

Wed. Feb 17, 1988

Witcher decision retreat

Page 1

1: Mission of the decision retreat

This is a decision (+) retreat of which discussion (-) is a part. The true mission is decision!

1: **Agenda for decision retreat (not retreat from decision!)**
 Degree of system openness (dso) measures how much input and output is desired or expected.

1 means the system is totally closed to input and locked to output. 10 means the system is totally open to input and unlocked.

1.1: **Sunday, February 21, 1988**

1.1.1: **2:00 - 4:00 PM - Open session for idea exchange - (dso - 8 to 6)**

1.2: **Monday, February 22, 1988**

1.2.1: **8:00 - 9:00 AM**

1.2.1.1: Introduction (10 min) - Mike Redmond
 State the mission of the retreat (dso from 5 to 1)
 End product of the 10 minutes is agreement on mission of retreat

1.2.1.2: Review & summarize statements about the nature of Witcher (30 min)
 MR, JC and WW will answer in writing the questions in boxes 1, 2 and 3 in the company model. These answers should be provided ahead of the retreat and made a part of the work book.

dso - 3 to 1
 End product is an acceptable set of answers to the 3 questions
 Should be recorded in minutes of retreat

1.2.1.3: Prepare Witcher mission statement (10 words or less) (20 min)
 dso - 8 to 3

1.2.2: **9:00 - 10:15 AM**

1.2.2.1: Select specific functional areas for goal & objective definition
 Selection is from handout # ?
 dso - 7 to 2

1.2.2.2: Rate selected functional areas as to desirability of working on at retreat
 dso - 7 to 2

1.2.3: **10:15 - 10:45 AM - Coffee break and phone calls**

1.2.4: **10:45 - 12:00 AM**
 It should be noted at the beginning of this management analysis process that the goal & object definition process can start at any of the boxes in model from 5 to 8 and move in either direction.

However it should also be remembered that the lower the number you start the definition from, the more probable the objectives derived will be valid and better relate to the company missions and goals

1.2.4.1: Define Witcher long range goals within highest rated

Wed, Feb 17, 1988

Witcher decision retreat

Page 2

- 1.2.4.2: dso - 8 to 3
- 1.2.5: 12:00 - 1:00 PM - Lunch
- 1.2.6: 1:00 - 3:00 PM
- 1.2.6.1: Continue define long range goals within highest rated functional area
 - Should have at least 30 long range goals by 3:00 PM
 - Assign ratings to 30 long range goals from which to select objectives
 - Prioritize
 - dso - 8 to 3
- 1.2.7: 3:00 - ? (individual review at discretion of individual)
- 1.2.7.1: Define medium range objectives for the 30 defined goals
- 1.2.7.2: Have about 30 medium range objectives per person by start of Tues mtg
- 1.2.7.3: dso - 8 to 2
- 1.3: **Tuesday, February 23, 1988**
- 1.3.1: 8:00 - 12:00 AM
- 1.3.1.1: Define and agree on medium range objectives for the 30 defined goals
 - These are from the lists prepared by each individual in the free session on Monday.
- 1.3.1.2: dso - 5 to 1
- 1.3.2: 1:00 - 4:00 PM
- 1.3.2.1: Define and agree on short & immediate objectives for the 30 defined goals
 - Should rate in importance when list is complete
 - dso - 5 to 1
- 1.4: **Wednesday, February 24, 1988**
- 1.4.1: 8:00 - 12:00 AM
- 1.4.1.1: Discuss & decide on implemetation plans for most critical objectives
- 1.4.1.2: dso - 5 to 1
- 1.4.2: 12:00 adjourn to bar for forgetfulness session

1: Functional areas to consider - in alphabetical order

The word fee in parenthesis indicates that the function may be either or both an internal and for-fee service to be provided by Witcher or its divisions, its subsidiaries or its network members.

The fee functions may overlap and use services provided by the core Witcher, subsidiary or network organizations.

- 1.1: A. Administration**
 - 1.1.1: A. Accounting**
 - 1.1.2: B. Corporate financing**
 - 1.1.3: C. Data processing**
 - 1.1.4: D. Executive policy**
 - 1.1.5: E. Legal**
 - 1.1.6: F. Personnel**
 - 1.1.7: G. Physical facilities for company**
 - 1.1.7.1: Construction**
 - 1.1.7.2: Design**
 - 1.1.7.3: Maintenance**
- 1.2: B. Construction**
 - 1.2.1: A. Equipment**
 - 1.2.2: B. Field operations**
 - 1.2.3: C. Fixturing and fit up**
 - 1.2.4: D. Procurement**
 - 1.2.5: E. Project management**
 - 1.2.6: F. Shop operations**
 - 1.2.7: G. Yard operations**
- 1.3: C. Corporate planning**
 - 1.3.1: A. Business continuity**
 - 1.3.2: B. Diversification**
 - 1.3.2.1: Horizontal**
 - 1.3.2.2: Vertical**
- 1.4: D. Development - real estate**
 - 1.4.1: A. Design**
 - 1.4.2: B. Financing and funding**
 - 1.4.3: C. Program management**
 - 1.4.4: D. Project management**
 - 1.4.5: E. Property management**
 - 1.4.6: F. Real estate**
- 1.5: E. Fee (and/or internal) services - some are staff services internally**
 - 1.5.1: A. (Fee) Appraisal services**
 - 1.5.1.1: Residential**
 - 1.5.1.2: Commercial**
 - 1.5.1.3: Industrial**
 - 1.5.1.4: Institutional**
 - 1.5.1.5: Public**
 - 1.5.2: B. (Fee) As-is facility records - on a regular basis**
 - 1.5.2.1: Drawings**
 - Mechanical**

- Electrical
- Site
- Equipment acquisitions
- Structural
- Architectural
- Additions
- Property and utility plans
- 1.5.2.2: Specifications
- 1.5.2.3: Equipment and operating manuals
- 1.5.2.4: Inventories
- 1.5.2.5: Appraisals
- 1.5.3: C. (Fee) Code checks
- 1.5.4: D. (Fee) Construction services
 - 1.5.4.1: Estimating
 - 1.5.4.2: Inspection
 - 1.5.4.3: Project planning and scheduling
- 1.5.5: E. (Fee) Equipment rental
- 1.5.6: F. (Fee) Feasibility analysis
- 1.5.7: G. (Fee) Financial analysis
- 1.5.8: H. (Fee) Life cycle costing
- 1.5.9: I. (Fee) Maintenance
- 1.5.10: J. (Fee) Netwkg with others practicing construction related disciplines
- 1.5.11: K. (Fee) Placement services
- 1.5.12: L. (Fee) Prefabricated, preengineered metal buildings
- 1.5.13: M. (Fee) Privatization
- 1.5.13.1: Total development and operation of public facilities
 - Real estate
 - Financing
 - Design
 - Construction
 - Operation
 - Maintenance
- 1.5.14: N. (Fee) Project delivery systems
- 1.5.15: O. (Fee) Project programming
- 1.5.16: P. (Fee) Property management
- 1.5.17: Q. (Fee) Training and education
- 1.5.18: R. (Fee) Trash disposal
 - 1.5.18.1: Solid waste
 - 1.5.18.2: Sanitary land fill
 - 1.5.18.3: Energy generation
- 1.5.19: S. (Fee) Value engineering
- 1.6: F. Marketing & sales
 - 1.6.1: A. Closing
 - 1.6.2: B. Direct
 - 1.6.3: C. Graphics
 - 1.6.4: D. Indirect
 - 1.6.5: E. Records
 - 1.6.6: F. Sales reimbursement
 - 1.6.7: G. Staffing
- 1.7: G. Training and education

- 1.7.1: A. Executive
- 1.7.2: B. Management
- 1.7.3: C. Staff
- 1.7.4: D. Technical

- 1: **Example of setting long range goal to defining immediate objective**
- 1.1: **Step 1 - Identify functional area in which to work - AF00.000000**
 Select a major functional area category say A, administration, with subcategory F for personnel relations.
- 1.2: **Step 2 - Box #5 - State long range goal (3 to 6 year) - AF01.000000**
 "Upgrade communication of company policies to employees"
- 1.3: **Step 3 - Box #6 - State medium range objective (2 to 4 year) - AF01.010000**
 "Assemble, edit, print and distribute full corporate manual for all employees in 2 years from 3/1/88"
- 1.4: **Step 4 - Box #7 - State short range objective (1 to 2 year) - AF01.010100**
 "Identify contents of Witcher company manual and have assembled the rough draft for executive committee review and approval in 1 1/2 years from 3/1/88."
- 1.5: **Step 5 - Box #8 - State immediate objective (now to 1 year) - AF01.010101**
 "Establish major topics to be included in Witcher company manual, general format to be used, responsibilities for preparation, time table for production and obtain executive committee approval within 3 months from March 1, 1988."
- 1.6: **Step 6 - Box #9 - Define implementatn steps to achieve objtvs - AF01.010101**
 "Make a network model plan of the activities required to prepare the Witcher company manual from March 1, 1988 to the publishing date of March 1, 1990. Responsibility codes and durations should be shown on the network"

Wed, Feb 17, 1988

Witcher decision retreat

Page 1

- 1: **Example of how to record objective definition in retreat**
- 1.1: **Functional area: Administration , personnel relations**
- AF
- 1.1.1: **Long range goal - 3 to 6 years - Box #5**
- 1.1.1.1: **Statement**
Upgrade communication of company policies to employees of Witcher.
- 1.1.1.2: **Identification: #AF01.000000**
- 1.1.2: **Medium range objective - 2 to 4 years - Box #6**
- 1.1.2.1: **Statement**
Assemble, edit, print & distribute full corporate manual by March 1, 1990.
- 1.1.2.2: **Identification: #A01.010000**
- 1.1.2.3: **Who's responsible?: MR**
- 1.1.3: **Short range objective - 1 to 2 years - Box #7**
- 1.1.3.1: **Statement**
Identify contents of Witcher manual, and assemble rough draft for approval by executive committee in 1 1/2 years from 3/1/88.
- 1.1.3.2: **Identification: #AF01.010100**
- 1.1.3.3: **Who's responsible?: MR**
- 1.1.4: **Immediate range objective - 0 to 1 year - Box #8**
- 1.1.4.1: **Statement**
Establish major topics, general format, responsibilities and time tables for preparation of Witcher company manual and obtain approval within 3 months of 3/1/88.
- 1.1.4.2: **Identification: #A01.010101**
- 1.1.4.3: **Who's responsible?: MR**

1: Definitions**1.1: Vertical diversification**

A management system that emphasizes diversifying by adding new functional area to the existing functional areas. New functions added usually bear an organizational relation to the existing. An example of vertical diversification is incorporating real estate control, building design, financing, construction, leasing and asset management into a single development operation.

1.2: Horizontal diversification

A management system that emphasizes diversifying by expanding existing functional areas by classes of work presently done within the functional activity. For instance a design office could accomplish horizontal diversification by dividing their operations into various kinds of projects such as commercial, institutional, and industrial, using the same functional disciplines but dividing the organization into separate groups that concentrate mainly on one of the three main building types.

1.3: Goal

The unquantified desires of an organization or individual expressed without time or other resources assigned.

1.4: Objective

Quantified targets derived from established goals. The most commonly used resources in converting goals to objectives are money, time, human abilities, human actions, equipment and space.

1.5: Degree of system openness (dso)

Degree of system openness (dso) measures how much input and output is desired or expected.

1 means the system is totally closed to input and locked to output. 10 means the system is totally open to input and unlocked.

1.6: Witcher company model

The wellspring element of the model is the functional area list of prime things Witcher as a business entity must or could be involved with.

The main model or simulation of the Witcher organization is composed of boxes containing questions of importance to defining Witcher's nature (boxes 1, 2 & 3), its mission (box 4), its goals (box 5), its medium, short & immediate objectives (boxes 6, 7 and 8), the objective

Wed. Feb 17, 1988

Witcher decision retreat

Page 2

implementation plans, means, methods and result
measurement method (box 9), along with a feedback and
information loop with inlets from the inside and outlets
to the outside.

MISSION STATEMENT

Witcher Construction's continuing purpose is to provide extraordinary service to our clients in terms of quality and value. In order for Witcher to achieve this we are aggressive and innovative in our systems of management and technology. Staying on the cutting edge of the current industry trends enables us to provide the most up-to-date construction techniques for our clients. We are committed to uphold the highest level of personal and professional integrity and to continue our education in all aspects of the construction industry. We believe in maintaining a supportive and challenging working environment for our employees. Because of these commitments we are able to bring organization and the highest level of professionalism to the construction process.

Exhibit 1
Dynamic Conditions
Internal
Strengths and Weaknesses

People Resources	Action Plans	Manage Areas of Weakness
<p>1. People generally interested in DR</p> <p>2. People well educated</p> <p>3. People are outgoing and social</p> <p>4. People are weak on estimating</p> <p>5. People are not decisive. "on edge"</p> <p>6. People not "well connected"</p>	<p>Capitalize on Strengths</p> <ul style="list-style-type: none"> • Play for advancement • Anticipation of clients • Meet trial contacts. • Maybe good negotiator. 	<p>Manage Areas of Weakness</p> <ul style="list-style-type: none"> • Program what's inside • Monitor contacts (Gen. Kellie) • Training of Jc/Se system • Force decision. "what would you do?" • Social networking

Exhibit 2
Dynamic Conditions
Internal
Strengths and Weaknesses

Knowledge Base		Action Plans	
		Capitalize on Strengths	Manage Areas of Weakness
<ol style="list-style-type: none"> 1. Workable cost control system 2. Monthly billing system 3. Contract & Change Order procedure 4. Operation Review System 5. Scheduling System 6. Project close out system 7. 		<p>Timely & Accurate</p> <ul style="list-style-type: none"> • Timeliness of Timely • Controls by Management • Good Monthly Review • Focus "look ahead" 	<p>Training & understanding</p> <ul style="list-style-type: none"> • Also improve job payment • Improve timeliness • Lack of understanding • Need training and experience • Hard to get front part

Exhibit 3
Dynamic Conditions
Internal
Strengths and Weaknesses

Financial Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness
<ol style="list-style-type: none"> 1. High overhead operation 2. low profit margin on work 3. Minimum Financial Revenue 4. Bonding; Questionable 	<ul style="list-style-type: none"> • Company Visibility • Computer Fee • Superior Relationships 	<ul style="list-style-type: none"> • Manage purchasing's budget • Buy smart or create RFP profit center • Monitor type of projects • Develop no bond requirement

Exhibit 4
Dynamic Conditions
Internal
Strengths and Weaknesses

Facilities/Equipment Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness
<ol style="list-style-type: none"> 1. Well equipped field operation 2. new office space 3. good yard operation 4. Computer's Equipment Selling 5. Computerized Project Management 	<ul style="list-style-type: none"> • good marketability • maintenance of safety • accurate & well generated • utilize w/ daily op. 	<ul style="list-style-type: none"> • Sell unneeded equip • expenses • larger than needed • monitor transportation • Independent info source (networking)

Exhibit 5
Dynamic Conditions
Internal
Strengths and Weaknesses

worth/cost.

