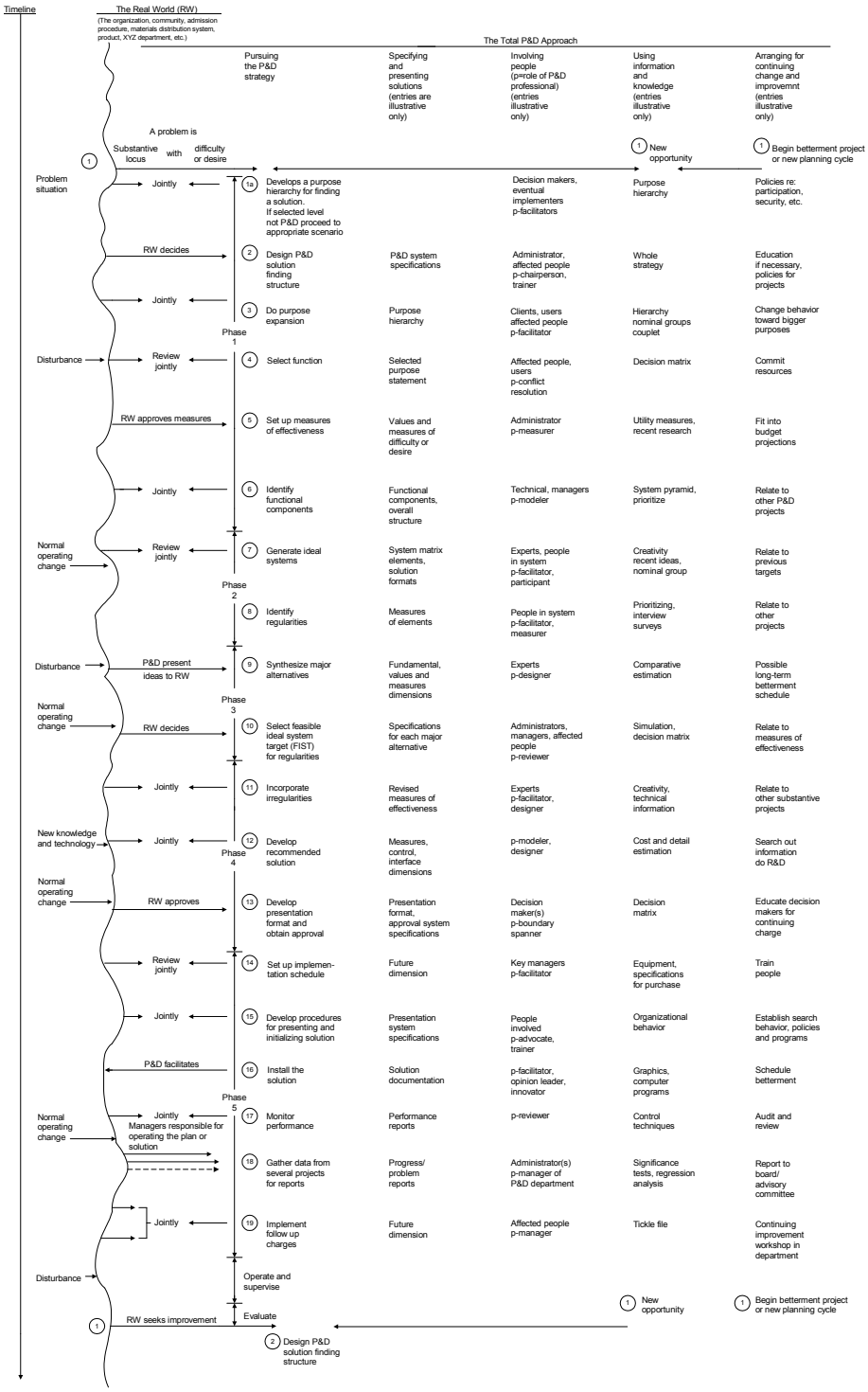
Individual Generic Interactive MT/MA Platforms (3' <- 5')

