

Attacking the Wicked Problem of the Balanced Scorecard: Designing your Factors & Measures to Accomplish Management Purposes

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Operative Theories

- Human Factors Theory
- Complexity Theory
 - Corporate Social Responsibility (CSR)
- Social Problem Theory

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Managing System Performance

*“The overarching goal of managing performance in the government environment is to build **systems** in which outcomes matter to constituents, where performance can be used the same way and with the same meaning up and down the management chain, and agencies can be held responsible not for failing to meet goals, but for lacking the data to analyze problems that arise and to change course if needed.”*

(Gene Dodaro, GAO, March 16, 2011)

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Human Factors Theory (Metcalfe & Benn, 2012)

- Efficiency, Adaptability, Social cohesion, Sustainability are requirements
- Business **systems** can be made more sustainable through the process of continuous re-design
- Organizations must be continually kept
 - *“fit for their intended purpose”*

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Complexity Theory (Horn & Weber, 2007)

- Complex adaptive systems (CAS) are networks of relationships that are independent, interdependent;
- Have layered autonomous agents that interact with each other through feedback mechanisms.
- Their behavior results from collective, dynamic, adaptive behavior of the agents in the system.

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Social Problem Theory

What People Think we Have

- Current systems are not sustainable
- High degree of mistrust of political systems
- Governance failure
- Lack of perceived legitimacy
- System level impacts (+/-)
- Activities not connected to outcomes

What People Want

- Demand for sustainable practices
- Accountability
- Transparency
- Innovation
- Social responsibility
- Sustainability
- Meaningfulness

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Social **Problems** Have Characteristics

- **Simple** or tame, start and stop points, single solutions, stable
- **Complex** or circular, continuous discrete processes
- **“Wicked”** with multiple constructs, processes, and linked measures represented

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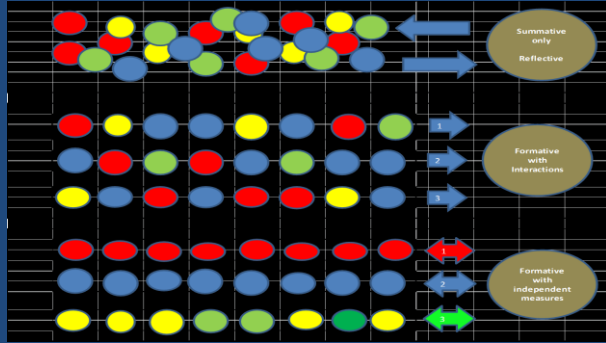
Social Problems are “Messes”

(Rittel, 1995; Horn & Weber, 2007)

- Social problems are often “Wicked messes”
 - Wicked problem type
 - Multiple factors
 - Change in one activity affects the behavior of other factors in unknown ways
 - Unintended consequences
- Goal is to reduce complexity and use the right tool to measure the right stuff

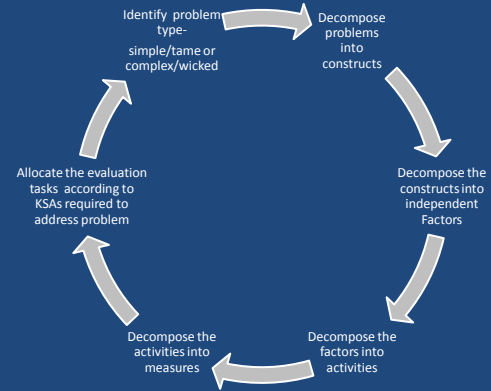
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Decomposing Complexity for Meaning



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SCOPE IDENTIFICATION



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Employment is a Wicked Problem

Factors	Metrics	Subconstruct	Impact
X7 Education	Functional Skills	Achievement	Assumption of citizenship responsibilities & Reduced reliance on public benefits
X8 Employment	911 data		
X1 Family & Friends	Integration	Independent Living	
X2 Financial Self Sufficiency	Bank Balances, Housing		
X3 Transportation	Travels Independently		
X4 Health Care Access	Health management		
X5 Food sufficiency	Freedom from hunger		
X6 Recreation	Social exchange		
Xi etc	Whatever		
Problem type	Summative / Formative	Short term	Distal

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State VR agencies are **systems** of unique organizational structures