	Action Plans
Value/Quality Relationship	Manage Areas of Weakness
Capitalize on Strengths	
<p>1. High priced but contractors.</p> <p>2. Excellent Quality Image</p> <p>3. Image as "negotiated contractors."</p> <p>4. Perform on schedule</p> <p>5.</p>	<p>· good performance</p> <p>· Sell performance</p> <p>· Market image</p> <p>· sell scheduled part clients.</p>
	<p>· we to negotiate w/owner</p> <p>· maintain jobs to lower</p> <p>· bid more projects</p>

Exhibit 6
Dynamic Conditions
Internal
Strengths and Weaknesses

<i>External View</i>	Reputation/Image	Action Plans
	Capitalize on Strengths	Manage Areas of Weakness
<ol style="list-style-type: none"> 1. Image as "smaller builder" 2. Image as retail contractor. 3. High repeat client base 4. "Jim's" President 5. Geographic location. 6. 	<ul style="list-style-type: none"> Identify own market. Target certain areas, etc. Support track of clients. Announce ownership will track for clients 	<ul style="list-style-type: none"> sell on larger work expand to new clients. need field network

Exhibit 1
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
Economic	Opportunities	Threats	
<p>1. Possible Recession in '88</p> <p>2. More Bonded work</p> <p>3. B.C.F. merger</p> <p>4. Hospitality work</p>	<p>Capitalize on Opportunities</p> <p>contact "national" clients.</p> <p>work w/ Multinational</p> <p>self generating income</p> <p>Specialize w/ people</p>	<p>Protect Against Threats</p> <p>Develop travel potential</p> <p>Send subcontractors</p> <p>Same length for "new"</p>	

Exhibit 2
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
Technological <i>Computer use on site</i>	<i>timely information</i>	

Exhibit 3
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
Social		Capitalize on Opportunities	Protect Against Threats
<ul style="list-style-type: none"> • Expanding Geographic Areas <ul style="list-style-type: none"> - Eagan - Wayzata • Good company image 	<ul style="list-style-type: none"> • Appoint people on e-do Monitor Activity. Repeat work. 		

Exhibit 4
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
Governmental	Capitalize on Opportunities	Protect Against Threats	
<ul style="list-style-type: none"> • New tax laws • Interest rates • Insurance costs 	<ul style="list-style-type: none"> • Reorganize "int. S" • subcontract more 	<ul style="list-style-type: none"> • Strengthen target & EOLs • "ship memoranda" 	

Exhibit 5
Dynamic Conditions
External
Opportunities and Threats

Principal Customer(s)/Geography	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
<ul style="list-style-type: none"> • Target • Estes • Historic landmarks • Dayton Hudson • Frank Quinson 	<ul style="list-style-type: none"> • Remodel & new • Strengthen Relationship • Continue growth • Agreements / Knowledge 	<ul style="list-style-type: none"> • Mkt & App (Lower Fee) • May move geographically • How can we meet them?

Exhibit 6
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
Suppliers and/or Subcontractors/Geography	Capitalize on Opportunities	Protect Against Threats	

Exhibit 7
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
Competitors/Geography		

Exhibit 8
Dynamic Conditions
External
Opportunities and Threats

Markets/Geography	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

Training matrix
 Scheduling
 Communications

Mike

Exhibit I
Dynamic Conditions
Internal
Strengths and Weaknesses

People Resources	Action Plans
	Manage Areas of Weakness
1. no record in command for U.P. op. 2. J.C. is making good progress in marketing 3. Mr.'s health problems limit his productive hours 4. L.I. is proving to have a higher level of competence than expected 5. There is no continuity among managers in setting goals for their subordinates to work towards. 6. Marketing assistant's role is unclear to me	encourage Bill to select a pupil he can teach work w/ him to develop comprehensive mkt. plan review her responsibilities w/ an eye to broadening her usefulness esp in mkt limited mode managers are knowledgeable and perceptive J.C. has capability to learn if motivated
	continue search for reasons p.m. & concentrate on training T.C. establish areas of primary importance for his attention and stick to them establish a method of establishing and tracking progress on goals at least on a monthly basis audit J.C.'s responsibilities and determine min areas of priority for her

Exhibit 2
Dynamic Conditions
Internal
Strengths and Weaknesses

Knowledge Base	Action Plans	Manage Areas of Weakness
<p>1. no historical cost data bank</p> <p>2. financial information is prepared promptly each month</p> <p>3. "Loyalty" among entire staff is strong; morale is high</p> <p>4. There is no clear idea of what features about WCC attracts clients</p> <p>5. Estimating ability among op. staff varies widely</p> <p>6. Staffs understanding of what management perceives as S.O.P. is incomplete</p>	<p>use S.E. to research and assemble</p> <p>identify sources of their commitment and insure that these favorable conditions are well maintained</p> <p>information and knowledge is available from senior staff</p> <p>motivation to learn could be very high if information is properly presented</p>	<p>improve expense level of estimating accidents</p> <p>accounting staff should look up staff on union issues</p> <p>marketing should quantify our positive characteristics; use them methodically to attract new clients</p> <p>investigate options for training the less experienced people</p> <p>a training program and company manual are possible vehicles to educate</p>

Exhibit 3
Dynamic Conditions
Internal
Strengths and Weaknesses

Financial Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness
<p>1. working capital growth is very strong</p> <p>2. bonding capacity limits ability to increase volume</p> <p>3. The financial failure of 1 large sub could wipe out a whole years earnings.</p>	<p>make sure bank; bonding comp. are kept informed</p>	<p>employing imp. of relationship to build. ins. co.</p> <p>expand use of perf. bonds with subs who are or could become marginally solvent</p>
<p>4. Egypt rental is exp. for about 50% of EDIT annually</p> <p>5. Difficult to maintain motivation to provide tracking and prediction of cash flow, productivity, retention status</p>	<p>continue to upgrade rental; inventory information systems</p> <p>capability to provide this service is available in-house</p>	<p>does it take a regular sit-down to review financials and motivate prep of suppl. info.</p> <p>Bank of consistent interest on my part?)</p> <p>staff ed., pro man, staff mtgs, monthly summary to MR. B.W.</p>
<p>6. Our clients consistently pay their bills but more pressure in house on clients could save money for WCC</p>		

Exhibit 4
Dynamic Conditions
Internal
Strengths and Weaknesses

Facilities/Equipment Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness
<ol style="list-style-type: none"> 1. attractive, well furnished, convenient offices 2. well maintained large inventory of eqpt. 3. a large fleet of eqpt for masonry and steel erection sites unused 4. conference space is available in bldg for large groups 5. computer hardware is avail for op staff to do CPM diagrams as needed for projects 6. The use of CRT terminals on site at major projects is becoming a standard in the industry 	<p>start a program inviting clients in on a regular basis</p> <p>marketing should monitor appearance on a quarterly basis</p> <p>write eqpts in for brown bag mtgs once/mo.</p> <p>eqpts; pms are evaluated on value of job planning</p>	<p>investigate mkt. value; decide whether or not to sell</p> <p>a reliable resource for CPM expertise must be established</p> <p>a plan for implementation would force us to become involved and evaluate the benefits for us</p>

Exhibit 5
Dynamic Conditions
Internal
Strengths and Weaknesses

Value/Quality Relationship	Action Plans	Manage Areas of Weakness
<p>1. Principals agree on importance of good appearance</p> <p>2. WCC image is for quality work</p> <p>3. WCC probably will not usually have the lowest price on a given project</p> <p>4. "Integrity" is an issue we can usually address successfully</p> <p>5. We rely heavily on our ability to control the bldg. process overlooking cost premium a client might incur by using WCC.</p> <p>6.</p>	<p>Capitalize on Strengths</p> <p>spend time w/ prospective clients</p> <p>reward tradesman for achievements on a regular basis</p> <p>identify its elements and use it as a powerful mkt. tool</p> <p>managements intentions for client satisfaction are well known to staff</p>	<p>Hammer home our other advantages to prospective clients</p> <p>no price issue is equalized</p> <p>these same intentions are poorly articulated making them seem mysterious in crises</p>

Exhibit 6
Dynamic Conditions
Internal
Strengths and Weaknesses

Reputation/Image	Action Plans	Manage Areas of Weakness
<ol style="list-style-type: none"> 1. WCC sells: means performance 2. project planning is our greatest asset 3. We initiated an image of being young and aggressive. How do we maintain it? 4. WCC attracts interest from competent people seeking "greener grass" 5. Past clients are our greatest asset for our reputation 6. Many people are unaware of our capabilities; success 	<p>solicit testimonials whenever possible</p> <p>improve communication w/ ex com. ; keep the fire hot</p> <p>maintain a comprehensive file on prospective employees</p> <p>most of them are very supportive</p> <p>a plethora of stellar performances are in our repertoire</p>	<p>establish continuity plan for Ralph's retirement</p> <p>contact w/ them is bit! miss. How to strengthen?</p> <p>our base line direct mail and ad program is disorganized</p>

Exhibit 1
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
Economic		Capitalize on Opportunities	Protect Against Threats
<p>1. good possibility for growth in rehab work</p> <p>2. election year could be good for multiple housing</p> <p>3. steady economy in Twin Cities should provide reasonably sufficient opportunities for aggressive marketers</p> <p>4. Recent threats to Day/Hub will probably restrict new construction spending.</p> <p>5. Loss of EC's leaves an open issue for Targets wall system</p> <p>6. Stockmarket crash, not a deficit and weak dollar make future econ. economy unpredictable</p>	<p>prepare specific mktg information</p> <p>identify operational team and develop strategy</p> <p>get marketing organized! Develop a plan to invade the "good ole boy" bastions</p>	<p>if we can fill the gap it could be an opp for new work</p>	<p>concentrate on main training their favor in Detroit. Jump on remodel program now!</p> <p>get there before our competitors</p> <p>examine: monitor oil and productivity</p>

Exhibit 2
Dynamic Conditions
External
Opportunities and Threats

Technological	Action Plans	Protect Against Threats
<p>1. Trend is toward more money and less labor on projects.</p> <p>2. early involvement in design phase is becoming expected by more owners</p> <p>3. Target is dropping use of EC's panel</p> <p>4: Our operations people are limited in their exposure to new technology in industry.</p> <p>5. Rising need for communication and documentation by PM's and project mgt</p> <p>6. more polished and professional marketing materials are the trend</p>	<p>Capitalize on Opportunities</p> <p>increase awareness of architect needs; ex. presentations</p> <p>Take advantage of new products for use in our proposals and prequalification pieces.</p>	<p>Pay more attention to club relationships w/ major subs</p> <p>emphasize development of early design scheduling techniques</p> <p>Develop proficiency in use of site cost panels</p> <p>Begin a technical training program for supts; PM's</p> <p>Use CRT's to communicate data between office & project sites</p>

*

Exhibit 3
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
Social		Capitalize on Opportunities	Protect Against Threats
<p>1. Age of principals becoming closer to buyer age groups</p> <p>2. drastic increase in aged population</p> <p>3. Most clients react positively to w/c principals' efforts to form personal relationship</p> <p>4. some very desirable clients are loyal to our com-petitors</p> <p>5. Often times, "who you know" gets you the job.</p> <p>6. Peggy and Cappie enjoy having clients to house</p>	<p>infiltrate peer groups thru associations and social opportunities</p> <p>explore this groups needs for facilities</p> <p>explore feasibility of associating w/ a health care manager</p> <p>Ensure that principals are servicing these relationships on a regular basis</p> <p>Examine means for getting personnel to consciously form new relationships</p> <p>Keep an ongoing program of entertainment</p>	<p>Identify the "not-a-chance" situations and work out a strategy to chip away at them.</p>	

Exhibit 4
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
<p>Governmental</p> <ol style="list-style-type: none"> 1. agencies such as Park Ser. v. Port Authority and WDA becoming more instr. in dev. proj's 2. public projects are infrequent and heavily bid 3. High tax base in the will prevent area from realizing full growth potential 4. Increased pressure on contractors to take care of employees exposed to potential health threat. 	<p>concentrate on marketing strategy involving those agencies</p> <p>Local manufacturers may build elsewhere. Learn where & when</p>	<p>concentrate marketing effort on privately financed developments</p> <p>Identify employee responsible for meeting current standards to avoid liability</p>

Exhibit 5
Dynamic Conditions
External
Opportunities and Threats

Principal Customer(s)/Geography	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
<ol style="list-style-type: none"> 1. 3 major clients build nationally 2. consistent opp's in St. Paul 3. 	<p>Aire roofing reports</p> <p>increase our familiarity w/ St. Paul market</p>	<p>exploit opp's to work out of town</p>

Exhibit 6
Dynamic Conditions
External
Opportunities and Threats

		Action Plans	
		Capitalize on Opportunities	Protect Against Threats
Suppliers and/or Subcontractors/Geography	<p>1. The sure of mpls subs in Detroit hasn't been good</p> <p>2. We may soon need support from subs in Pac. N.W.</p>		<p>Campaign to raise our profile in Detroit</p> <p>Exhibit community</p> <p>Begin strategy to word familiarization w/ that market</p>

Exhibit 7
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
<p>Competitors/Geography</p> <p>Other contractors in Detroit probably not as sophisticated as WCC</p> <p>Level of competence of Mpls A.C.'s uniformly high</p>	<p>Market for other Detroit work</p>	<p>Define WCC's capabilities that make us unique</p>

Exhibit 8
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
<p>Markets/Geography</p> <p><i>Consistent steady mkt in Twin Cities</i></p> <p><i>Bonding co. very jumpy about geographic diversification</i></p>	<p><i>Plan for growth thru further local market penetration</i></p>	<p><i>Keep them current w/ opportunities we are considering</i></p>

Exhibit 1
Dynamic Conditions
Internal
Strengths and Weaknesses

People Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness

Exhibit 2
Dynamic Conditions
Internal
Strengths and Weaknesses

Knowledge Base	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness

**Exhibit 3
Dynamic Conditions
Internal
Strengths and Weaknesses**

Financial Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness

Exhibit 4
Dynamic Conditions
Internal
Strengths and Weaknesses

Facilities/Equipment Resources	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness

Exhibit 5
Dynamic Conditions
Internal
Strengths and Weaknesses

Value/Quality Relationship	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness

Exhibit 6
Dynamic Conditions
Internal
Strengths and Weaknesses

Reputation/Image	Action Plans	
	Capitalize on Strengths	Manage Areas of Weakness

Exhibit 1
Dynamic Conditions
External
Opportunities and Threats

Economic	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

Exhibit 2
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
	Capitalize on Opportunities	Protect Against Threats
Technological		

Exhibit 3
Dynamic Conditions
External
Opportunities and Threats

Social	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

**Exhibit 4
Dynamic Conditions
External
Opportunities and Threats**

Governmental	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

Exhibit 6
Dynamic Conditions
External
Opportunities and Threats

Principal Customer(s)/Geography	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

Exhibit 6
Dynamic Conditions
External
Opportunities and Threats

Suppliers and/or Subcontractors/Geography	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

Exhibit 7
Dynamic Conditions
External
Opportunities and Threats

Competitors/Geography	Action Plans	
	Capitalize on Opportunities	Protect Against Threats

Exhibit 8
Dynamic Conditions
External
Opportunities and Threats

	Action Plans	
Markets/Geography	Capitalize on Opportunities	Protect Against Threats

RALPH J. STEPHENSON, P. E.
CONSULTING ENGINEER

QUESTIONS TO BE ASKED

- 1) WHAT? -- What is the scope of the activity?
 -- What is the standard of performance?
 -- What are our objectives?
 -- What are our goals?
 -- What is needed to start?
- 2) WHERE? -- Where will the work take place?
- 3) WHEN? -- When does the work start?
 -- When is the work supposed to finish?
 -- When will the work be completed?
- 4) HOW? -- How do I know when the job is done?
 -- How do I know if we've done a good job?
 -- How do I get out of the job when it's done?
- 5) WHO'S? -- Who's responsible?
 -- Who's in charge?
 -- Who's doing the work?
 -- Who's liable?
 -- Who's in charge for my client?
 -- Who's the ultimate decision maker? (UDM)

Ralph J. Stephenson PE PC
Consulting Engineer

February 7, 1988

TRADITIONAL PROJECT DELIVERY SYSTEM
CHARACTERISTICS

1. Checks and balances normally built in from start
2. Construction decisions usually based on capital costs
3. Participant selection often made by cost competitive bidding
4. Job control is highly centralized in most stages
5. Project usually being built for owner/users
6. Contract documents completed before bidding
7. Bidder selected from short list derived from long list (occasionally use long list)
8. Bonding is often required
9. Site preparation and expense work often by owner before construction starts

Note - Expense work includes those costs that do not directly affect (increase) life or value of the facility.

