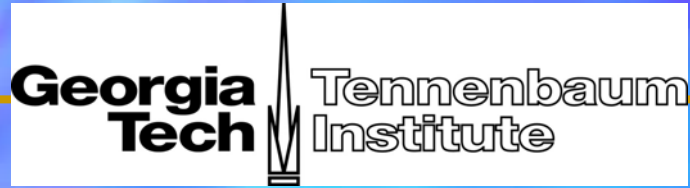


Enterprise Transformation

Bill Rouse – *Executive Director of the Tennenbaum Institute at Georgia Tech*





Knowledge and Skills for Enterprise Transformation.



Enterprise Transformation

William B. Rouse

Overview

- Enterprise Challenges
- Theory of Transformation
 - ✓ *Definition of Transformation*
 - ✓ *Context of Transformation*
 - ✓ *Elements of Enterprise System*
 - ✓ *Elements of Theory*
- Ends, Means & Scope of Transformation
 - ✓ *Framework & Examples*
 - ✓ *Value Deficiencies*
 - ✓ *Work Processes*
 - ✓ *Enterprise Systems Research*
 - ✓ *Enterprise Solutions*
- Transformation Methodologies

Enterprise Challenges

- Underlying Phenomena
- Strategic Management
- Nature of Challenges
- Relationships Among Challenges

Underlying Phenomena

- Most enterprises face similar challenges, although relative importance varies
- Success of enterprises, and their leaders, strongly affected by these challenges
- Multiple useful ways to address strategic challenges successfully
- True nature of strategic challenges not determined by tools chosen to address them



Nature of Challenges

Challenge	Nature
Growth	Increasing Impact in Saturated/Declining Markets
Value	Enhancing Relationships of Processes to Benefits & Costs
Focus	Pursuing Opportunities & Avoiding Diversions
Change	Competing Creatively While Maintaining Continuity
Future	Investing in Inherently Unpredictable Outcomes
Knowledge	Transforming Information to Insights to Programs
Time	Carefully Allocating the Organization's Scarcest Resource