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Shared Characteristics

- Common Purpose & Goals
- Expectations
- Assumptions & Risks
- Customers
- Inputs, Outputs, Outcomes
- Minimum processes
- Impact

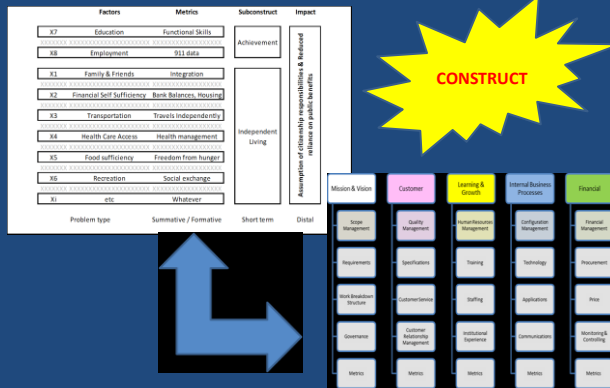
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Unique Differences

- Embeddedness in government
- Organizational structure
- Tools
- Financial capability
- Populations served
- Economic climate
- Geographic constraints
- Community capacity differences

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HOW ARE WE TO MANAGE?



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Assumptions, Logic Models, & Dashboards

- *It is perfectly possible to perfectly measure the wrong attributes every time, and come to the perfectly wrong conclusion about the perfectly wrong problem.*
- *Inspect and verify*

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↑ FROM SCOPE TO SCALE ↓

- CONSTRUCT – PROBLEM THEORY, WHAT & WHY
- SCOPE – SYSTEM & FACTORS
- SCALE – ACTIVITIES, EFFICIENCIES & BENCHMARKS
- MEASUREMENT – PROCESSES, OUTPUTS, METRICS
- MEANINGFULNESS – THE RIGHT STUFF

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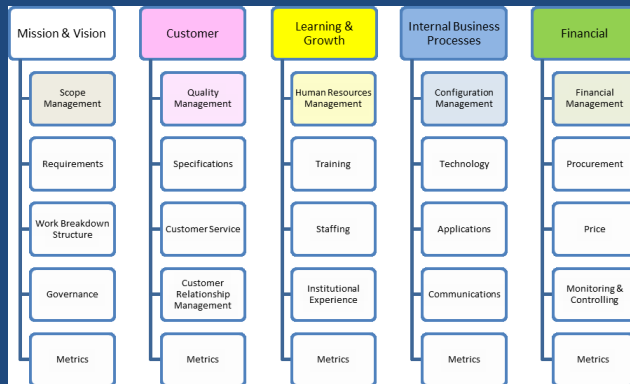
Balanced Scorecard

(Kaplan & Norton, 1992)

- ✓ Represents characteristics of a **system scope**
- ✓ Integration requires **configuration** of the operational system scale to be managed
- ✓ Organizes and translates ideas to into **management actions**
- ✓ Defines strategic decisions, benchmarks
- ✓ From decision strategies to **metrics** and **impact measures**

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☀ The Management Dashboard



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The **Mission** of the state VR agencies are to house the structure for delivery of services authorized under the Rehabilitation Act of 1973 & WIA



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The Adopted Vision Reflects



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Unique Values, Culture, Needs



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Of Local Stakeholders



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Learning & Growth

What do we need to learn?

- Training
- Human Resources
- Capacity Development
- Processes
- Procedures



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Change Control

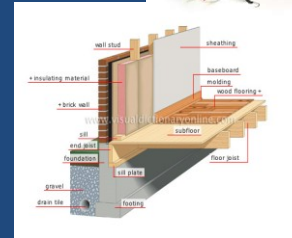
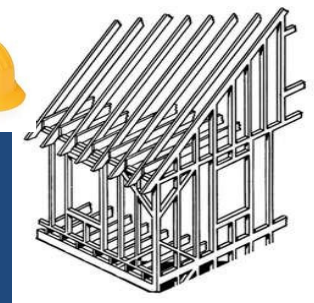
✓ CONTROL VARIATION IN PROCESSES
 ✓ MANAGE DECISION STRATEGIES
 ✓ INNOVATION