10. Majority of attention given to the need and want list. Wish list usually considered a luxury.

Ralph J. Stephenson PE PC
Consulting Engineer

NON TRADITIONAL PROJECT DELIVERY SYSTEM
CHARACTERISTICS

1. Checks and balances evolve as project proceeds and when need arises.
2. Construction decisions based on capital costs, maintenance costs, operating costs, project quality desired, and desired investment return.
3. Lead participant selection made on professional and technical abilities, and on reputation and past performance, along with cost as a secondary consideration.
4. Job control somewhat decentralized during early program and design stages with progressive centralization as the working document and construction phases are approached.
5. Project could be for a variety of conceivers and prime movers including owners, users, investors, developers, funds, syndicates, governmental agencies (privatization), and groups assembling capital to gain desired returns on investment.
6. Construction is often closely dovetailed with design of the project. Design usually proceeds with construction guidance and advice from a construction discipline.
7. Capital cost is often negotiated from the pro forma base and reduced in stages to a guaranteed maximum price (gmp).

Ralph J. Stephenson PE PC
Consulting Engineer

8. Need for bonding ususally minimized or eliminated by careful selection procedures to maximize probability of success.
9. Site preparation and expense work often done by various members of the selected project or program team.

Note - Expense work includes those costs that do not directly affect (increase) life or value of the facility.

10. Design and construction heavily influenced by consideration of the needs, wants and wishes of the participants.

ho 292 - Jan, 88

ELEMENTS OF THE LINE OF ACTION

The line of action is a simple statement of the range of tasks necessary to conceive, design, build and operate an environment. The line begins at a point referred to as the recognition of need with these actions following:

- Conceive
- Program
- Articulate
- Approve
- Design
- Construct
- Turnover
- Operate
- Maintain

These all culminate at an end point called discharge of environmental design and construction responsibility. A brief description of each step is appropriate in understanding their importance to the total design and build concept.

Recognition of need is the point at which a requirement for a new environment is first felt. The good design build operation tries to become involved in this creative stage. There is a danger of getting in too early and giving away so much of the early work that the job may be lost through over-exposure at a later date. However, recognition of needs is the starting point and the sales activity starts here. Taking the points in order -

- | | | |
|----------|---|--|
| Conceive | - | <p>During the conceptual period the need which may be for increased facilities, larger dollar volume, more efficient handling systems or a variety of other demands is visualized and put down in some rough form. It may be a pencil sketch or may remain an idea in someone's mind. Here the project sees its origin and it is this early idea that often carries through the entire project. A good conceptual grasp is essential if the project is to be successfully completed.</p> |
| Program | - | <p>During the programming phase, the needs of the concept are put into easily understood tabular form so many square feet for storage, so many square feet for office, so much height for shipping facilities, etc. The actual physical demands of the environment are set forth in the project program or project bible.</p> |

- Articulate** - Now the concept and program are combined into preliminary construction language. Floor plans are drawn in accordance with requirements. The functional arrangement is shown in accordance with the project bible. Materials are called out in terms of the demands of the concept.
- Approve** - This is a critical point in the line of action. By now sufficient work has taken place so the manager can understand the project and say: "I like this or I don't; change this, revise this; let's increase that a bit; let's cut down here." Finally saying: "OK, I'm satisfied with this set of ideas showing the concept and the program - let's move on!" Approval unlocks the design and construction period.
- Design** - In the design phase, products of the previous four steps are utilized concurrently to prepare a set of working drawings and specifications that translate concept into steel, concrete and space.
- Construct** - Next, the actual environment is built. Construction is the first point where something major and tangible happens as a result of the concept.
- Turnover** - When the project has been built, it is turned over with the appropriate operating manuals to the owner or tenant. Turnover is an important step since if done properly it insures that a valuable commodity, the completed environment, is properly given to those who must use it.

Neglect of good turnover procedures is often the cause of serious callback problems. We certainly wouldn't turn a complex piece of machinery over to

Turnover - (Continued)

an amateur operator and expect he would make it perform 100% right from the start. Neither should we assume that an owner can take a new environment that has just been built for him and immediately operate it at full efficiency. Time should be spent during turnover to explain how this environment is to function.

Operate -

The environment is now run-in and begins to achieve its full purpose. Operation can be an important responsibility although the design/build contractor should furnish his operational functions in connection with a new environment only on a paid contract arrangement and provided he is competent to operate the facility.

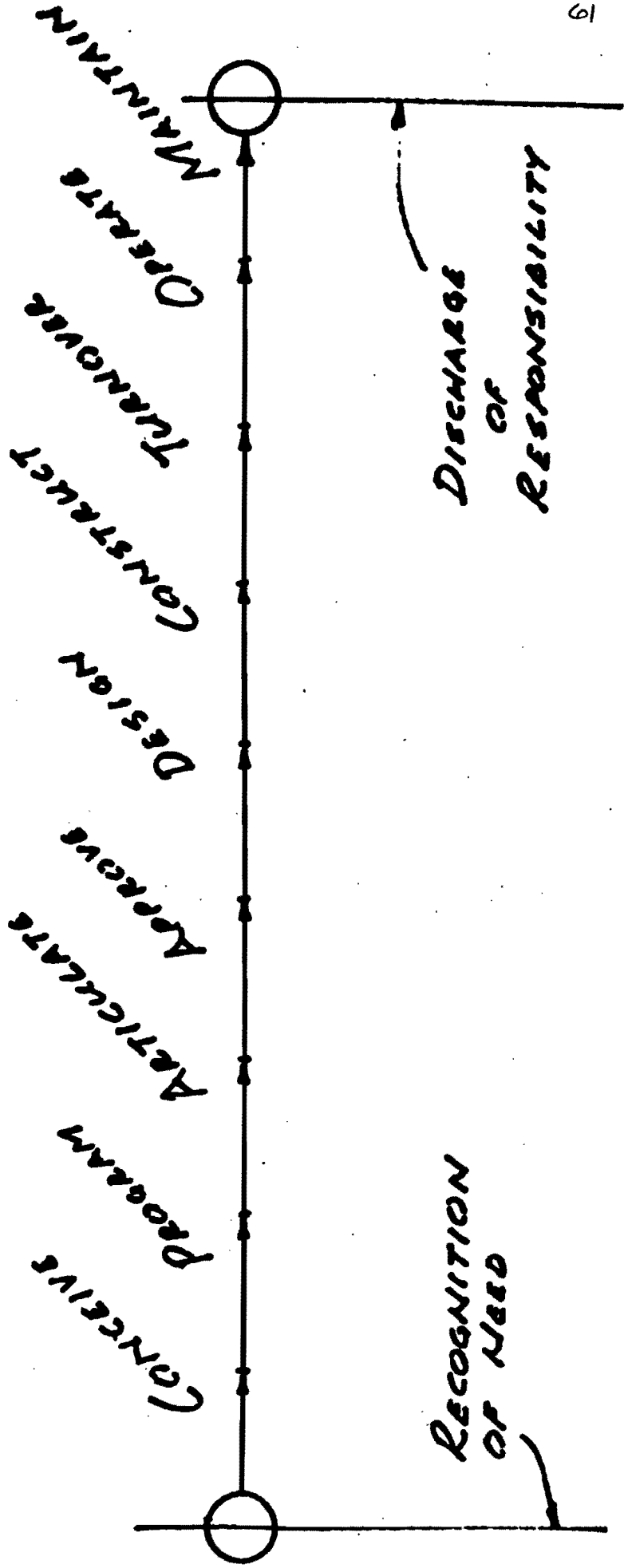
Maintain -

Maintenance of the physical environment is the door opener for future projects. It also assures that the environment that has been nursed through the previous eight stages will be maintained correctly so as to work at its best for those who must use it. The maintenance contract is perhaps one of the least explored areas in the more sophisticated approaches to environmental design and construction.

The end of the line of action is when the designer and builder of environments has discharged his responsibilities. In a continuing trustworthy relationship, the line of action will have no end since before it is finished, a competent professional will be re-involved in another program at its beginning.

RALPH J. STEPHENSON, P. E.
CONSULTING ENGINEER

DS 2/4/72



LINE OF ACTION



Ralph J. Stephenson PE PC

PARTICIPANTS IN DESIGNING & BUILDING ENVIRONMENTS

There are five basic participants in the process of designing and building environments. These are the conceiver, the translator, the constructor, the operator and the regulator.

Conceivers - Those who conceive the idea and provide the wherewithal to bring the environmental program to a successful conclusion. The conceiver may be the owner but it also might be a governmental agency, a financial source, an architect, an engineer, a contractor, a vendor or a potential tenant looking for space. We identify the conceiver since he usually is the key person driving the project on to completion.

Translators - Those who translate the environmental program into construction language. Traditionally we think of the architect/engineer as the translator. However careful consideration of this matter shows there are many others who translate the conceiver's fundamental ideas into understandable, workable construction language. Subcontractors, suppliers, vendors, manufacturers, contractors and the conceiver may all play a role in translating.

Constructors - Those who interpret the construction language and convert it to a actual physical environment. Occupying this role are general contractors, specialty contractors, vendors, suppliers, manufacturers, artists and others who actually put the materials into place in the field.

Operators - Those who operate and maintain the completed physical environment on a continuing basis. Ususally the party responsible for this function is an owner or tenant working through a plant or facilities manager.

Regulators - Those who fill a review & inspection position to help insure protection of the health, safety & welfare of the people. This is usually done by enforcing regulations written and adopted by qualified public or private bodies. Examples of regulators include those who work for building departments, departments of natural resources, public health agencies, fire prevention organizations, technical societies and other such groups.

* * * * *

Identification of the parties to a project is important because it assists in defining the important individuals & organizations involved, their functional authority and responsibility so that optimum use can be made of their participation and assistance.

no 268 - 1/2/87

DESIGN/BUILD MATRIX

ACTIONS →

FUNCTIONS ↴

	A	B	C	D	E	F	G	H	I
	CONCEIVE	PROGRAM	ARTICULATE	APPROVE	DESIGN	CONSTRUCT	TURN OVER	OPERATE	MAINTAIN

1	SALES									
2	ENGINEERING									
3	ARCHITECTURE									
4	ESTIMATING									
5	REAL ESTATE									
6	FINANCE									
7	LEGAL									
8	GRAPHICS									
9	CONSTRUCTION									
10	MAINTENANCE									
11	MANAGEMENT									

RALPH J. STEPHENSON, P.E.
Copyright Reserved

64

Characteristics of a Contract

A. Quality of Arrangements Possible

- 1. Negotiated - value competition only
- 2. Qualified - limited multiple - value competition possible
- 3. Unqualified - single value competition demanded

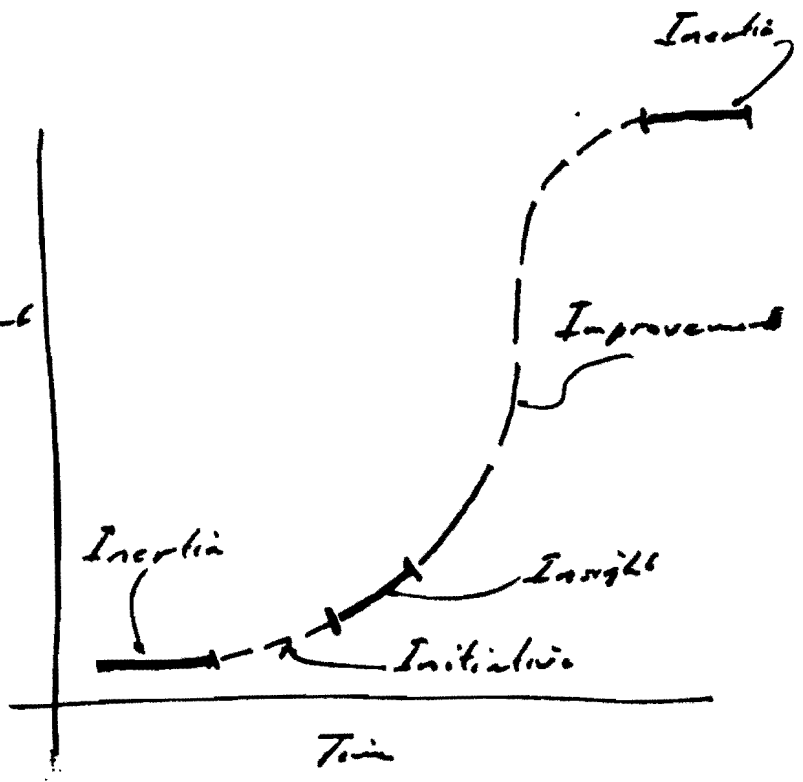
B. Services & Materials Provided

- 1. Provide all labor, material and management
 - 2. Provide some labor, material and management
 - 3. Provide management only
 - 4. Provide material only
 - 5. Provide labor only
- a. Limited trades
b. All trades