Goal

Growth

Design

Change

Focus

Time

Knowledge

Future

Path

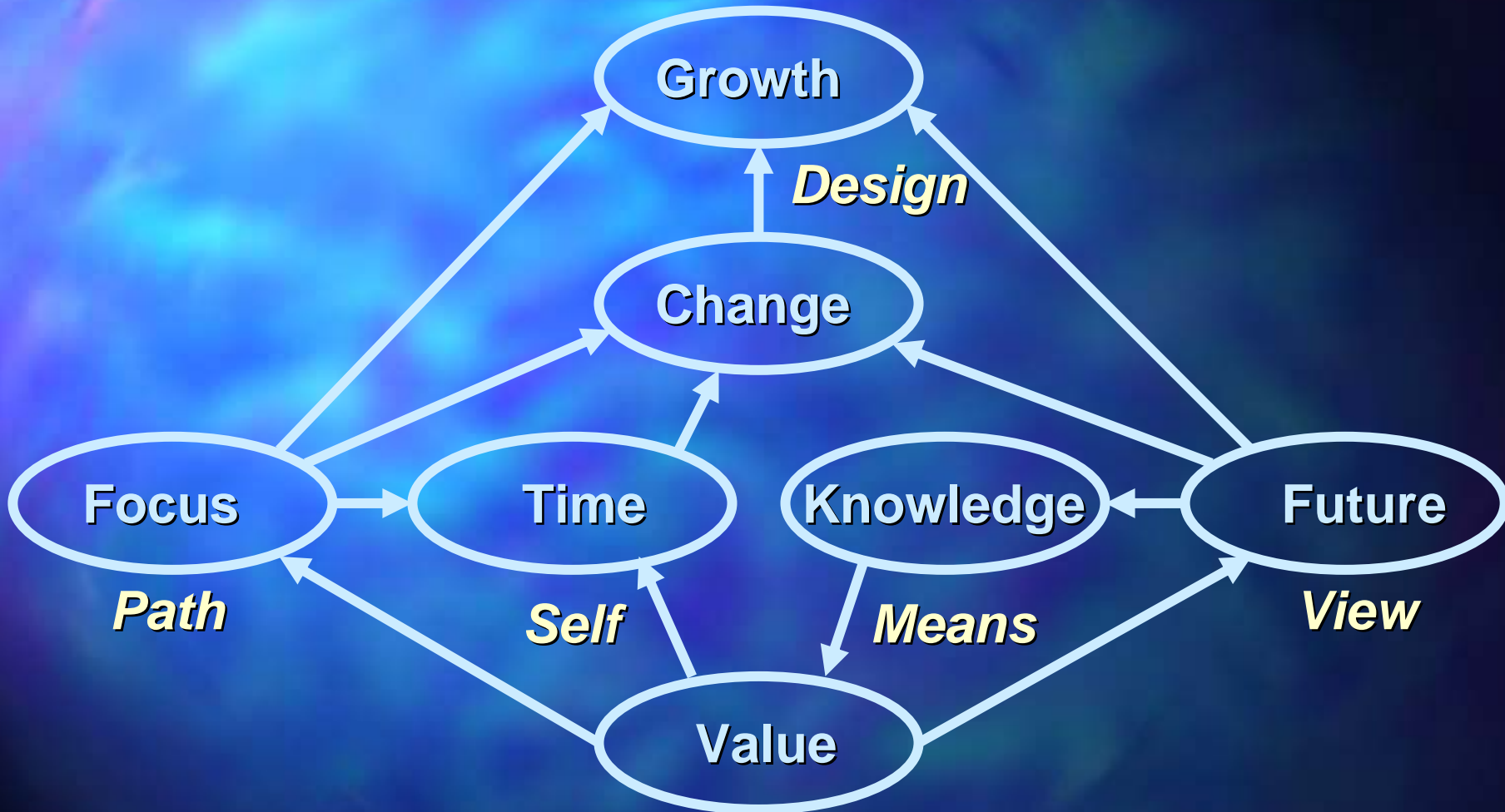
Self

Means

View

Value

Foundation

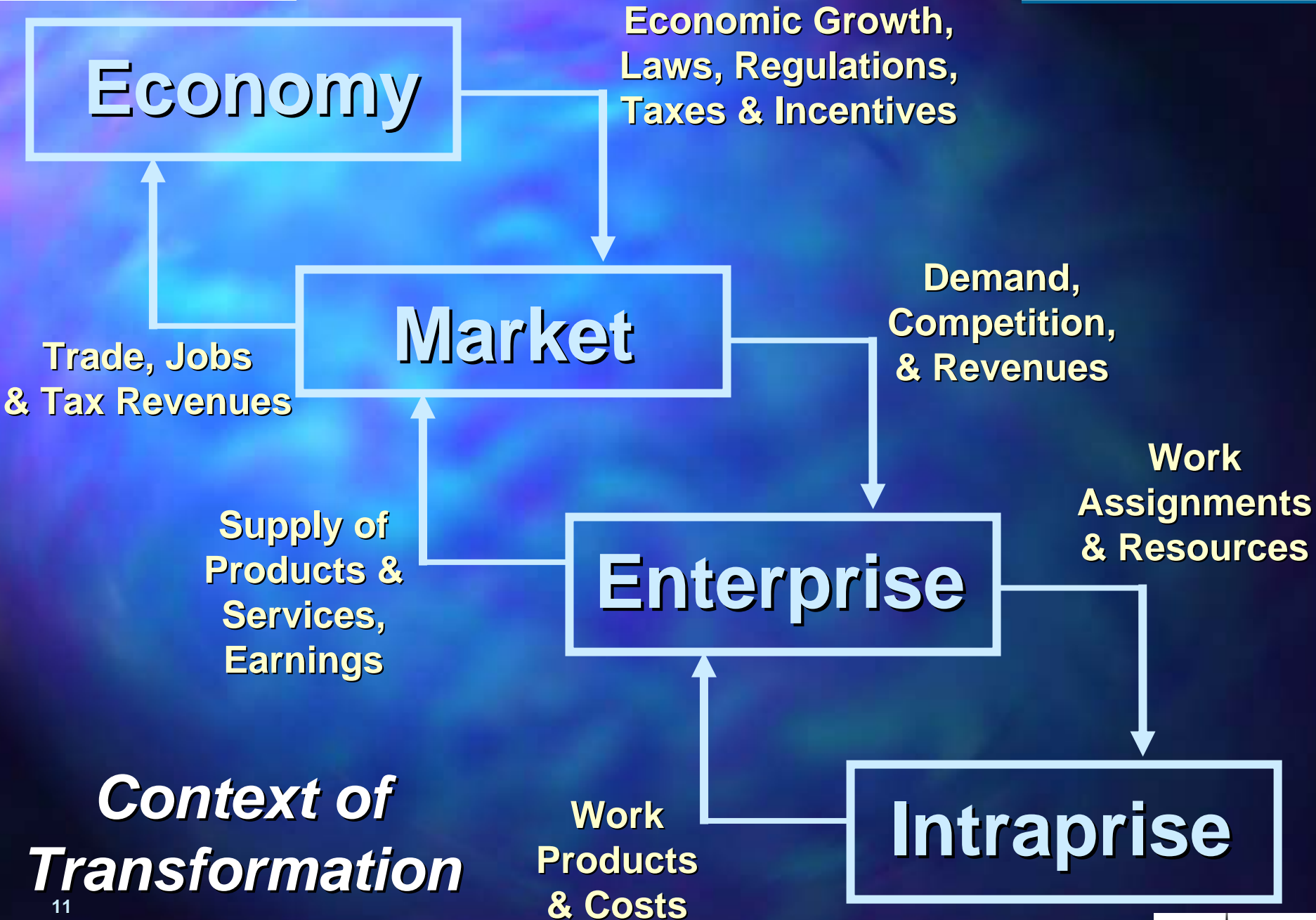


Theory of Transformation

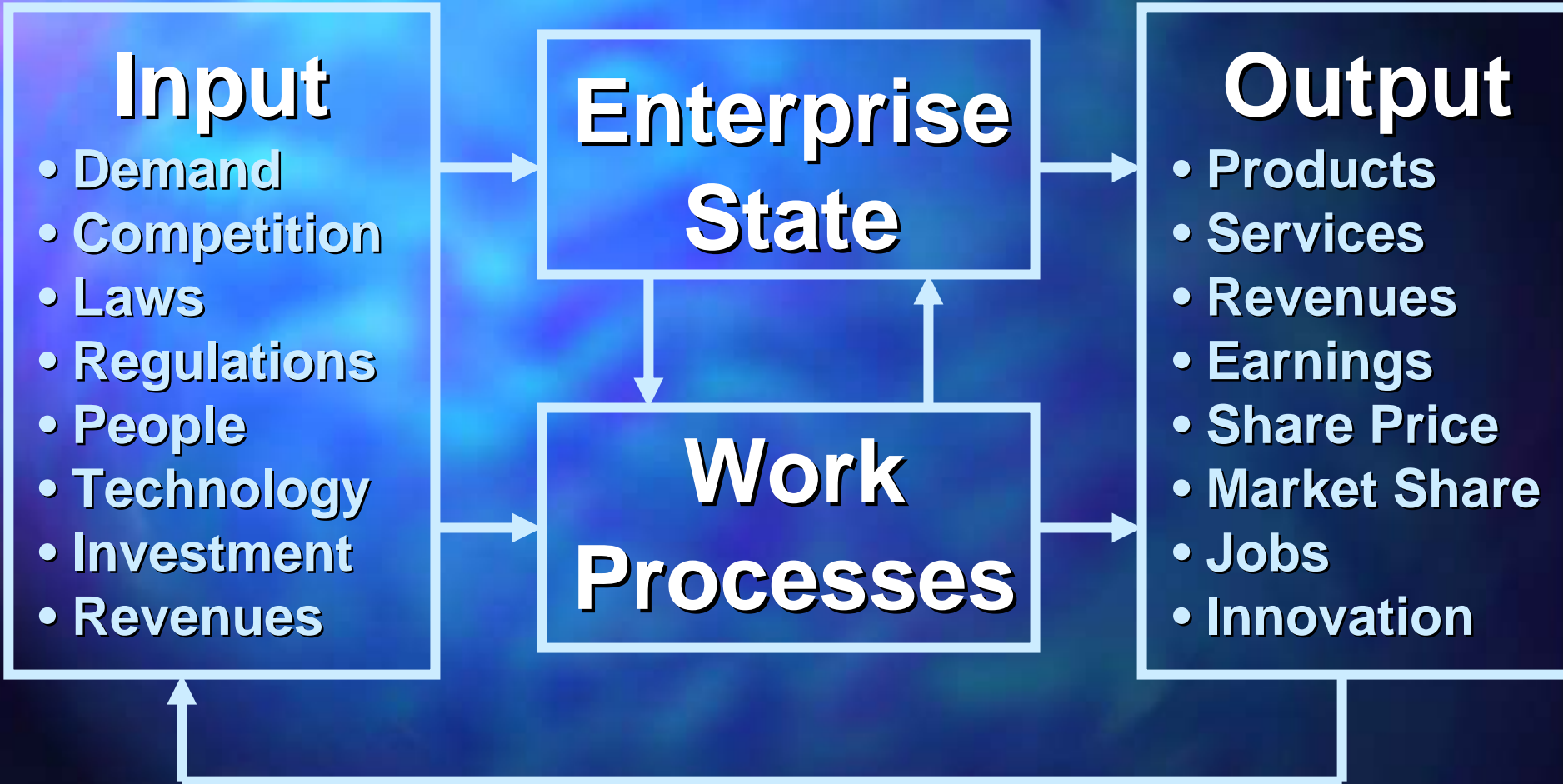
- Definition of Enterprise Transformation
- Context of Transformation
- Elements of Enterprise System
- Elements of Theory
 - ✓ *Value Deficiencies Drive Transformation*
 - ✓ *Work Processes Enable Transformation*
 - ✓ *Allocation of Attention & Resources*
 - ✓ *Management Decision Making*
 - ✓ *Social Networks*