4. **High Level Managers** (Definitive **P/A** DOT Occupations and Educational Procedures)
5. **Middle Level Managers** (Definitive **N/S** DOT Occupations and Strategical 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')


Timeline
The Real World (RW)
(The organization, community, admission procedure, materials distribution system, product, XYZ department, etc.)
The Total P&D Approach
Pursuing the P&D strategy
Specifying and presenting solutions (entries are illustrative only)
Involving people (p=role of P&D professional) (entries illustrative only)
Using information and knowledge (entries illustrative only)
Arranging for continuing change and improvemnt (entries illustrative only)
A problem is
Substantive locus with difficulty or desire
1 New opportunity
1 Begin betterment project or new planning cycle
Problem situation
Jointly
1a Develops a purpose hierarchy for finding a solution. If selected level not P&D proceed to appropriate scenario
Decision makers, eventual implementers p-facilitators
Purpose hierarchy
Policies re: participation, security, etc.
RW decides
2 Design P&D solution finding structure
P&D system specifications
Administrator, affected people p-chairperson, trainer
Whole strategy
Education if necessary, policies for projects
Jointly
3 Do purpose expansion
Purpose hierarchy
Clients, users affected people p-facilitator
Hierarchy nominal groups couplet
Change behavior toward bigger purposes
Phase 1
Disturbance
Review jointly
4 Select function
Selected purpose statement
Affected people, users p-conflict resolution
Decision matrix
Commit resources
RW approves measures
5 Set up measures of effectiveness
Values and measures of difficulty or desire
Administrator p-measurer
Utility measures, recent research
Fit into budget projections
Jointly
6 Identify functional components
Functional components, overall structure
Technical, managers p-modeler
System pyramid, prioritize
Relate to other P&D projects
Normal operating change
Review jointly
7 Generate ideal systems
System matrix elements, solution formats
Experts, people in system p-facilitator, participant
Creativity recent ideas, nominal group
Relate to previous targets
Phase 2
8 Identify regularities
Measures of elements
People in system p-facilitator, measurer
Prioritizing, interview surveys
Relate to other projects
Disturbance
P&D present ideas to RW
9 Synthesize major alternatives
Fundamental, values and measures dimensions
Experts p-designer
Comparative estimation
Possible long-term betterment schedule
Phase 3
Normal operating change
RW decides
10 Select feasible ideal system target (FIST) for regularities
Specifications for each major alternative
Administrators, managers, affected people p-reviewer
Simulation, decision matrix
Relate to measures of effectiveness
Jointly
11 Incorporate irregularities
Revised measures of effectiveness
Experts p-facilitator, designer
Creativity, technical information
Relate to other substantive projects
New knowledge and technology
Jointly
12 Develop recommended solution
Measures, control, interface dimensions
p-modeler, designer
Cost and detail estimation
Search out information do R&D
Phase 4
Normal operating change
RW approves
13 Develop presentation format and obtain approval
Presentation format, approval system specifications
Decision maker(s) p-boundary spanner
Decision matrix
Educate decision makers for continuing charge
Review jointly
14 Set up implementation schedule
Future dimension
Key managers p-facilitator
Equipment, specifications for purchase
Train people
Jointly
15 Develop procedures for presenting and initializing solution
Presentation system specifications
People involved p-advocate, trainer
Organizational behavior
Establish search behavior, policies and programs
P&D facilitates
16 Install the solution
Solution documentation
p-facilitator, opinion leader, innovator
Graphics, computer programs
Schedule betterment
Phase 5
Normal operating change
Jointly
Managers responsible for operating the plan or solution
17 Monitor performance
Performance reports
p-reviewer
Control techniques
Audit and review
18 Gather data from several projects for reports
Progress/ problem reports
Administrator(s) p-manager of P&D department
Significance tests, regression analysis
Report to board/ advisory committee
Jointly
19 Implement follow up charges
Future dimension
Affected people p-manager
Tickle file
Continuing improvement workshop in department
Disturbance
Operate and supervise
Evaluate
1 New opportunity
1 Begin betterment project or new planning cycle
1 RW seeks improvement
2 Design P&D solution finding structure