C. Type of Contract Possible

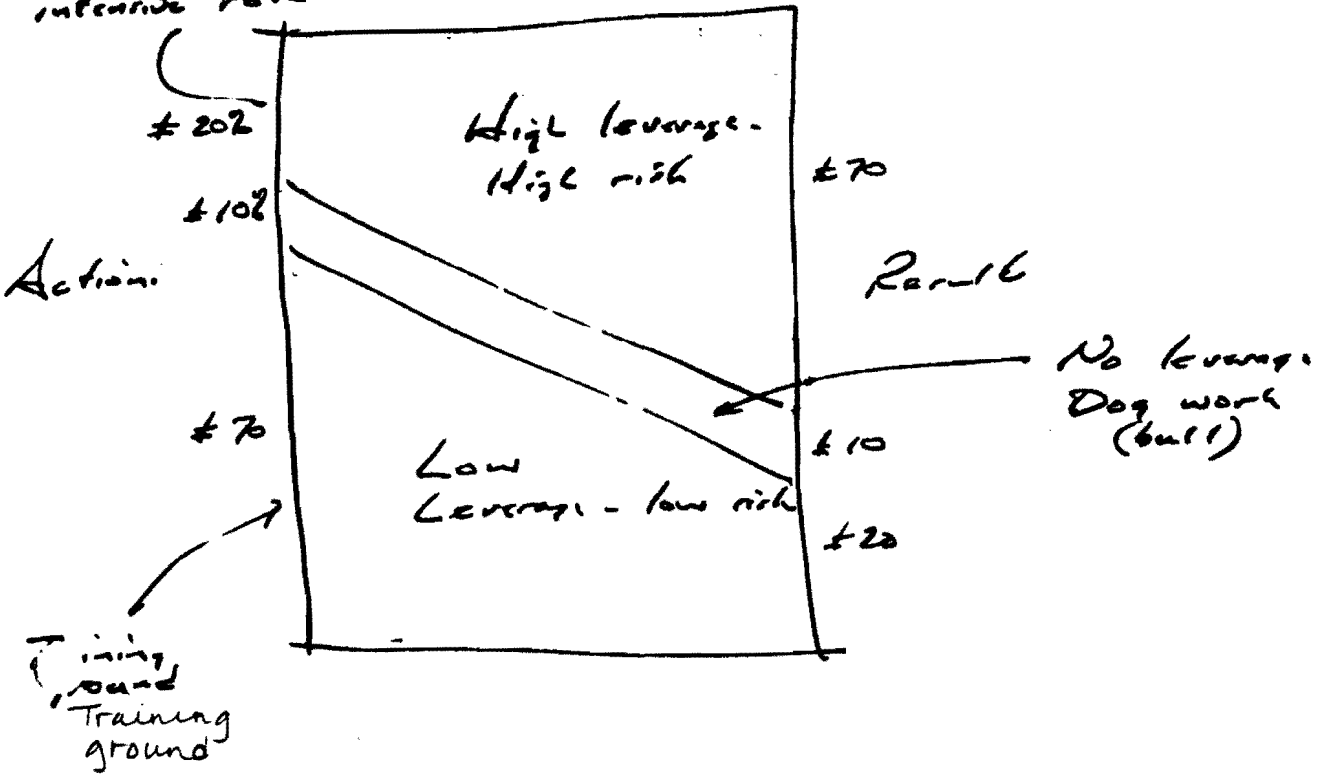
- 1. Fixed cost - limited trades
 - 2. Fixed cost - all trades
 - 3. Fixed cost - limited trades plus fee for other trades management
 - 4. Time and material plus fee - limited trades
 - 5. Time and material plus fee - all trades
- a. With upset price
b. With upset price and shared saving
c. With no upset price

Level of accomplishment of program



The Learning / Knowing Improvement / Program cycle

Where the manager plays a continuous increase rate



Training ground

Summary of the Nine Master Keys of Management

(Adapted from the Nine Master Keys of Management
by Lester R. Bittel)

Three requirements of the good manager

- A. Acquire a discerning (unique) point of view
- B. Follow an effective mode of action
- C. Employ a sensitive touch in interpersonal relationships

A Discerning Point of View

Action #1 - Apply situational thinking

Result #1 - Your decisions will be more objective and less impulsive

Action #2 - Identify vital targets

Result #2 - You'll quickly recognize turning points in critical situations

Action #3 - Prepare for the probable

Result #3 - You'll be less flappable in difficult situations

An Effective Mode of Action

Action #4 - Focus on performance criteria

Result #4 - You'll better satisfy yourself and your superiors

Action #5 - Act from a plan

Result #5 - You'll be able to get projects under way quickly and with certainty

Action #6 - Manage by exception

Result #6 - You'll accomplish more work than you ever thought possible

A Feeling for People

Action #7 - Develop your confidence in others

Result #7 - You'll find that people cooperate more freely

Action #8 - Employ the power of training

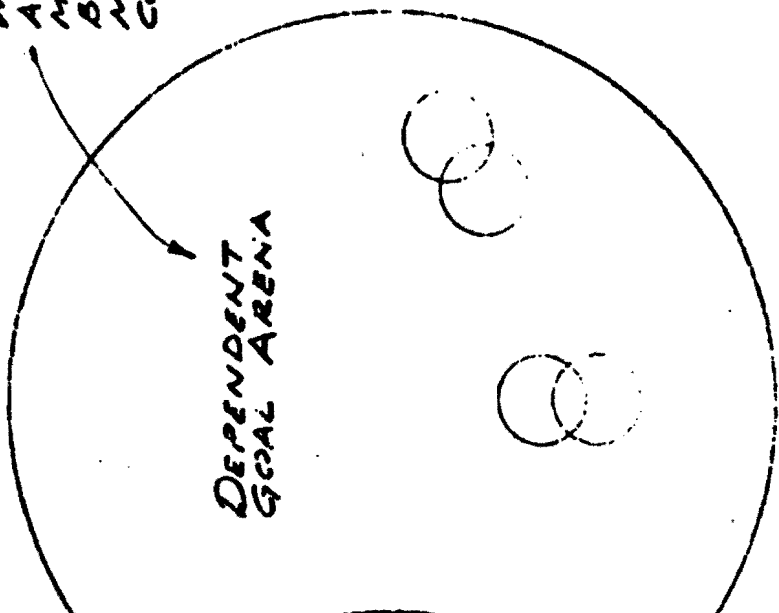
Result #8 - You'll find that employee attitudes improve

Action #9 - Know your true self

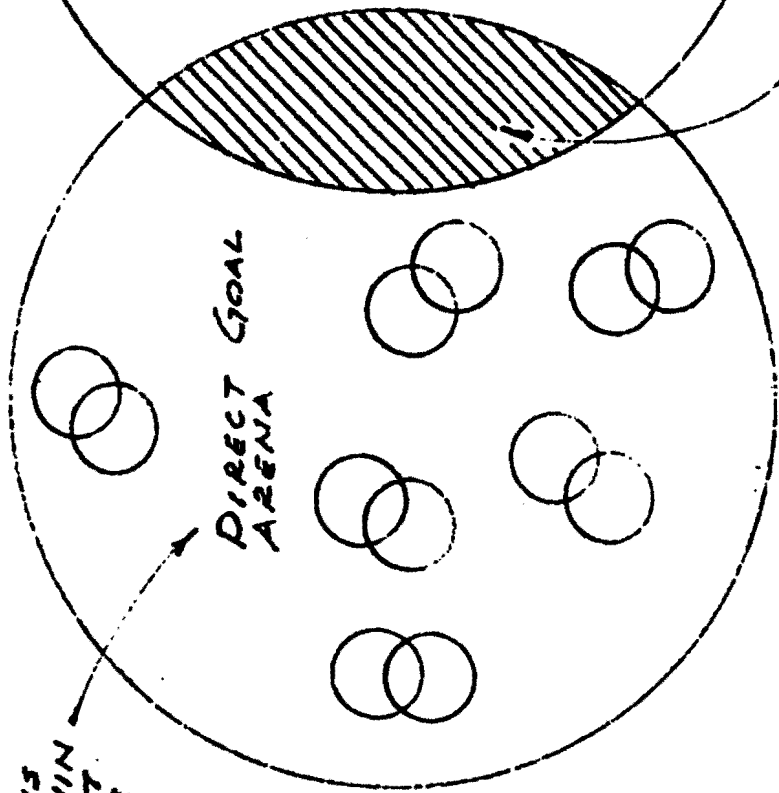
Result #9 - When you truly comprehend your whole self you'll find people responding to your ideas more directly and often more favorably

Remember: If you don't care who gets the credit,
you can accomplish anything.

TARGETS TO BE
ACHIEVED BUT
WHICH ARE
AFFECTED BY
MAJOR INFLUENCES
BEYOND THE
MANAGER'S
CONTROL

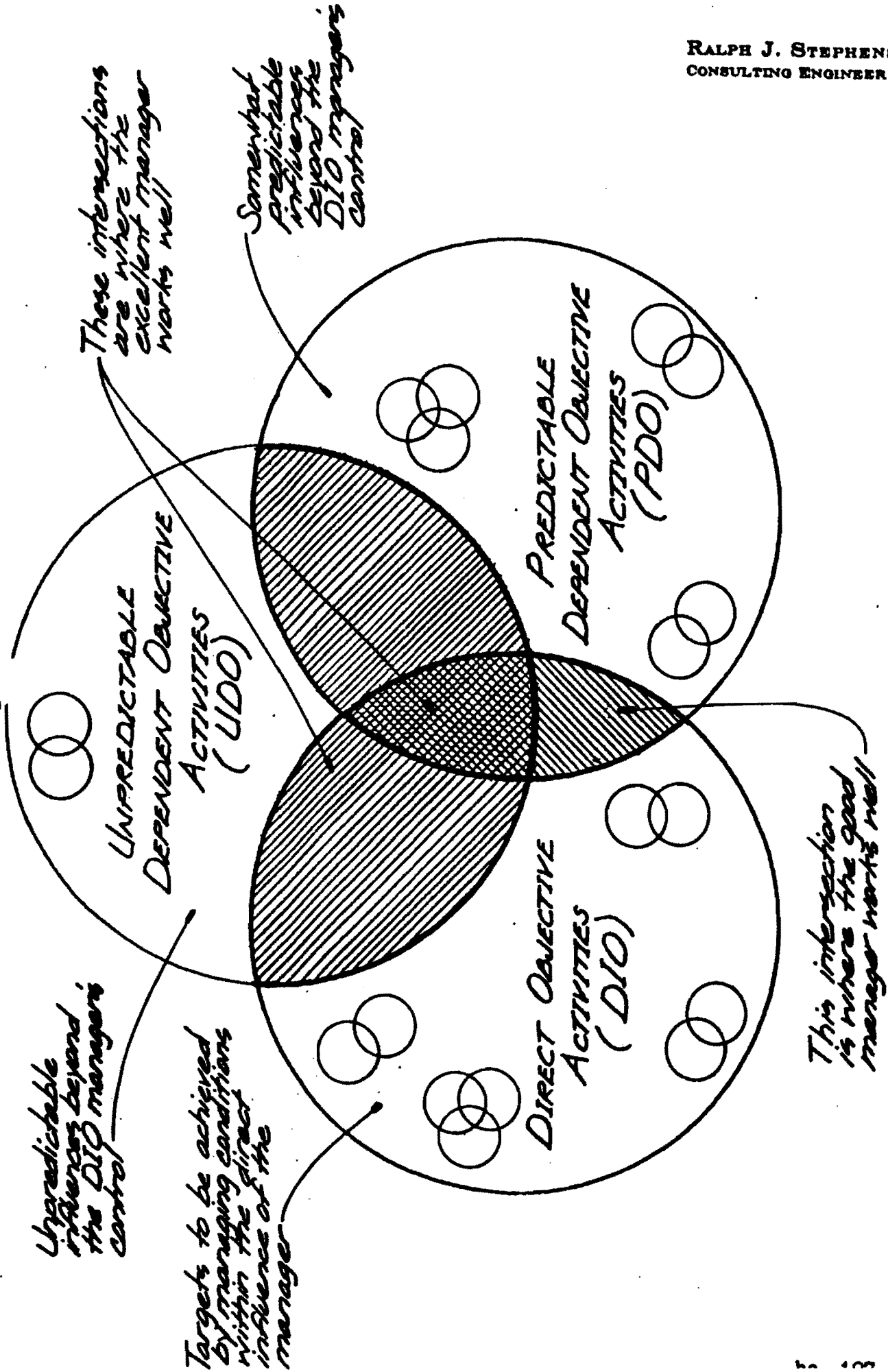


TARGETS TO BE
ACHIEVED BY
MANAGING
CONDITIONS
WELL WITHIN
THE DIRECT
INFLUENCE
OF THE
MANAGER



THIS INTERSECTION IS
WHERE THE GOOD PM
IS USUALLY FOUND TO
EXCEL; MANAGING THE
INTERFACES BETWEEN
DIRECT GOALS & DEPENDENT
GOALS.