Definition

Enterprise transformation is driven by experienced and/or anticipated **value deficiencies** that result in significantly redesigned and/or new **work processes** as determined by management's **decision making** abilities, limitations, and inclinations, all in the context of the **social networks** of management in particular, and the enterprise in general.



Elements of Enterprise System



Examples

Domain	Process	State	Work	Value
Manufacturing	Production	Work in Process	Products	Unit Price Minus Cost
Service	Delivery	People in Queues	Transactions	Customer Satisfaction
R&D	Research	Studies in Progress	Technology Options	Potential of Options
Military	Operations	Positions of Forces	Objectives Secured	Importance of Objectives

Elements of Theory

- Value Deficiencies Drive Transformation
- Work Processes Enable Transformation
- Allocation of Attention & Resources
- Management Decision Making
- Social Networks

Value Deficiencies Drive Transformation

- Experienced or expected downside losses of value, e.g., declining enterprise revenues and/or profits
- Experienced or expected failures to meet projected or promised upside gains of value, e.g., failures to achieve anticipated enterprise growth
- Desires to achieve new levels of value, e.g., via exploitation of market and/or technological opportunities

Work Processes Enable Transformation

- Improve how work is currently performed, e.g., reduce variability
- Perform current work differently, e.g., web-enable customer service
- Perform different work, e.g., outsource manufacturing and focus on service

Allocation of Attention & Resources

- Anticipate and adapt to changes of external variables, i.e., control the enterprise relative to the “road ahead” rather than the road behind
- Cultivate and allocate resources so as to yield future enterprise states with high projected value with acceptable uncertainties and risks