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Internal Business Process

Foundation Business Practices



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Minimum Requirements

- Standards
- Plans
- Policies
- Procedures
- Priorities
- Partnerships



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Financial Investment



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Assumptions & Risks



THEORY OF PROBLEM
 ✓ SUBCONSTRUCTS
 ✓ CONSTRUCTS

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Quality

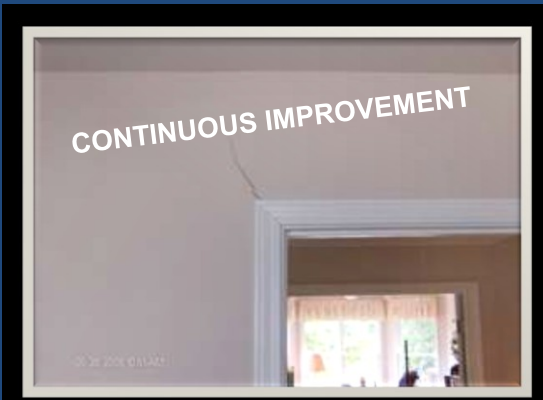


INSPECTION TEST PLAN AND LOG

CONTRACT NUMBER		PROJECT NAME		CONTRACTOR		EXAMPLE	
Item	Spec #	Specifications Section	Subsection	Test Required	Frequency	Test By (All tests verified by supervisor unless noted)	Remarks
1.	033000	Cast-in-Place Concrete	3.12	Mixing and Delivery	Each Truck	Concrete Patcher/Supplier	
2.	033000	Cast-in-Place Concrete	3.12	Concrete - Three cylinders, slump, air temperature	1 composite per truck load delivered	Third party inspector	
3.	094110	Metal Roof Panels	3.6A	Insider Qualifications	Prior to commencement of work	Superintendent	
4.	221100	Water Distribution Systems	3.2N	HDPE Pipe - Bark Strip Test	Once Daily	Plumbing subcontractor	
5.	221100	Water Distribution Systems	3.5A	Hydrostatic Testing of Water System	See Spec.	Plumbing subcontractor	
6.	221100	Water Distribution Systems	3.5B	Pressure and Leakage Test - Water Line	See Spec.	Plumbing subcontractor	
7.	221100	Water Distribution Systems	3.6A	Microbiological Examination	After distribution, before use	Plumbing subcontractor	
8.	221120	Water Distribution Systems	3.6A	Mechanical and Electrical Testing (Pump System)	See Spec.	Plumbing subcontractor	
9.	221200	Water Distribution Systems	3.12A	Bath Test	Unit Passing	Plumbing subcontractor	
10.	221200	Water Distribution Systems	3.12B	Air Test	See Spec.	Plumbing subcontractor	
11.	221200	Water Distribution Systems	3.12C	Pressure Test	Unit Passing	Plumbing subcontractor	

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Maintenance



CONTINUOUS IMPROVEMENT

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Design of Metrics



Inform decision processes

- **Summative**
- **Formative**

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KEY PERFORMANCE INDICATORS

Short Term Program Goals + Distal Goals

Subconstructs

- Program factors
- Inputs
- Activities
- Outputs
- Outcomes

Distal Construct:

- Theory of the Problem
- Mission
- Customer
- Learning & Growth
- Internal business process
- Financial

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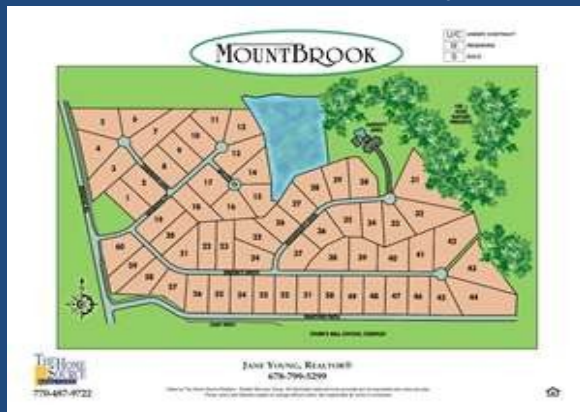
IMPACT

- Mission **adherence**
- **Market** forces and customer needs
- **Improvement** through learning
- **Productivity** of business process outputs
- **Performance** outcomes



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Continued "Fit for Purpose"



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