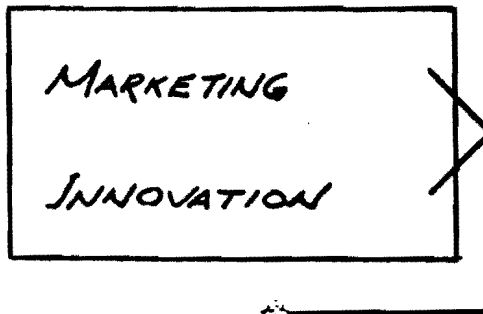
THE DIG/DEG INTERSECTION



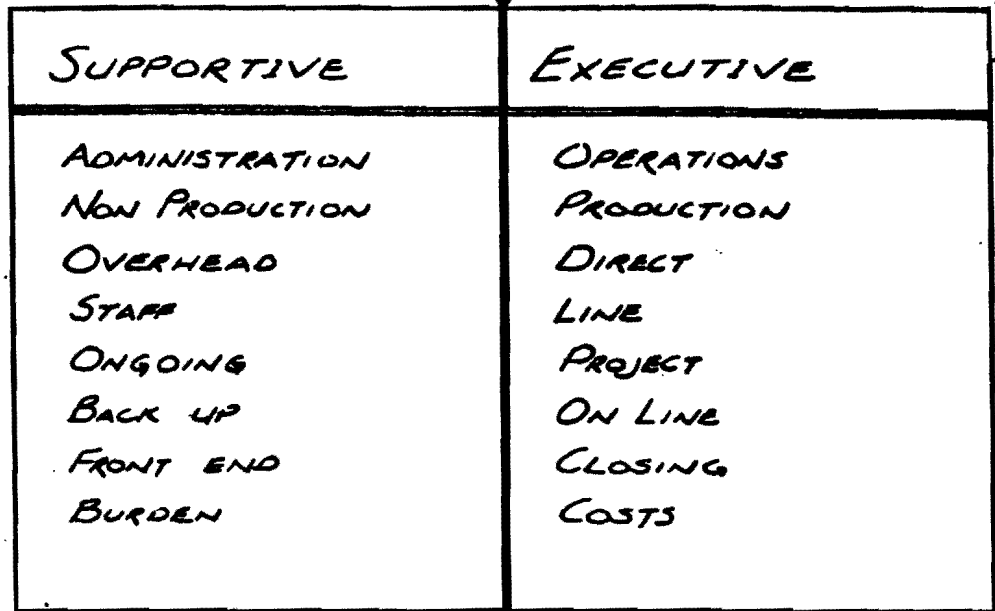
THE DIO/PDO/UDDO INTERSECTION

ELEMENTS OF BUSINESS & MANAGEMENT

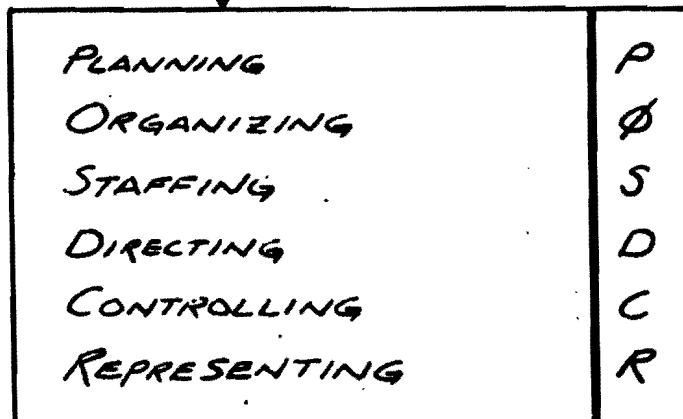
PRIME
FUNCTIONS



BUSINESS
ACTIVITIES

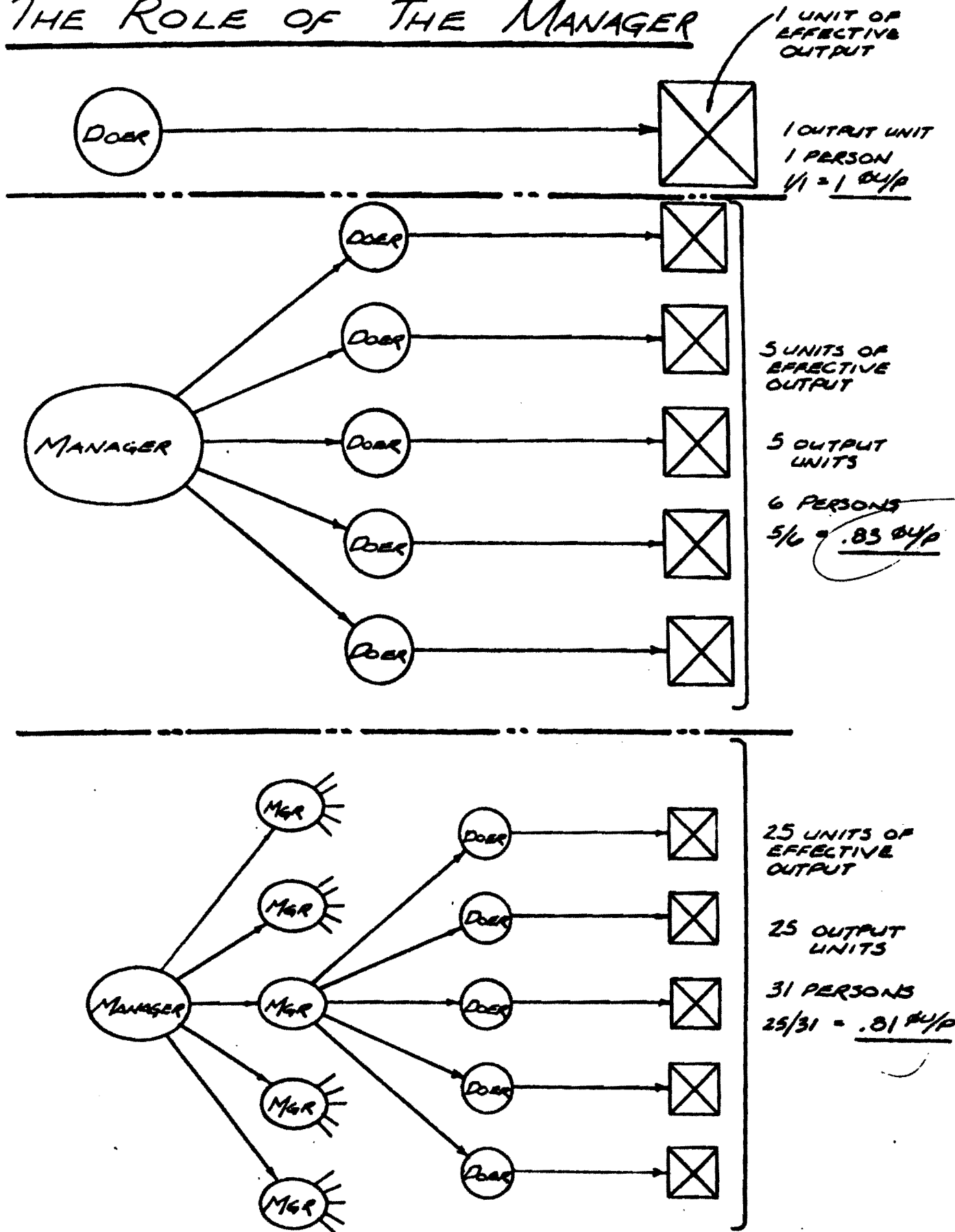


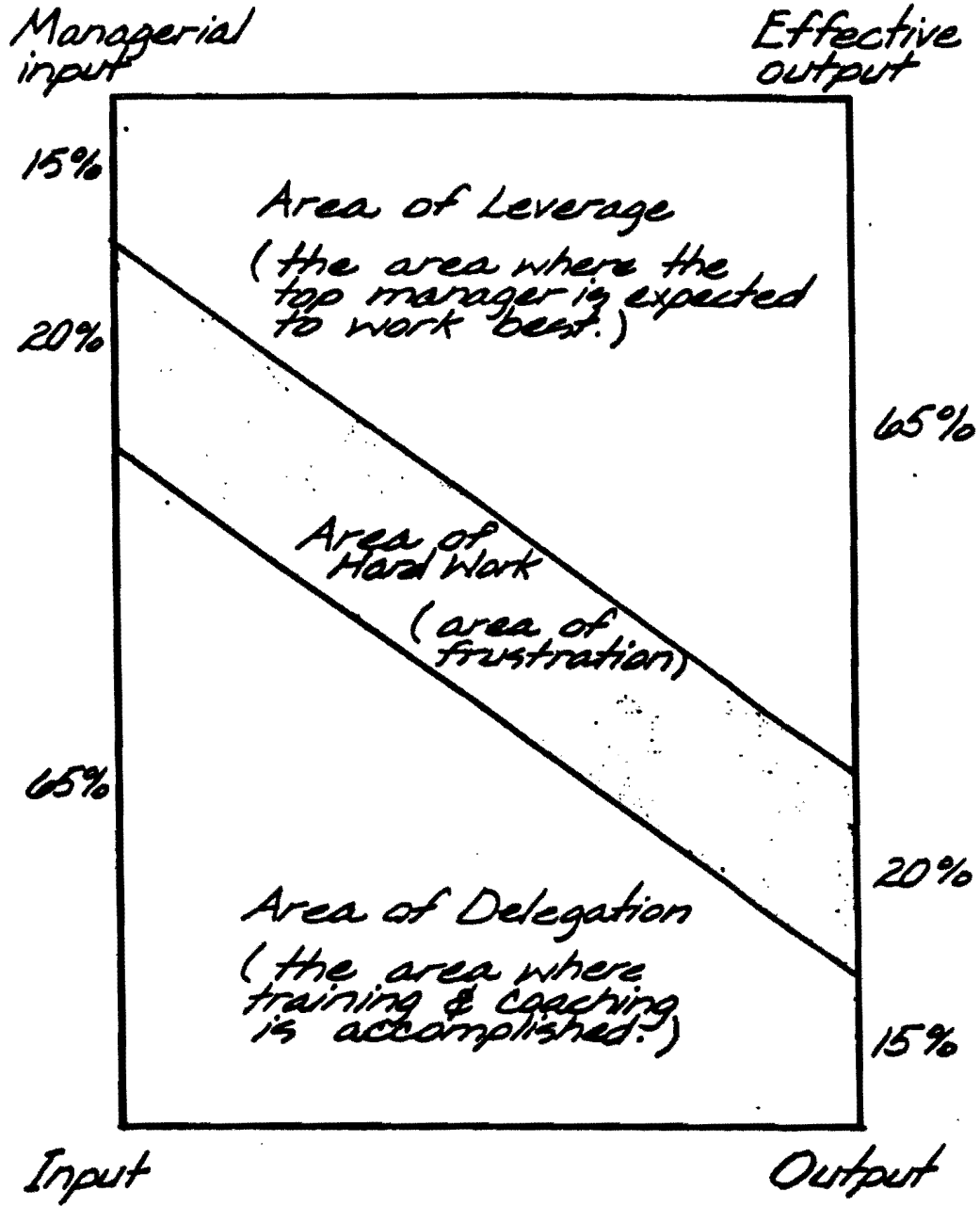
MANAGEMENT
ACTIONS



RALPH J. STEPHENSON, P. E.
CONSULTING ENGINEER

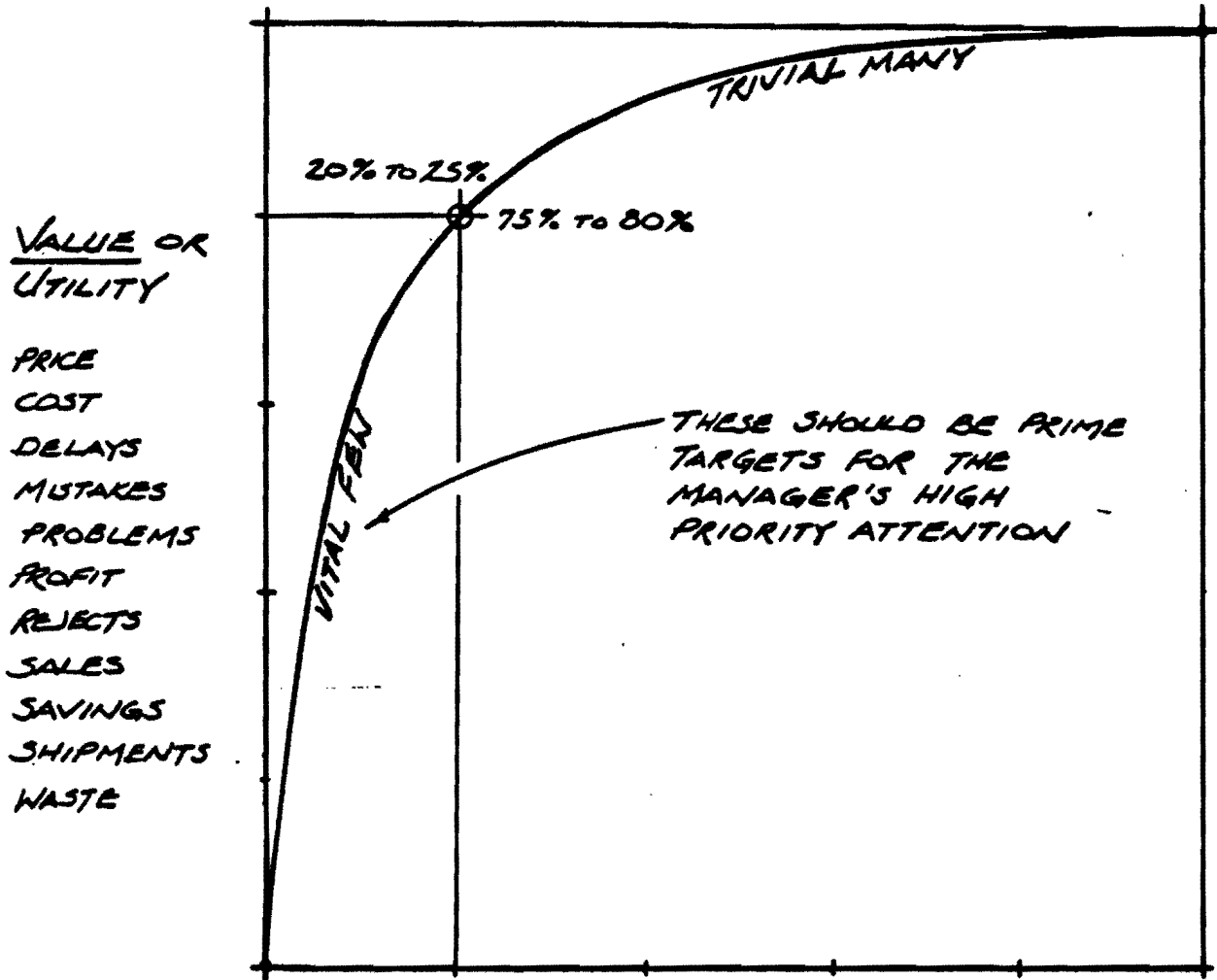
THE ROLE OF THE MANAGER





MANAGERIAL LEVERAGE

PARETOS LAW - IN AN OBJECT/VALUE SITUATION ONLY A FEW OF THE OBJECTS ACCOUNT FOR THE GREATEST PART OF THE VALUE.

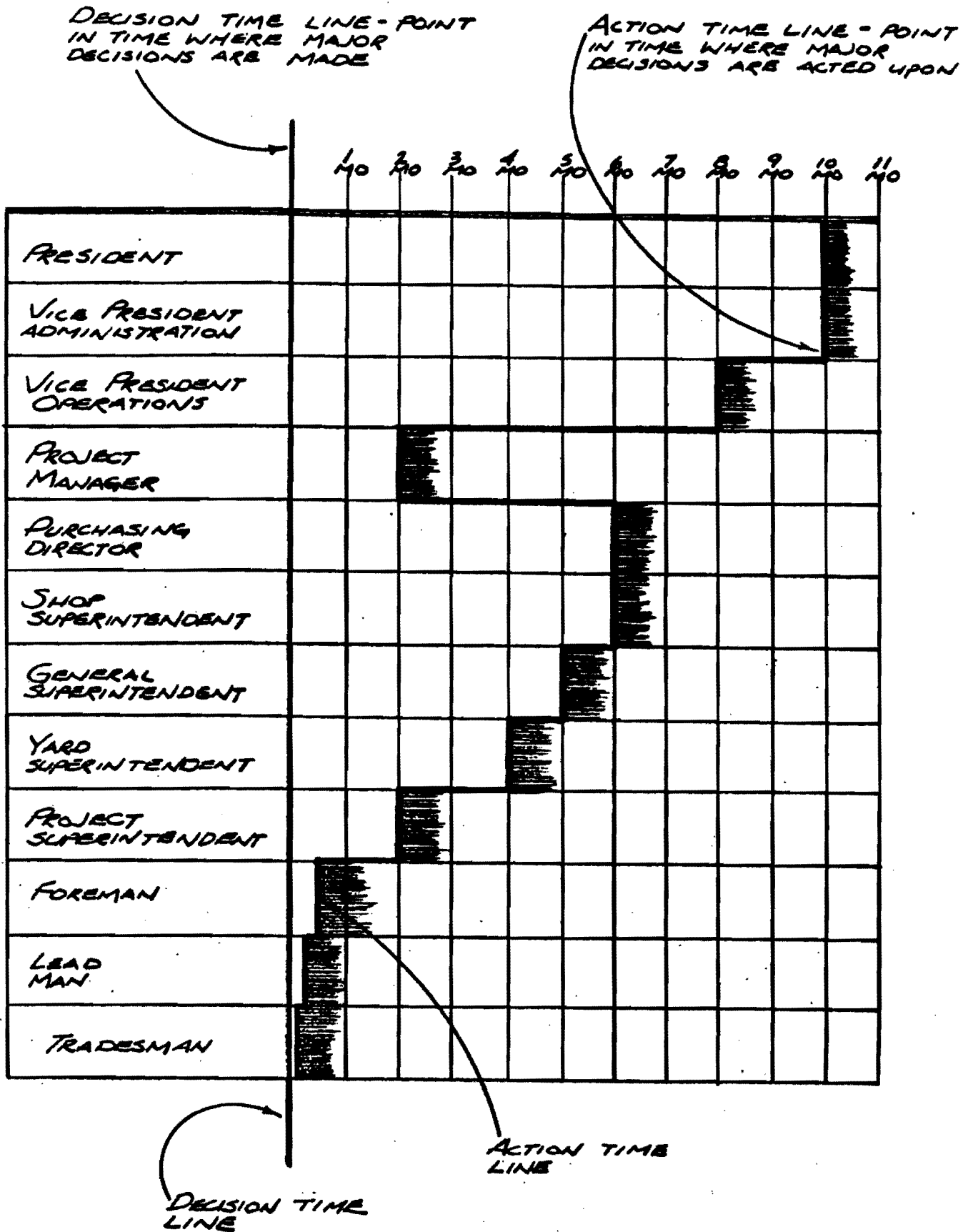


OBJECTS OR RESOURCES

- | | |
|------------|-------------|
| ACTIVITIES | MATERIALS |
| CAUSES | METHODS |
| OCCURANCES | PRODUCTS |
| PROBLEMS | SALES CALLS |
| RESOURCES | SERVICES |
| PRODUCTS | STAFF |
| DECISIONS | |
| FACILITIES | |

RALPH J. STEPHENSON, P.E.
CONSULTING ENGINEER

DECISION TO ACTION TIME SPAN



**Ralph J. Stephenson PE PC
Consulting Engineer**

Decision to action time span explanation

In a well managed company the decision making process should be spread over a proper time span as well as among the appropriate people and groups of people. A decision to action time span chart shows the time dimension between the point where a decision is made and where the decision is acted upon.