Management Decision Making

■ Phenomena

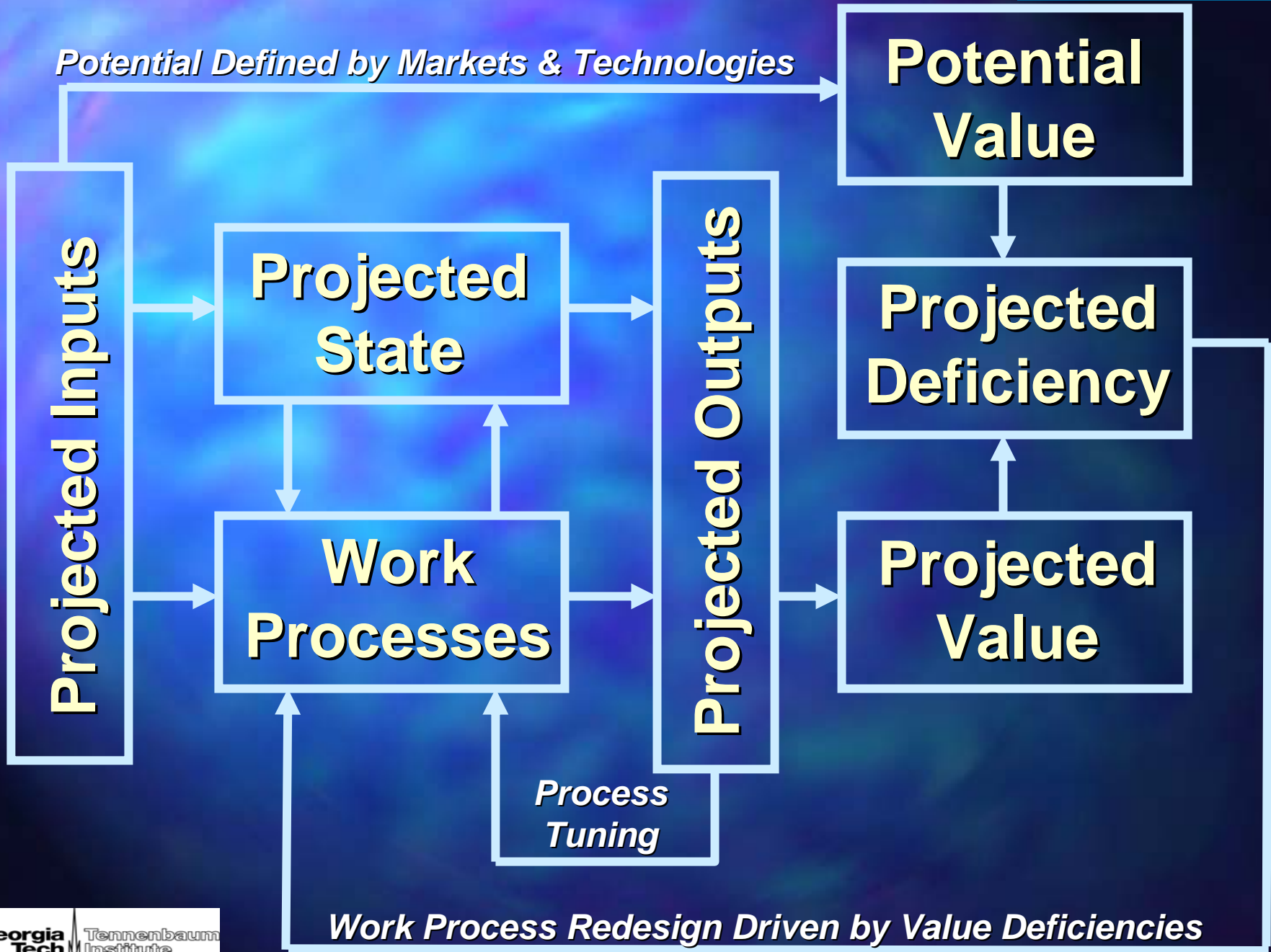
- ✓ *Folklore and fact of managers' jobs (Mintzberg)*
- ✓ *Optimizing vs. Satisficing (Simon)*
- ✓ *Organizational Delusions (Rouse)*
- ✓ *Role of Intuition (Klein)*

■ Frameworks

- ✓ *How managers address change, ranging from tuning, to adaptation, to reorientation, to re-creation (Nadler & Tushman)*
- ✓ *Managers' modes of control, ranging from scrambled, to opportunistic, to tactical, to strategic (Hollnagel)*