(3' <- 5')

DOT Functions to Be Accomplished within Each Factor

Chromosomal Alphanumeric Value{ 5.002532928065e-5 }

***Pursuing the P&D Strategy through the Human Genome -** *(Policy Based-**Power/Authority**-Sociological Approaches)*

Project selection **(Phase One)**
P&D system structure **(Phase One)**
Problem formulation **(Phase One)**
Measures of effectiveness **(Phase One)**
Creativity-idea generation **(Phase Two)**
Regularity-conditionals **(Phase Two)**
Target **(Phase Three)**
Recommended solution **(Phase Four)**
Approval **(Phase Four)**
Installation plan **(Phase Five)**
Preparation for operation **(Phase Five)**
Performance measures **(Phase Five)**
Turn-over to operators **(Phase Five)**
Interrupt-delay **(Phase Five)**

***Specifying and Presenting the Solution through Genetic or Chromosomal Development -** *(Strategy Based-**Norms/Standards**-Philosophical Approaches)*

Purpose (Fundamental, Values, Measures, Control, Interface & Future)
Inputs (Fundamental, Values, Measures, Control, Interface & Future)
Outputs (Fundamental, Values, Measures, Control, Interface & Future)
Sequence (Fundamental, Values, Measures, Control, Interface & Future)
Environment (Fundamental, Values, Measures, Control, Interface & Future)
Human agents (Fundamental, Values, Measures, Control, Interface & Future)
Physical catalysts (Fundamental, Values, Measures, Control, Interface & Future)
Information aids (Fundamental, Values, Measures, Control, Interface & Future)

***Involving People in Real-Time & Virtual Real-World Scenarios -** (Individual, Group, Inter-Group, Social System & Larger Social System)

Goals/Objectives (Decision maker I)
Goals/Objectives (Decision maker 2)
Goals/Objectives (Elected Influential I)
Goals/Objectives (Business Influential 2)
Goals/Objectives (Internal Expert 1)
Goals/Objectives (External Expert 2)
Goals/Objectives (Internal Worker I)
Goals/Objectives (External Worker 2)
Power/Authority (Sequence Agents-P&D professional role I)
Power/Authority (Human Agents-P&D professional role 2)

Morale/Cohesion (Group process role 1)
Morale/Cohesion (Group process role 2)
Morale/Cohesion (Group process technique I)
Morale/Cohesion (Group process technique 2)
Norms/Standards (Meeting condition 1)
Norms/Standards (Meeting condition 2)

***Using Information and Knowledge -** *(Tactics Based-**Morale/Cohesion**-Psychological Approaches)*

Theory of **P&D-axiology**
Theory of **P&D-philosophy**
Theory of **P&D-epistemology**
Theory of **P&D-history**
Theory of **P&D-pedagogy**
Upper Chromosomal Levels using Information and knowledge in P&D I
Lower Chromosomal Levels using Information and knowledge in P&D 2
Upper Chromosomal Levels using I & K in locus content area 1
Lower Chromosomal Levels using I & K in locus content area 2

***Arranging for Continuing Change and Improvement -** *(Operations Based-**Goals/Objectives**-Physiological Approaches)*

Philosophical/Strategical Approaches (Readiness factors assessment – 269)
Physical/Operational Approaches (Project betterment)
Psychological/Tactical Approaches (Favorable behavior)
Policy/Sociological (NAME Network Organizational policy 1)
Policy/Sociological (Client Network Organizational policy 2)

Institutionalized Program Structure (Nascent Applied Methods & Endeavors)