Who makes the decisions and who acts on them is another phase of management that is an integral part of the full decision making process. The handout shown here displays the decision maker role for a medium large company with several departments or divisions. Time spans for larger or smaller firms will vary from these. For example in a small construction company doing \$15 million volume per year, the president's decision to action time span may only be 4 to 6 months. The variance is generally a function of the degree of involvement by the deciding individual or group.

Good grading of the decision to action time will help assure that the organization has assigned the responsibility for decision making at the proper management level. This assurance leads to proper assignment of tasks and operations at lower levels of management, and to identification of responsibility and matched authority.

In summary the benefits of preparing a decision to action analysis for your firm are:

1. Helps identify responsibility for short, medium and long range planning.
2. Encourages proper assignment of activities to those who are responsible for implementation of decisions
3. Helps identify the people and groups best equipped to make decisions and to implement the decisions
4. Forces careful evaluation of all time scale decisions by showing the time waste potential of a wrong decision
5. Makes all levels of management aware of their importance in executing decisions made at other management levels.

PREPARE FOR THE PROBABLE - Optimism, skepticism, and conservatism are ingredients a good manager knows how to mix and use, as a good cook knows how to prepare and serve food.

- A. Over optimism is often the manager's enemy. It can blind him to the true needs for success.
- B. Over pessimism is usually the manager's paralyzer. Improperly administered it makes action possible only DESPITE the pessimist.
- C. A manager simply cannot afford to be surprised by the unexpected event.
- D. An understanding of the statistics of happenings is essential if you are to manage well.
- E. Several distribution patterns are seen in happenings.
 - 1. Normal distribution
 - 2. Poisson distribution
 - 3. Binomial distribution
- F. Statistics are important to effective production.
- G. Pareto's law is an example of a distribution
- H. Normal distribution says that in every situation there are two extremes and a range of possibilities in between.
 - 1. Dice - 2's, 3's, 11's, 12's come up less frequently than 4's
 - 2. Distribution can be
 - a. Skewed
 - b. Tall
 - c. Flat
 - d. Symmetrical
- I. Flat distribution - A large number of things go wrong over a long period of time. Deterioration of the situation is slow and often difficult for the manager to see. Hard to get a fix on. Anything can happen. The long run ultimately proves the distribution.
- J. Tall distribution - When things go wrong they go wrong quickly. Deterioration is rapid and visible. Instability is easy to detect but usually failure occurs before the mediocre manager can do anything about it.
- K. Several common managerial failings result from not understanding the meaning of chance and probability.
 - 1. The relation of luck and good fortune is not recognized.
 - 2. Over optimism casts a false glow on the situation. It may blind the manager to his true chance for success.
 - 3. Subjective temptations such as ego, greed, and false pride tend to over feed ambition.
 - 4. The manager may tend to lose his cool. (When things are going wrong and you have overextended yourself, pull back temporarily, and objectively evaluate the situation).
 - 5. You may tend to become overprotective and become fearful of risk even when the odds are good in favor of success.
- L. Stabilizing your judgements - Use the knowledge of normal expectancies to guide your actions.
 - 1. Set your priorities in terms of the probable rather

than the merely possible. Always try to work from a position of strength.

2. Set attainable goals and objectives. Don't set them too high for either yourself or others.

3. Build safeguards into your plans.

4. Prepare fall back positions. These are merely preselected alternate plans of action.

5. Avoid demands for perfection. All statistical reasoning rules against its achievement.

pre pbl,d156, ho227

EMPLOY THE POWER OF TRAINING - A manager multiplies his own knowledge and skills when he teaches them to others

1. Unguided learning will occur, but it is random, inexact, wasteful and tends to encourage bad habits
2. Good training usually results in good staff performance
3. Good staff performance allows the manager more time to concentrate on his major activities - planning, scheduling, initiating, directing and controlling
4. The need for good training is ongoing irrespective of how good or bad times are
5. The excellent manager will usually try to teach what he knows to those who wish to learn
6. The improvement cycle - inertia, initiative, insight, and improvement
 - a. Inertia is resistance to change, and initiative is its removal as a barrier to learning
 - 1.) Reasons for inertia
 - a.) Fear for safety
 - b.) Fear for security
 - c.) Concern for comfort
 - d.) Doubts about ability
 - e.) Old habits and attitudes
 - f.) Dislike for schooling
 - g.) Preoccupation with other problems
 - 2.) Overcoming inertia
 - a.) Use motivation to get going - habit to keep going
 - b.) Motivation must be mainly furnished by supervision
 - c.) Neutralizing fear
 - (1.) Show that others similar to the subordinate have benefited from learning
 - (2.) Show that added skills give more, not less, security through added employee value
 - (3.) Acknowledge doubts as to aptitude or potential
 - (4.) Criticize constructively and express willingness to tolerate learning mistakes
 - d.) Show the employee that training will be truly relevant; that what he learns can be used now, for his and the company's benefit
 - e.) Plan the training so the learner is rewarded with a quick and simple success experience
 - b. Insights: key elements of a subject that deal with the intellectual, the physical and the procedural requirements of learning
 - 1.) Intellectual insights - those that concern the whole concept of what is to be learned
 - 2.) Physical insights - those that concern getting the physical feel of the process - the touch, tone, heft and smell of the job
 - 3.) Procedural insights - those related to

- sequential demands of the operation
- c. Improvement - Accelerated learning gained by overcoming inertia, taking initiative, gaining insights. Should be encouraged by
- 1.) Applying learned principals through exercises
 - 2.) Stepping up challenges by increasing the level of difficulty
 - 3.) Accelerating the flow of learning challenges until the rate of improvement levels off (this may constitute a return to the inertia plateau and signal the need for a new progress cycle)
7. The learning curve
- a. As output or quantity doubles there is a uniform % drop in the time needed to produce this output
 - b. Some observed rates of learning
 - 1.) Machining - 90 to 95%
 - 2.) Short cycle bench assembly - 85 to 90%
 - 3.) Equipment maintenance - 75 to 80%
8. Various types of teaching and learning
- a. Training - is vocational and procedural
 - b. Education - teaches principles that can be universally applied
 - c. Coaching - depends upon guided dialogue between teacher and learner
9. The phases of a training program are planning, instruction, evaluation
- a. Planning
 - 1.) Survey and analyze needs
 - 2.) Identify and analyze key learning need points
 - 3.) Select training methods
 - 4.) Prepare the training outline
 - b. Instruction
 - 1.) Capture interest and arouse initiative
 - 2.) Give insights
 - 3.) Accelerate improvement
 - c. Evaluation
 - 1.) Review progress
 - 2.) Evaluate results
 - 3.) Make plans to overcome the next inertia plateau

pwr trg, d156, ho 230

SEMINARS AVAILABLE

<u>Dates/Locations</u>	<u>Title of Seminar</u>	<u>Directed toward</u>	<u>Presented By</u>
<u>Ongoing</u>			
1 Session/month - Mpls. Year round	Effective Telephone Communications	Receptionist/ Secretaries	Northwestern Bell
Contact for Info - Mpls.	Various Computer Seminars - Intro to Lotus - Intermediate Lotus - Advanced Lotus - Intro to dBase III Plus - Intermediate dBase III Plus - Introduction to Paradox	Anyone	Deloitte Haskins Sells
Per semester - Mpls.	Management & Leadership Computers & Information Systems Communication Marketing Finance & Accounting (Note - Several seminars offered under each of these headings. See brochure.)	Anyone	University of Minnesota

<u>Dates/Locations</u>	<u>Title of Seminar</u>	<u>Directed toward</u>	<u>Presented By</u>
Jan. 4-8 - Marco Islands, FL	Business Continuation & Management Succession	Executives	FMI
Jan. 11 - Minneapolis	Building Failures: Lessons from Past Mistakes	Project Managers	Construction Specifications Institute (CSI)
Jan. 11-15 - Madison	Effective Project Mgmt for Bldg. Design & Constrcn	Project Managers	College of Engineering U of Wisconsin - Madison
Jan. 22-23 - Minneapolis	Estimating - Cost Estimating I & II - Estimating Concrete - Earthwork & Underground - Computerized Estimating - Highway Construction - Est. & Bidding Techniques	Estimators/ Project Managers	Const. Est. Inst. of Am.
Jan. 25-26 - Naples (Will also be offered: Feb. 2-3 - Scottsdale, AZ Mar. 21-22 - Maui Mar. 28-29 - Hilton Head)	Leadership Excellence	Executives	FMI
Jan. 27 & 28 - Chicago	Complexity Under Control	Project Managers	FMI
Feb. 11 - Minneapolis	Managing Secretarial Stress	Secretaries	Prime Learning Int'l

<u>Dates/Locations</u>	<u>Title of Seminar</u>	<u>Directed toward</u>	<u>Presented By</u>
Feb. 11 - Minneapolis	Job Leadership Program	Foremen/Superintendents/ Project Managers	FMI
Feb. 11-13 - Grand Cayman Island Mar. 10-12 - Vall	Management Productivity Conference	Executives	Falls Management
Feb. 29-Mar. 4 - St. Paul	Cultivating Managerial Excellence	Executives	College of St. Thomas
March 15-16 - St. Paul	Construction Claims	Executives/Project Managers	University of Minnesota

Cassette Tapes

Foremen & Supervisory Management Training	FMI
Building Excellence Through Construction Productivity	FMI
Financial Management for Contractors	FMI
How to Market Construction Services	FMI
Pricing and Bidding Strategy	FMI

Other Possible Training Sources

Dunwoody
Dun & Bradstreet

WORKING WELL WITH PEOPLE - the key to multiplying your effectiveness

A. Develop your confidence in others - the good manager reaches his objectives through the work of other people in whom he has confidence.

1. Learn about and understand the behavioral sciences
 - a. Basic sciences are
 - 1.) Anthropology (heredity)
 - 2.) Psychology (attitudes and feelings)
 - 3.) Physiology (body characteristics)
 - 4.) Sociology (environmental and group influences and relations)
 - b. The manager should start with the assumption that most people want to do a good job
 - c. Most also want to share in the success of a common effort
 - d. The good manager learns to avoid people manipulation
 - 1.) Manipulation is excessive management of other's feelings and emotions
 - 2.) Manipulation is often rooted in fear
 - 3.) Genuine interest and willingness to trust people is an effective thought pattern that will help avoid manipulation
 - 4.) Don't play behavioral games with your employees
 - e. Motivation & maintenance
 - 1.) Maslow's basic motivational priorities
 - a.) Man wants to be alive and stay alive
 - b.) He wants to feel safe and secure
 - c.) He wants to socialize with other people
 - d.) He wants to feel worthy and respected
 - e.) He needs to do the work he likes
 - 2.) Motivational elements
 - a.) Nature of work
 - b.) Recognition of achievement
 - c.) Utilized abilities
 - d.) Challenging assignments
 - e.) Extended involvement and responsibility
 - f.) Production of something of worth
 - 3.) Motivation is introduced into the work place by providing genuinely satisfying conditions that reflect the heirachy of human values
 - 4.) Maintenance - those job elements that do not in themselves motivate, but when missing, reduce the incentive to produce
 - a.) Pay and benefits
 - b.) Security
 - c.) Working environment
 - d.) Status
 - e.) Social activity
 - 5.) Avoid managing by force
 - a.) Force is primitive rather than scientific

- b.) Force kills the qualities a good manager must encourage in his employees
 - (1.) Confidence
 - (2.) Spirit
 - (3.) Self reliance
 - (4.) Assurance
 - (5.) Self sufficiency
- 2. Know and understand the people you work with
 - a. Elements important in knowing your people better
 - 1.) Name, age, address
 - 2.) Employment record
 - 3.) Education
 - 4.) Military service record
 - 5.) Family and dependents
 - 6.) Medical characteristics
 - 7.) Off job interests
 - a.) Job related
 - b.) Recreation, hobbies
 - c.) Community
 - 8.) Personal beliefs
 - 9.) Personal habits
 - 10.) Life goals
 - b. A good manager does not
 - 1.) Pry for facts people don't want to reveal
 - 2.) Gossip about people
 - 3.) Reveal confidences
 - c. Knowing a person well is to become aware of him apart from the group
 - d. Knowing a person well can allow you to more properly place confidence in him
- 3. Express your respect and confidence if actually deserved
 - a. Should be expressed publicly and privately
 - b. Respect and confidence are reciprocal in a good working relation
 - c. Don't confuse being liked with being respected
 - d. The minds of people perceive both what management says AND what they do
 - e. The respected employee wants to be treated well and used well
- 4. Communicate freely
 - a. Within allowable boundaries keep people informed about
 - 1.) What is going on in the larger picture around them
 - 2.) What changes are planned
 - 3.) What objectives have been set for their functional activities
 - b. Listen carefully to what your people are saying. Try to understand
 - 1.) The outward message
 - 2.) The feelings they are attempting to express but don't or can't
 - c. To watch out for in communications
 - 1.) Use discretion as to what should and should

- not be conveyed to your people. Don't show off superior access to information.
- 2.) Generally base your actions with people on what you actually know, rather than on what you think they may be thinking.
- 3.) Your suggestions as a peer are considered conversations; your suggestions as a boss are generally regarded as an order.
5. Provide people with challenging assignments
- a. To expect a lot from your staff or crew is to show respect for their abilities, initiative and perserverance
 - b. Be firm but fair in assignment and in follow up. A boss doesn't have to be liked to be effective
 - c. Usually challenging work is accompanied by a possibility of failure
 - d. A challenging assignment should be doable
6. Delegate important tasks frequently
- a. Don't try to make all decisions about every job by yourself
 - b. Let your people accept new responsibilities and to make occasional mistakes; that's the way they will learn and improve
 - c. Make it known that the more important jobs that you delegate are training assignments. You then retain control of the activity and can make comparative critiques of performance without offense.
 - d. Don't be frightened of losing your influence through delegation (pie theory). Constructive delegation is the path to greater influence and power.
 - e. The delegation sequence
 - 1.) First, use guided actions. Be available to help the man do the new work
 - 2.) Second, show him how to do the job, and encourage him to further delegate, where appropriate, by having him train or coach his subordinates in the activity
 - 3.) Third, delegate the whole job and involve the subordinate in the early planning as well as the activity itself
7. Study and understand the benefits and shortcomings of each subordinate's participation
- a. Hawthorne experiment (1927)-encouraging workers to get things off their chest was proven to increase production
 - b. IBM (1950's)-job enlargement broadened divisions of labor. Improved quality, output and morale
 - c. Harwood Manufacturing-controlled experiments in employee participation produced impressive improvement. Measured by using three different methods of conveying information about proposed operational revisions
 - d. Texas Instruments-emphasized use of goal