Social Networks

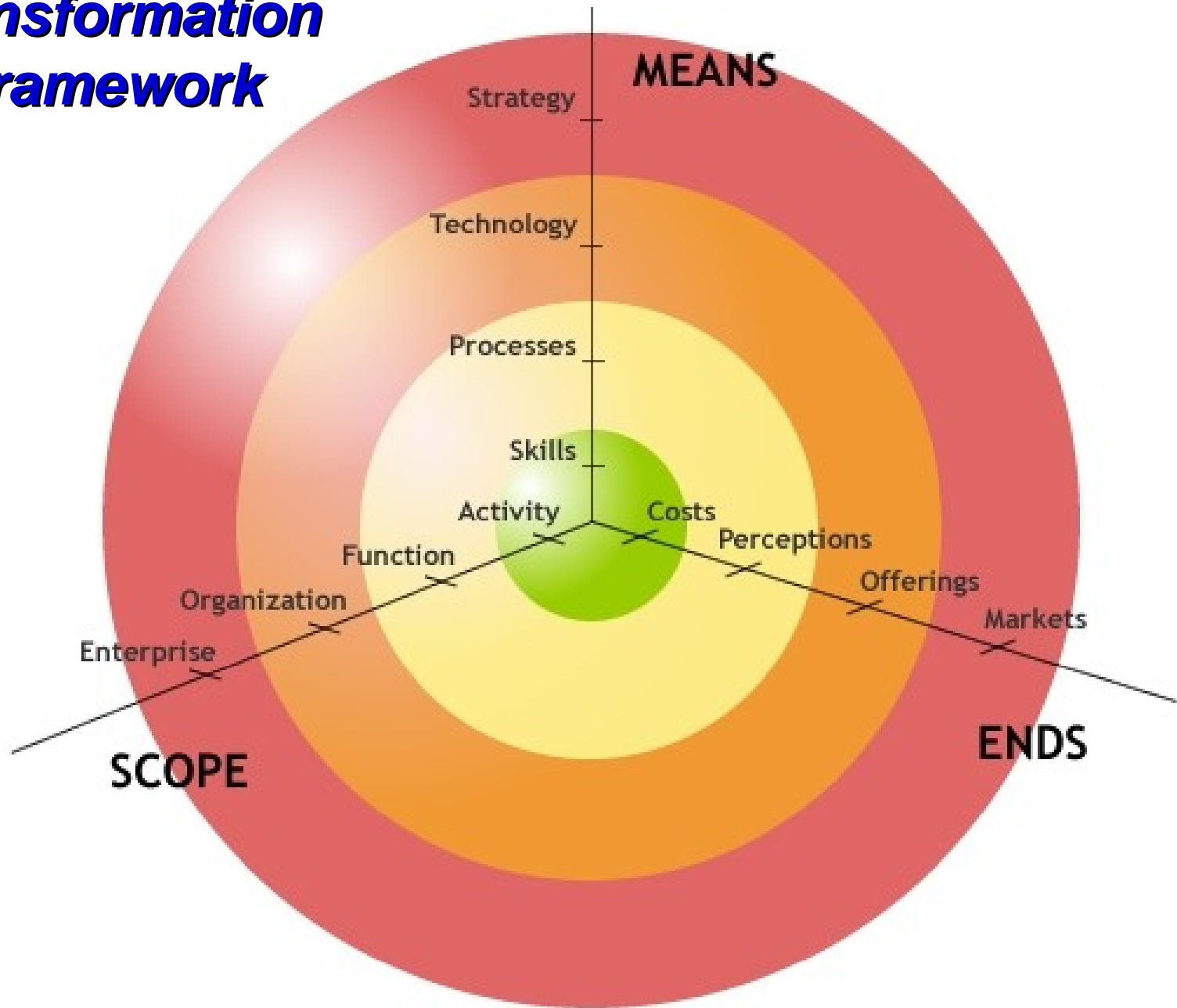
- **Strong vs. Weak Networks (Burt, Granovetter)**
 - ✓ *Strongly connected networks result in rapid and efficient information and knowledge sharing among members*
 - ✓ *Weakly connected networks have “holes,” in many cases between strongly connected subnetworks*
- **Implications for Transformation**
 - ✓ *Weakly connected networks are better sources of new information and novel ideas*
 - ✓ *Strongly connected networks are better at implementing change once sense has been made of them*



Ends, Means & Scope

- Transformation Framework
- Examples of Transformation
- Value Deficiencies Drive Transformation
- Work Processes Enable Transformation
- Recent Transformations
- Enterprise Solutions

Transformation Framework



Examples

- Changing Markets
- Changing Offerings
- Changing Perceptions
- Changing Operations

Ends: Changing Markets

- Amazon leveraging IT to redefine book buying
- DoD adopting effects-based planning & acquisition
- e-Bay leveraging IT to redefine the resale market
- FedEx defining the overnight mail market
- NCR leveraging IT to redefine banking (via ATMs)
- Wal-Mart leveraging IT to redefine the retail industry

Ends: Changing Offerings

- CNN redefining news offerings
- GE moving from products to financing
- Home Depot redefining hardware store offerings
- HP attempting to redefine offerings in the printer market
- IBM defining the business PC market (via outsourcing)
- IBM moving from manufacturing to services
- Motorola moving from battery eliminators to radios to cell phones
- Schwab redefining how people buy securities
- UPS expanding from packages to supply chains