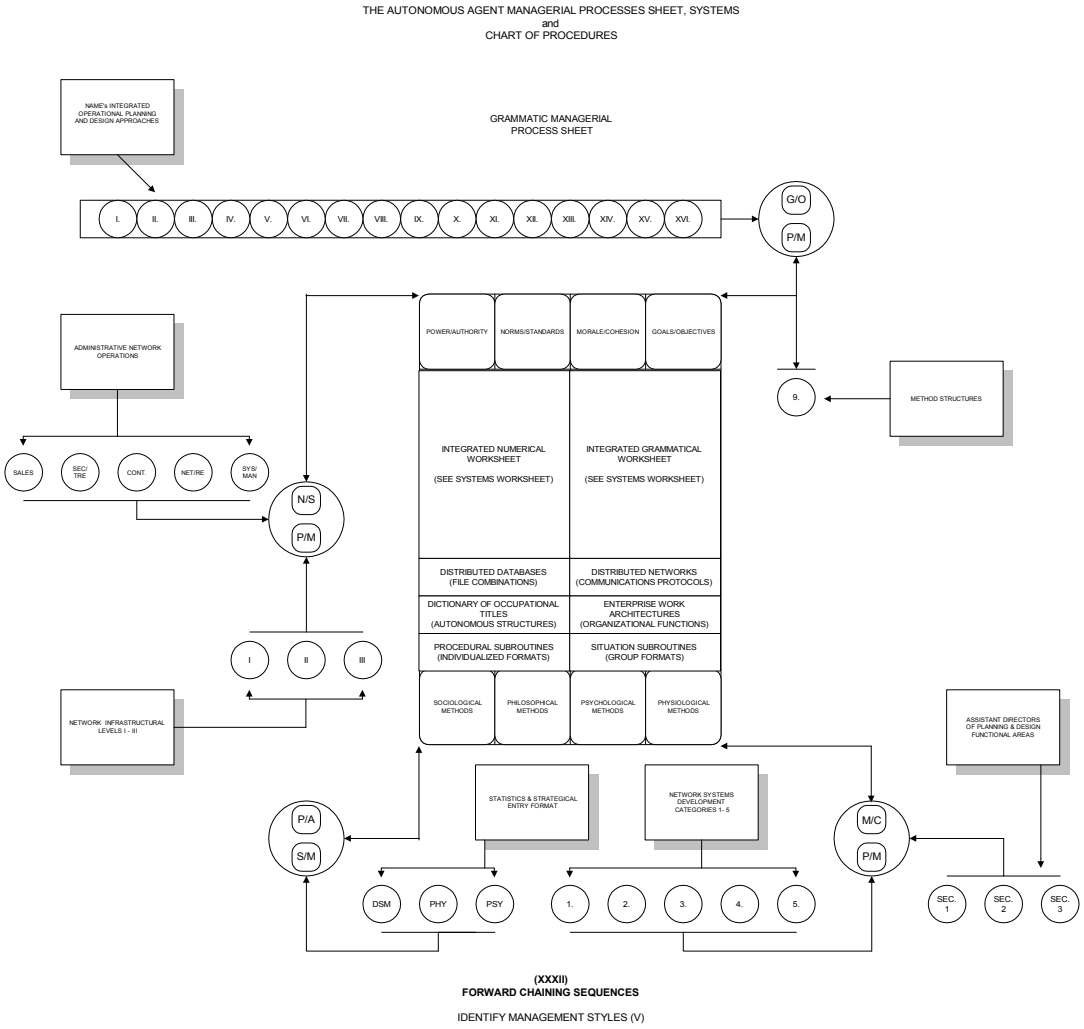
Education (Employment Related Educational Development)
Workshop Groups (Distributed Learning Environments)
Project Team (Nascent Applied Methods & Endeavors Management Structure)
P&D Research and Development (Infrastructural Framework for IBOS [DOSA/DALP/IAOA])
Program audit (Distributed Method Structures)

Enterprise Resource Planning (ERP), Manufacturing Resource Planning (MRP) & Group Ordering Logistics (GOL)

Utilizing what is available
Developing new I & K
Verifying the I & K
Modifying the I & K

Other Purposeful Activities

Operate and Supervise (Acceptant *Individual*)
Planning & Design (Confrontational *Group*)
Evaluate (Theory *Inter-Group*)
Research (Prescriptive *Social System*)
Learn (Catalytic *Larger Social System*)