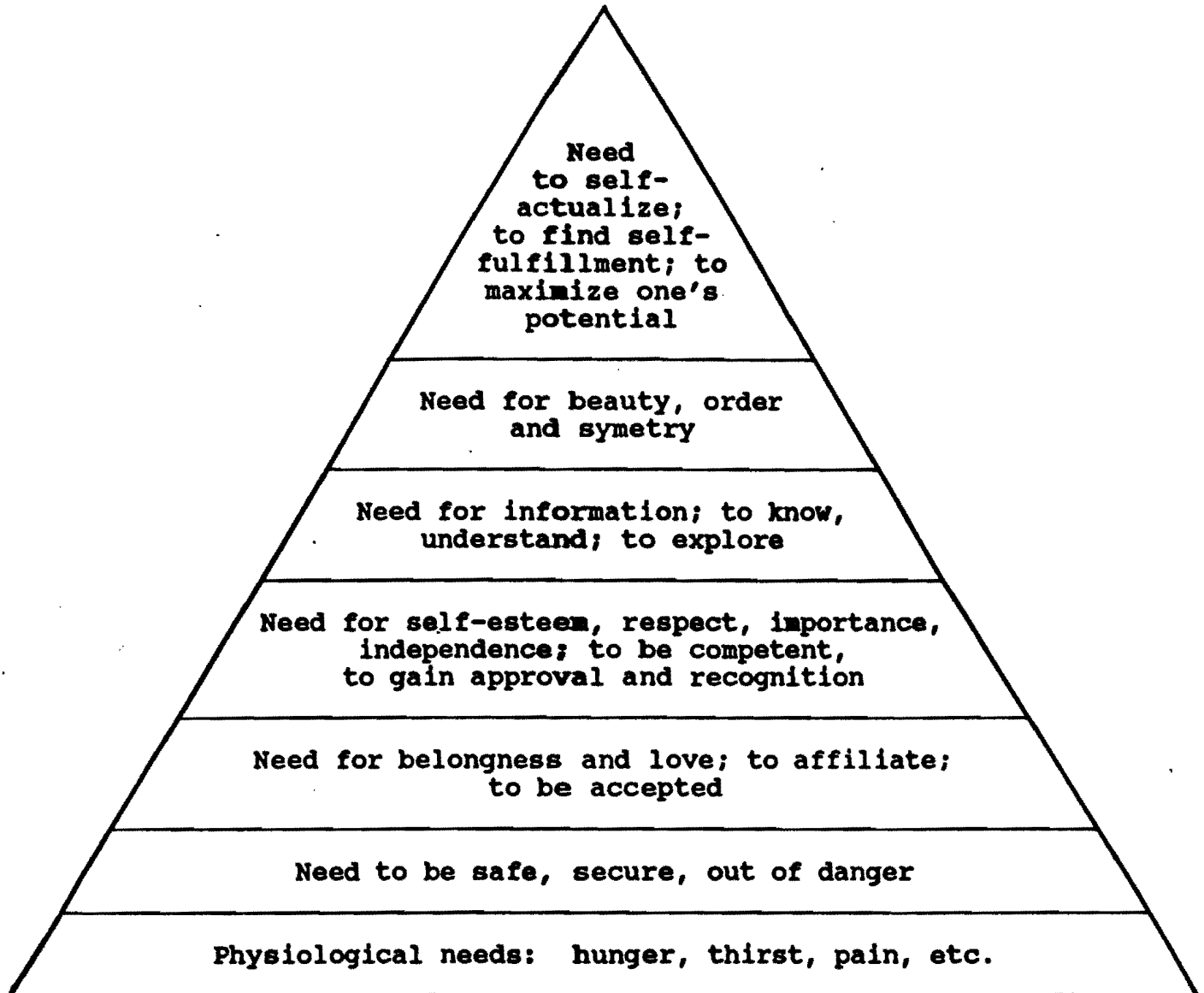
oriented management rather than authority oriented management. Manager exerts most of his leadership in planning. Subordinates carry out the actual plan, control, do cycle.

e. American Telegraph and Telephone-used job enrichment process focussing on the work itself. Encouraged employee decisions on HOW the work was to be done. Resulted in money savings, reduced turnover and improvement in staff utilization.

wkg wll, d156, ho 231

Basic Traits

In order to compare your personality with those of other individuals, it seems constructive to first inspect your own house - to compile a personal punch list of sorts.



SELF-ACTUALIZERS

Do you maximize your potential?

On the basis of in-depth study, Maslow developed a list of characteristics most descriptive of those individuals who extract the most from their potential. In general a self-actualizing person:

1. seeks reality, but can tolerate uncertainty,
2. accepts himself and others for what they are,
3. acts in a spontaneous fashion, seldom worrying about what other people think,
4. enjoys his own privacy,
5. remains faithful to his own values and independent of others,
6. appreciates the basic experiences of life around him, finding stimulation and pleasure in repeating experiences that absorb him,
7. establishes deep, satisfying, interpersonal relationships with few, rather than many, people,
8. believes every individual is worthy of respect, dignity, and esteem,
9. creates more because he breaks away from convention, and seeks new relationships,
10. has a good sense of humor because he tends to see relationships that strike him as funny,
11. makes decisions and accepts responsibility for these decisions,
12. focuses on particular goals with little wasted effort,
13. stays flexible; able to change his attitudes when he thinks it is appropriate,
14. takes a stand on important issues,
15. recognizes the effect he has on people, and
16. possess ability to give and take.

BEHAVIORS THAT LEAD TO SELF-ACTUALIZATION

1. Experience life with full absorption and concentration.
2. Attempt new approaches rather than sticking to secure and safe ways. Be creative.
3. Give more weight to your own feelings in evaluating experiences, rather than to tradition or authority or the majority.
4. Be honest with yourself and others.
5. Assume responsibility for your decisions and actions.
6. Try your best at whatever you decide to do.
7. Try to recognize your problems and prejudices. Have the courage to change them.

Tables 1 through 7 present a number of important characteristics excerpted from various psychological tests. These data should assist you in assessing your profile - your needs, values, interests, temperament, and abilities. Be honest, first and foremost, and be perceptive. Many people have difficulty in truly seeing the face in the mirror. Valid self-evaluation is very difficult, indeed, and fraught with pitfalls, because your self-concept reflects the qualities you see, not those seen by others. Not everyone can be a Napoleon, nor would everyone wish to be. Nevertheless, most people presumably possess a reasonable degree of insight into understanding and honestly evaluating themselves. Rate yourself on an arbitrary scale of 0-5, 5 being the highest value.

**Self-Assessment
Page 1**

ABILITIES What Are Your Strongest (and Weakest) Abilities?	Scale					
	0	1	2	3	4	5
<u>Artistic ability</u> - drawing, designing, creating						
<u>Numerical ability</u> - speed and accuracy in working with numbers						
<u>Math ability</u> - solving math problems						
<u>Scientific ability</u> - doing experiments and understanding scientific principles; reasoning effectively						
<u>Language ability</u> - writing, speaking						
<u>Principles of mechanics</u> - working with machines or tools, repairing things, and understanding the principles						
<u>Motor ability</u> - working with your hands						
<u>Spatial ability</u> - seeing differences in size, form, and shape, and visualizing their relationships						
<u>Social ability</u> - ability to work with people; considered congenial by others						
<u>Teaching ability</u> - helping others learn; instructing people to perform tasks and activities						
<u>Persuasive ability</u> - able to talk easily with people; to influence others; to sell						
<u>Leadership ability</u> - leading group activities; able to get things started and to act quickly when necessary						
<u>Clerical ability</u> - providing or collecting information, accurate record-keeping						
Sub Totals						

Total Abilities: _____

Self-Assessment
Page 2

NEEDS How Strong Are your Personal Needs?	Scale					
	0	1	2	3	4	5
<u>Achievement</u> - the need to accomplish things well, to be successful in overcoming obstacles						
<u>Deference</u> - the need to follow; to have a leader						
<u>Order</u> - the need to be neat and orderly, to have plans						
<u>Exhibition</u> - the need to attract attention, to be noticed						
<u>Autonomy</u> - the need to be independent, to defy authority, to come and go freely						
<u>Affiliation</u> - the need to form friendships, to join groups, to participate with others						
<u>Intraspection</u> - the need to be imaginative, subjective, analytical						
<u>Succorance</u> - the need to get help, to be dependent						
<u>Dominance</u> - the need to dominate or control others; to lead, to organize						
<u>Abasement</u> - the need to apologize, to accept punishment and guilt						
<u>Nurturance</u> - the need to help others, to empathize						
<u>Change</u> - the need to avoid routine, to be involved with innovation						
<u>Endurance</u> - the need to work hard, to persevere						
<u>Heterosexuality</u> - the need for relationships with the opposite sex						
<u>Aggression</u> - the need to express aggressive feelings, to punish						
Sub Totals						

Total Personal Needs: _____

Self-Assessment
Page 3

TEMPERAMENT

What Are Those Temperamental Factors That
Most (and Least) Describe You

Scale

	0	1	2	3	4	5
<u>General activity</u> : hurrying, vitality, production, efficiency versus: slow, deliberate, easily fatigued, inefficient						
<u>Restraint</u> : serious-minded, persistent versus: carefree, impulsive, excitement-loving						
<u>Ascendance</u> : leadership, speaking in public, bluffing versus: submissiveness, hesitation						
<u>Sociability</u> : having many friends, seeking social contacts, attracting attention versus: few friends and shyness						
<u>Emotional stability</u> : evenness of moods, optimistic, even-keeled, composure versus: fluctuation of moods, pessimism, day-dreaming, excitability, feelings of guilt, worry						
<u>Objectively</u> : thick-skinned, analytical versus: hypersensitive, self-centered, suspicious						
<u>Friendliness</u> : toleration of hostility, acceptance of domination, respect for others versus: hostility, resentment, desire to dominate, aggressiveness and contempt for others						
<u>Thoughtfulness</u> : reflective, analytic of self and others, mental poise versus: interest in overt activity and mental disconcertedness						
<u>Personal relations</u> : tolerance of others, faith in social institutions and authority versus: critical of institutions, suspicious, self-pitying						
<u>Masculinity</u> : interest in masculine activities, hard-boiled, inhibits emotional expression versus: interest in feminine activities and vocations, easily disgusted, fearful, emotionally expressive						
Sub Totals						

Total Temperament: _____

Self-Assessment
Page 4

PERSONAL VALUES	Scale					
What Values are Most (and Least) Important to You?	0	1	2	3	4	5
<u>Theoretical</u> - values truth in the philosophical scientific sense; intellect; and the rational, empirical approach						
<u>Economic</u> - values the pragmatic and useful; money and material wealth						
<u>Esthetic</u> - values the artistic, both in form and grace						
<u>Social</u> - values social considerations and interactions						
<u>Political</u> - values power, prestige, the opportunity to influence						
<u>Religious</u> - values the religious aspects of the world						
Sub Totals						

Total Personal Values: _____

Self-Assessment
Page 5

JOB VALUES Which Work Values Do You Prefer (or Reject)?	Scale					
	0	1	2	3	4	5
<u>Good salary</u> - being paid well						
<u>Prestige</u> - having a job that offers a great deal of status and respect						
<u>Job security</u> - having a steady job						
<u>High achievement</u> - being able to do things of importance or to succeed on a challenging job						
<u>Routine activity</u> - work that is uncomplicated, organized and repetitive						
<u>Variety</u> - diversion - having the chance to do many and different things						
<u>Creativity</u> - having the opportunity to use your imagination and to be inventive						
<u>Working with your mind</u> - work that offers intellectual stimulation and allows use of your mental capabilities						
<u>Independence</u> - work that allows freedom to follow your own convictions with minimum supervision						
<u>Working with people</u> - working in close contact with people, being able to assist others						
<u>Leadership</u> - being responsible for directing the work of subordinates, making decisions affecting others						
<u>Physical activity</u> - work that calls for physical strength						
<u>Work under supervision</u> - working under the direction of others						
<u>Work with your hands</u> - a job where you can use your hands, machines, or tools to make or repair things						
Sub Totals						

Total Job Values: _____

BASIC INTERESTS
What Are Your Basic Interests?

Scale

	0	1	2	3	4	5
<u>Realistic theme</u> - prefer to work with machines, tools, things instead of people; rugged outdoors work						
<u>Conventional theme</u> - interested in highly structured activities; being a follower						
<u>Enterprising theme</u> - prefer to dominate, to lead, especially in the business sense						
<u>Investigative theme</u> - enjoy scientific activities, the abstract, intellectual						
<u>Artistic theme</u> - likes to work in artistic settings; self-expression						
<u>Social theme</u> - prefer work conducive to helping people, socially responsive						
Sub Totals						

Total Basic Interests: _____

JOB PREFERENCES
In What Job Situations Would You Rather Work?