Ends: Changing Perceptions

- Dell repositioning computer buying (via build to order)
- Interface adopting green practices to reposition carpet buying
- Southwest repositioning discount air travel
- Starbucks repositioning coffee buying
- Victoria's Secret repositioning lingerie buying

Ends: Changing Operations

- American Cancer Society consolidating & integrating operations
- Lockheed Martin merging three aircraft companies
- Newell Rubbermaid resuscitating home products companies
- Nucor decreasing the cost of steel making (via mini-mills)
- Tennenco resuscitating Pemco

Value Deficiencies Drive Transformation

- **Value Opportunities**: The lure of greater success via market and/or technology opportunities prompts transformation initiatives
- **Value Threats**: The danger of anticipated failure due to market and/or technology threats prompts transformation initiatives
- **Value Competition**: Other players' transformation initiatives prompt recognition that transformation is necessary to continued success
- **Value Crises**: Steadily declining market performance, cash flow problems, etc. prompt recognition that transformation is necessary to survive

Work Processes Enable Transformation

- **Markets Targeted**, e.g., pursuing global markets such as emerging markets, or pursuing vertical markets such as aerospace and defense
- **Market Channels Employed**, e.g., adding web-based sales of products and services such as automobiles, consumer electronics, and computers
- **Value Proposition**, e.g., moving from selling unbundled products and services to providing integrated solutions for information technology management
- **Offerings Provided**, e.g., changing the products and services provided, perhaps by private labeling of outsourced products and focusing on support services

Work Processes Enable Transformation

- **Supply Chain Restructuring**, e.g., simplifying supply chains, negotiating just-in-time relationships, developing collaborative information systems
- **Outsourcing & Offshoring**, e.g., contracting out manufacturing, information technology support; employing low-wage, high-skill labor from other countries
- **Process Standardization**, e.g., enterprise-wide standardization of processes for product and process development, R&D, finance, personnel, etc.
- **Process Reengineering**, e.g., identification, design, and deployment of value-driven processes; identification and elimination of non-value creating activities
- **Web-Enabled Processes**, e.g., online, self-support systems for customer relationship management, inventory management, etc.

Recent Transformations

Company	Transformation	Outcome
AT&T	Came late to wireless, computers, and cellular, paying too much to enter.	Facing a debt crisis and reduced market cap, AT&T was acquired by SBC.
Clear Channel	Clear Channel executed a long series of acquisitions, accelerated by the 1996 deregulation.	Cost leadership, combined with bundled selling resulted in their revenues growing over 50%.
IBM	Transformed from mainframe maker to robust provider of integrated hardware, networking, and software solutions.	Earnings and share price rebounded as services business flourished.
Kellogg	Remained committed to its brand strategy but focused on channels needs for consumers' changing concept of breakfast.	Acquired Keebler, resulting in revenue growth of almost 50 % and operating income nearly doubling in 5 year period.
Lucent	Adopting "high tech" image, abandoned Baby Bells, overdid mergers, delayed developments of optical systems, and inflated sales.	When Internet bubble burst and customers could not repay loans, \$250 billion market cap in 1999 shrunk to \$17 billion by 2005.

Recent Transformations

Company	Transformation	Outcome
Newell Rubbermaid	With a track record of successful acquiring over 60 companies, acquisition of Rubbermaid seemed like a natural match.	Acquisition dragged Newell down, losing 50% of the value of the investment. Brand strategy of Rubbermaid did not match Newell.
Nokia	New cell phone designs introduced to combat loss of market share.	Market share rebound, but likely temporary due to aggressive competitors.
Proctor & Gamble	Acquisition of Gillette, Clairol and Wella while selling off numerous brands.	Outcome uncertain as the “consumer goods industry is caught between slowing sales, rising costs, and waning pricing power.”
Siemens	Focused on cost reduction, innovation, growth, and culture change, in part by convincing people that there was a crisis.	Revenue almost doubled, net income more than tripled, and revenue per employee almost doubled over 12 years.
Thomson	Transformed itself from a traditional conglomerate into a focused provider of integrated electronic information to specialty markets.	They sold more than 60 companies and 130 newspapers, and then acquired 200 businesses becoming a leader in electronic databases.