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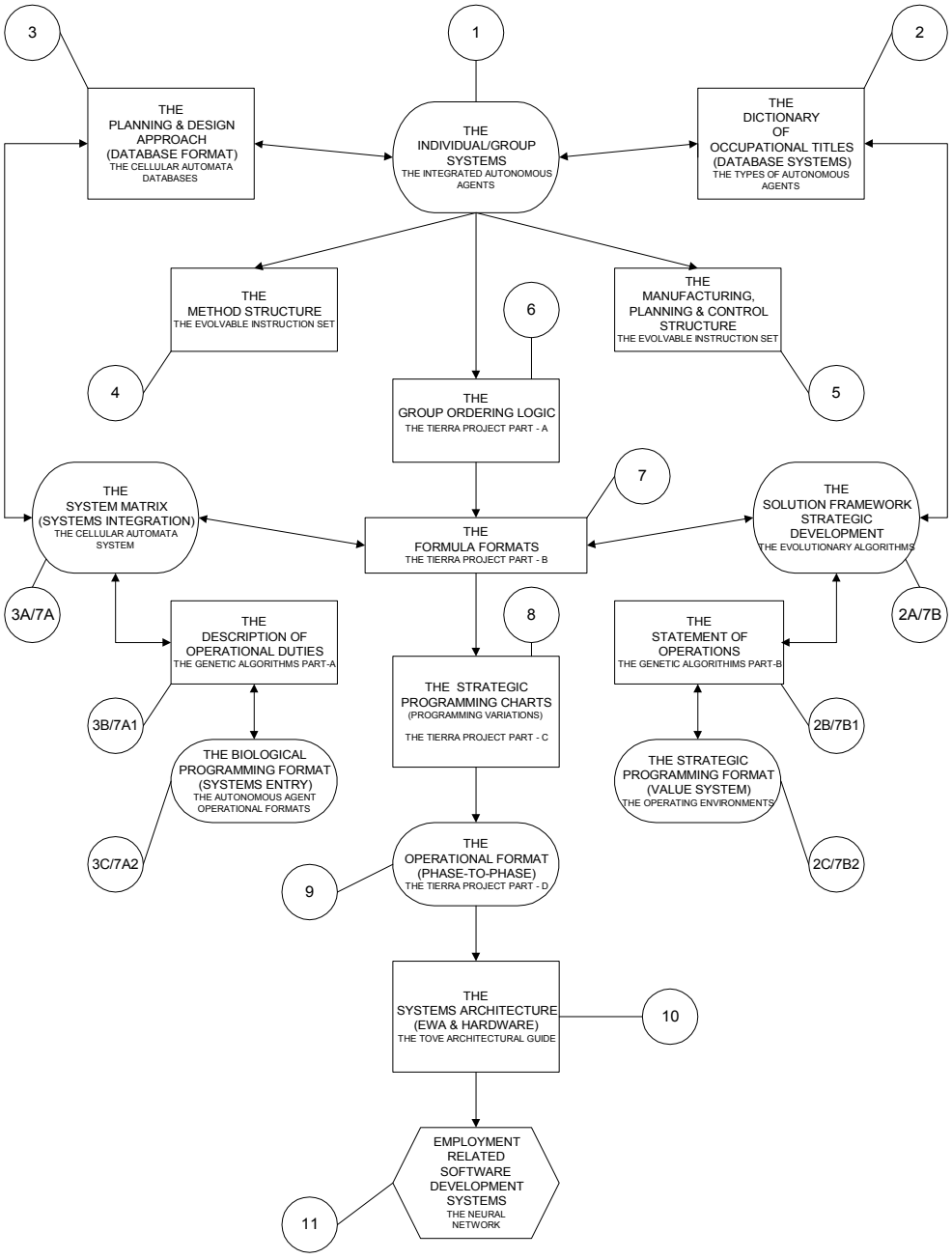
EMPLOYMENT RELATED SOFTWARE DEVELOPMENT GUIDE



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