Scale

	0	1	2	3	4	5
Outdoor						
Mechanical						
Computational						
Scientific						
Persuasive						
Artistic						
Literary						
Musical						
Social Service						
Clerical						
Sub Totals						

Total Job Preferences: _____

SUMMARY

Abilities: _____
 Personal Needs: _____
 Temperament: _____
 Personal Values: _____
 Job Values: _____
 Basic Interests: _____
 Job Preferences: _____

Date _____

Ten Personal Goals

Goal	Secondary Reward	Rank	Dead-line	Invest-ment	Decisions	Proba-bility

HOW TO SPRING THE TIME TRAP
 From R. Alec Mackenzie's book The Time Trap

TIME WASTER

POSSIBLE CAUSES

SOLUTIONS

- A. Lack of planning
 - 1. Failure to see the benefit
 - a. Recognize that planning takes time but saves time in the end
 - 2. Action orientation
 - a. Emphasize results, not activity
 - 3. Success without it
 - a. Recognize that success is often in spite of, not because of, methods
- B. Lack of priorities
 - 1. Lack of goals and objectives
 - a. Write out goals and objectives
 - b. Discuss priorities with subordinates
- C. Overcommitment
 - 1. Wide span of interests
 - a. Say no!
 - 2. Confusion in priorities
 - a. Put first things first
 - 3. Failure to set priorities
 - a. Develop a personal philosophy of time
 - b. Relate priorities to a schedule of events
- D. Management by crisis
 - 1. Lack of planning
 - a. Apply the same solution as for lack of planning (see A. above)
 - 2. Unrealistic time estimates
 - a. Allow more time
 - b. Allow for interruptions
 - 3. Problem orientation
 - a. Be opportunity oriented
 - 4. Reluctance of subordinates to break bad news
 - a. Encourage fast transmission of information as essential for timely corrective action
- E. Haste
 - 1. Impatience with detail
 - a. Take time to get it right. Save the time to do it over again
 - 2. Responding to the urgent
 - a. Distinguish between the urgent and the important
 - 3. Lack of planning ahead
 - a. Take time to plan. It, repays itself many times over
 - 4. Attempting too much in too little time
 - a. Attempt less
 - b. Delegate more
- F. Paperwork and reading
 - 1. Knowledge explosion

- a. Read selectively
 - b. Learn speed reading
- 2. Computerities
 - a. Manage computer data by exception
- 3. Failure to screen
 - a. Remember Pareto's law
 - b. Delegate reading to subordinates
- G. Routine and trivia
 - 1. Lack of priorities
 - a. Set and concentrate upon goals and objectives
 - b. Delegate non essentials
 - 2. Oversurveillance of subordinates
 - a. Delegate; then give subordinates their head
 - b. Look to results, not details or methods
 - 3. Refusal to delegate; feeling of greater security dealing with operating detail
 - a. Recognize that without delegation it is impossible to get anything done through others
- H. Visitors
 - 1. Enjoyment of socializing
 - a. Do it elsewhere
 - b. Meet visitors outside
 - c. Suggest lunch if necessary
 - d. Hold stand up conferences
 - 2. Inability to say no
 - a. Screen
 - b. Say no
 - c. Be unavailable
 - d. Modify your open door policy
- I. Telephone
 - 1. Lack of self discipline
 - a. Screen and group calls
 - b. Be brief
 - 2. Desire to be informed and involved
 - a. Stay uninvolved with all but essentials
 - b. Manage by exception
- J. Meetings
 - 1. Fear of responsibility for decisions
 - a. Make decisions without meetings
 - 2. Indecision
 - a. Make decisions even when some facts are missing
 - 3. Overcommunication
 - a. Discourage unnecessary meetings
 - b. Convene only those people needed for matters at hand
 - 4. Poor leadership
 - a. Use agendas
 - b. Stick to the subject
 - c. Prepare and distribute concise minutes as soon as possible after the meeting
- K. Indecision
 - 1. Lack of confidence in the facts
 - a. Improve fact finding
 - b. Improve validating procedures
 - 2. Insistence on all the facts - paralysis of analysis

- a. Accept risks as inevitable
- b. Decide without all the facts
- 3. Fear of the consequences of a mistake
 - a. Delegate the right to be wrong
 - b. Use mistakes as a learning process
- 4. Lack of a rational decision-making process
 - a. Get facts
 - b. Set goals and objectives
 - c. Check alternatives
 - d. Check negative consequences
 - e. Make decision
 - f. Implement decision
- L. Lack of delegation
 - 1. Fear of subordinates' inadequacy
 - a. Train
 - b. Allow mistakes
 - c. Replace if necessary
 - 2. Fear of subordinates' competence
 - a. Delegate fully, but within the subordinate's competence
 - b. Give credit
 - c. Insure corporate growth to maintain challenge
 - 3. Work overload on subordinates
 - a. Balance workloads
 - b. Staff up
 - c. Reorder priorities

tim trp, ho252, d156

IDENTIFY VITAL TARGETS - Which inputs and outputs most affect the results, the conditions, and the performance the manager wishes to achieve?

- A. Rarely is more than one problem out of four worth other than a manager's fleeting glance.
 - B. The good manager must quickly identify where his efforts are going to do the most good.
 - C. Must understand Pareto's law. Run samples of Pareto's principles.
 - D. Fewer than one third of the people a manager supervises require more than two thirds of his time. (Review this for accuracy)
 - E. Managerial mistakes resulting from not understanding the vital target concept include:
 - 1. Following prejudices
 - 2. Sticking with pat systems
 - 3. Doing what is easiest
 - 4. Playing hunches
 - F. Picking the vital few
 - 1. To do lists
 - 2. Setting priorities
 - 3. Rating systems
 - 4. Critical tasks in network models
 - G. Moving from a situational view to the vital few. (change in perceptive scale.)
 - H. What to do with the trivial many
 - 1. Delegate
 - 2. Defer (how long?)
- vit tgt,d156, ho 233

- 1: Ralph J. Stephenson PE**
1.1: Construction retentions, collections and final payment - d838 - no 259
1.2: Introduction - Payment as a lifeline

Lifeline has many definitions but one in particular strikes me as being most appropriate to the construction profession; "A lifeline is a line or rope for saving life".

Payment or money flow on a construction project can be just that - a line of strength that can preserve the life, vigor and integrity of a project, or a line of weakness that can cast the project adrift.

Successful firms are not often heard complaining about payment. This oddity bears close examination from those seeking to emulate them.

1.3: General nature of cash flow in the construction industry

- 1.3.1: Legal background for progress payments**
1.3.1.1: Governed by the doctrine of conditions

Doctrine of conditions says that a party should not have to perform its promise without obtaining the other party's promised performance. The principle is central to any discussion of progress payments.

1.3.1.2: Who is required to perform first?

Common law requires that performance of services precede payment

1.3.2: Role and obligations of the payer

- 1.3.2.1: To maintain strong financial position that allows prompt payment when deserved**
 Makes people want to work for you
 Improves potential for future reductions in proposal prices

1.3.2.2: To pay promptly and within the context of the contract

1.3.3: Role and obligations of the payee

- 1.3.3.1: To perform well and in accordance with your contract**
1.3.3.2: To bill accurately and promptly
1.3.3.3: To follow the ground rules by which payments are to be made
1.3.3.4: Frequently the payee holds the key to successful payment for the work
1.3.3.5: Points for the payee to consider

Too often we in the construction industry blame everyone but ourselves for not being paid what we think is owed us promptly.

Many times the cause of slow or reduced payment lies with the payee, not the payer.

- 1.4: Conditions surrounding collections and payments
- 1.4.1: Unsuccessful collections & payments often result from
- 1.4.1.1: Mistrust - Inability to work honestly with unwritten standards
- 1.4.1.2: Cupidity - Inordinate desire to get something for nothing
- 1.4.1.3: Doubtful risk taking - A high risk has a corresponding high penalty
- 1.4.1.4: Ultra conservatism - Excites suspicion and slows cash flow
- 1.4.1.5: Incompetence - Produces a lack of desire to pay or work - no incentive
- 1.4.1.6: Claim prone environment

The contested claim brings out the worst in everyone, and most particularly makes the payer reluctant to pay.

Understanding how to reduce the dust, noise and confusion that surround contested claims often can encourage prompt payment even in difficult conflicts.

Common causes of contested claims and their frequency are

- Directed change - 46%
- Constructive change - 42%
- Defective or deficient contract documents - 41%
- Delays - 41%
- Constructive acceleration - 35%
- Maladministration - 33%
- Differing site conditions - 31%
- Impossibility of performance - 18%
- Superior knowledge - 16%
- Termination - 7%

- 1.4.1.7: Stubbornness - A balky mule cannot be depended on to pull the wagon
- 1.4.1.8: Dishonesty - Destroys incentives to play fair and pay promptly!
- 1.4.2: Successful collections & payments
- 1.4.2.1: Trustful relations

Construction is a give and take situation. By the end of the job the gives and takes must balance out. The construction machinery is lubricated by the exchange of small favors.

- 1.4.2.2: Honesty

Honest people select their business associates carefully. Those who pay for services rendered generally recognize honesty in a company or an

individual if they themselves are honest.

1.4.2.3: Competence

Competent people recognize competence in others. On most jobs, given the presence of a reasonable number of high value factors, the competent payee will be compensated fairly and promptly. Financial check and balance systems ask too many "why" questions to allow competent parties to remain unrewarded.

1.4.2.4: A willingness to give and take

All taking and no giving by either the payer or the payee will sink a project in a swamp of paper and a sea of red ink. The mistrust that results from this lack of informal give and take will grow to a monster unless it is replaced by a mutual confidence by the parties to the situation.

1.5: Retentions

1.5.1: Often used for doubtful reasons

1.5.1.1: As a club to assure proper completion

1.5.1.2: To save interest payments for 10% of the job cost

1.5.1.3: To insure construction damage to completed work is repaired

1.5.1.4: To pay for anticipated contested claims

1.5.2: The problems of retention are old and will probably remain problems until

1.5.2.1: Properly addressed by the parties involved

1.5.2.2: There is agreement among like parties as to its impact

1.5.2.3: All parties to a contract behave according to their contract

1.5.3: Attitudes and realities about retention

1.5.3.1: In 1976 a survey was made of the American Subcontractors Association (ASA)

Showed average retention among members was \$200,000

Members said would reduce bid price 3.7% if retention was eliminated

1.5.3.2: A recent survey of the American Subcontractors Association indicates

Subcontractors are willing to give lower bids to generals who

Pay them promptly

Offer them a fair and equitable contract

Of 200 respondents

89% said they give better bids to generals regularly or occasionally

90% did so because the general had prompt payment policies

91% said not paid within 3 days of billings

69% said not paid within 7 days of billings

1.5.3.3: Policies on retention

+ Recent ABC, ASC and ASA policy calls for payment within 7 days of billing

- + In 1974 GSA went to zero retention
- + At one time Department of Defense eliminated retentions
- + EPA once wrote retention requirements out of its grants
- + About 1964 Michigan Dept of Mgmt & Budget adopted zero retention

Was required by the legislature
Department had 2 choices

Put money in escrow

Problem - couldn't use state treasury for holding vehicl

Problem - private holding would have too complicated

Would have thousands of accounts

Prohibitively expensive and cumbersome

Adopt a policy of total payment for completed line items

Each line item was to be explicit

On recent \$2,000,000 job

Had about 1100 line items

Listed on 27 pages

Ranged in cost from \$100 to nearly \$70,000

Adopted zero retention route

Some state officials like it, some hate it

Some contractors like it, some hate it

- + In 1963 the Office of Federal Procurement Policy decided that

A uniform governmentwide policy should be implemented

Retainage was not to be used as a substitute for good contract management

An agency cannot withhold funds without good cause
Determinations on retainage are to be made on the basis of

Contractor's past performance

Likelihood that such performance will continue in the future

Suggested that

Retainage not exceed 10%

That it be adjusted downwards as the contract approaches completion

When contract is complete all retainages be paid promptly

1.5.3.4: Summary - there is no single attitude or reality re retentions!

1.6: Collections, or better yet, payments

1.6.1: Direct payment from the owner

1.6.1.1: Conventional method on self financed projects

1.6.1.2: Success of method depends on the integrity and competence of the owner

6.2: Direct payment from another contractor

1.6.2.1: Evolved when general contractor did most of their own work

1.6.2.2: The secondary payment process may be used as a club rather than a tool

- 1.6.3: Direct payment from another party**
- .6.3.1: Usually called the title company method**
- Steps in the title company disbursement method**
- A. Monthly draw requests received from the contractors**
 - B. Supporting documents reviewed by the appropriate tier of contractor**
 - C. Job inspected by inspecting architect retained by payer**
 - D. Payment made to the contractors directly**
 Sometimes direct to subs
 Sometimes to general contractor for disbursement to subs
- Advantages**
- Insures prompt payment to contractors**
 - Provides third party evaluation to gage performance**
 - Gives financing source full control of the money flow**
 - Tends to diminish tendency to front load or unbalance billings**
- Disadvantages**
- Removes some of prime contractor's leverage to get work done**
 - Creates excessive dependency on attitudes of financing source**
 - Owner plays secondary role in motivating performance**
 - Poorly qualified inspecting architect can create havoc**
 Bad attitude toward contractors
 Jealousy between architect of record and inspecting architect
- 1.7: Final payment**
- 1.7.1: Elements of record used in closing out the job**
- 1.7.1.1: The punch list and the certificate of occupancy**
 Usually these provide the rationale behind final payment being made
 You should decide early how the job is to be punched out
- Who is to do it?**
 - When is it to be done?**
 - What standards of performance are to be used to measure acceptability**
 - When is the contractor's punch list to be prepared?**
 - When is the owner's punch list to be prepared?**
- 1.7.1.2: The operating and maintenance manuals**
 Inadequate O&M submittals may be cause for non payment
 Get them done and get them submitted!
- 1.8: Where successful collections and payment start**
- .8.1: The agreement**

The starting point for cash flow success is preparation and execution of a well understood

agreement up front

1.8.1.1: Often contractors take jobs that specify impossible performance

Leads to getting into a position where the owner, or the architect engineer feel they can withhold payment for personal, subjective reasons, using the impossible clause as a legal reason.

Example: the withholding of payment because the contractor did not submit a acceptable schedule within a given period of time - usually an unreasonable time frame for preparation of a good plan of work and schedule.

Infeasible schedules
 Inadequate contract documents
 Unworkable contract agreements
 Multiple primes
 Installation of unknown systems
 Undefined responsibility patterns

1.8.2: The client - either owner or contractor

Most payment-successful contractors profile a prospect before proposing on a job. This is done with any new client, and sometimes on previous clients with doubtful records.

1.8.2.1: Profiling a client should follows a basic pattern

1.8.2.2: What factors describe how a client will pay?

Personal integrity
 Business integrity
 Past payment record with you
 Past payment record with others
 Current financial strength
 Nature of assembled project financing
 Process used for approving payment and releasing funds
 Attitudes of the architect/engineer toward you and paying
 Methods of closing out jobs

1.8.3: The project

As with the client, the project must also be profiled. Not every job is for everyone. Be very selective so as to optimize your opportunities for success.

1.8.3.1: What factors describe a good pay project for you

- + Your past experience in building such facilities
- + The client's past experience in building such facilities
- + Funding sources
 - Individuals
 - Syndicates

- Trust funds
- Pension funds
- Political entities
- + Payment method
 - Direct payment
 - Title company payment
 - Inspecting architect
 - Payment method specified to be used for sub contractors
 - Retention specified

1.8.4: Evaluating the job

Once the client and project factors are identified, it is necessary to analyze them for a decision as to whether the job is potentially a good job or a bad job. Good and bad is evaluated as to the risk and the return on investment.

1.8.4.1: A. Weigh each factor

Weight each from one to ten as to its importance to you

- One - totally unimportant to being paid
- Ten - most critical to being paid

1.8.4.2: B. Assign values to the client and the project which you are proposing upon

Values should be from one to ten

- One - Client and project produce worst pay potential situation for factor
- Ten - Client and project produce best pay potential situation for factor

1.8.4.3: C. Multiply the factor weight by the value to get a profile number

1.8.4.4: Example of profiling

How you might profile the payment potential of a new prospect.

Factor weights multiplied by value for client Jones

Honesty in business - $10 \times 08 = 80$

Past payment record with you $10 \times 06 = 60$

Past payment record with others $07 \times 03 = 21$

Current financial strength $07 \times 05 = 35$

Nature of assembled financing $05 \times 07 = 35$

Process for approving payment and releasing funds $08 \times 09 = 72$

Attitudes of the architect/engineer - $06 \times 06 = 36$

Method of closing out jobs $07 \times 05 = 35$

Factor weights multiplied by value for Jones project

Your past experience in building such facilities $05 \times 08 = 40$

Client past experience in building such facilities $04 \times 04 = 16$

Funding sources $08 \times 08 = 64$

Payment method $07 \times 05 = 35$

Total = 529 out of a total possible of 740, or a
71% potential for good payment relationship

- 1.9: Rules for getting paid promptly
- 1.9.1: Be certain of your agreement and understand what it says
- 1.9.2: Be honest in your dealings and your intent
- 1.9.3: Fulfil your contract

- 1.9.4: Avoid legal entanglements and threats
- 1.9.5: Be willing to use the lubricating oil of small favors
exchanged
- 1.10: If you aren't entitled to it don't try to get it!
- 1.11: no 259 - Dec, 87