Summary of Examples

- Increasing shareholder value by mergers and acquisitions sometimes succeeds (Clear Channel, Kellogg and Thompson), sometimes fails (AT&T, Lucent, and Newell), and takes time to evaluate (Proctor & Gamble).
- Transformation of the enterprise's value proposition to customers via new product and service offerings is illustrated by the success of IBM, Kellogg, and Thompson and, to a lesser extent, by Nokia.
- Improving productivity via extensive process improvements, as illustrated by IBM and Siemens, can transform an enterprise's value provided to customers, suppliers, and employees and increase shareholder value.

Enterprise “Solutions”

- SFA: Sales Force Automation
- CRM: Customer Relationship Mgt.
- MRP: Materials Resource Planning
- ERP: Enterprise Resource Planning
- SCM: Supply Chain Management

Solution vs. Scope

	Suppliers' Suppliers	Suppliers	Enterprise	Customers	Customers' Customers
SFA	Red	Red	Green	Green	Red
CRM	Red	Red	Green	Green	Green
MRP	Yellow	Green	Green	Red	Red
ERP	Red	Yellow	Green	Yellow	Red
SCM	Yellow	Green	Green	Green	Yellow

Depth vs. Scope

	Suppliers' Suppliers	Suppliers	Enterprise	Customers	Customers' Customers
Information Integration	Save Money & Reduce Time				
Relationship Development	Share Goals, Plans & Information				
Collaborative Solutions	Co-Create High-Value Offerings				

Bottom Line

- Enterprise Solutions Do Not All Address the Same Elements of Enterprise Value Streams
- Impacts of Solutions on Elements of Value Streams Differ With Type of Solution
- Specific Nature of Value Deficiencies Should Drive Consideration of Particular Solutions

Transformation Methodologies

- Classic Approach to Change (Lewin, 1947)
- Contemporary Step-by-Step Methodologies
 - ✓ *Gouillart & Kelly (1995)*
 - ✓ *Kotter (1995)*
 - ✓ *Rouse & Boff (2004)*
 - ✓ *Kessler (2005)*
- Composite Theory-Based Methodology

Lewin (1947)

- Unfreezing
- Moving
- Refreezing

Gouillart & Kelly (1995)

Reframing

1. *Achieve Mobilization*
2. *Create Vision*
3. *Build Measurement System*

Restructuring

4. *Construct Economic Model*
5. *Configure Physical Infrastructure*
6. *Develop Work Architecture*

Revitalization

7. *Achieve Market focus*
8. *Invent New Businesses*
9. *Changing Rules Via IT*

Renewal

10. *Develop Reward System*
11. *Build Individual Learning*
12. *Develop Organization*

Kotter (1995)

- Establishing a Sense of Urgency
- Forming a Powerful Guiding Coalition
- Creating a Vision
- Communicating the Vision
- Empowering Others to Act of the Vision
- Planning for and Creating Short-Term Wins
- Consolidating Improvements and Producing Still More Change
- Institutionalizing New Approaches

Rouse & Boff (2004)

Principle	Key Concept	“As Is”	“To Be”
1	Technology Options	Strengths, Weaknesses & Deficiencies	Programs to Remediate Deficiencies
2	Uncertainty Management		
3	Portfolio of Options		
4	Value Stream/Networks		
5	Option-Based Valuation		
6	Decision Making Processes		
7	Organizational Structure		
8	Individuals & Teams		
9	Champions		
10	Incentives & Rewards		

Kessler (2005)

Decision to Transform

Transformation Processes

1.0 Purposes

2.0 Capability

3.0 Solutions

Intel & Executive Intents

Needs & Requirements

Needs & Requirements



Define

Deploy

Execute

1.1 Intent & Mission Definition

1.2 Action Programs

1.3 Directives

2.1 Capability Architecture

2.2 Operating System

2.3 Capable Operations

3.1 Solution Architecture

3.2 Solution Delivery System

3.3 Intended Solutions

Composite Methodology

1. Stimulate Need for Change
2. Identify Value Deficiencies
3. Map Deficiencies to Work Processes
4. (Re)Design Work Processes
5. Assess Required Investments
6. Frame, Make & Commit to Decisions
7. Plan & Communicate Implementation of Change
8. Execute Plan Via Enterprise Social Networks
9. Monitor & Adapt Plan Implementation
10. Institutionalize Change & Abilities to Change

Summary

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