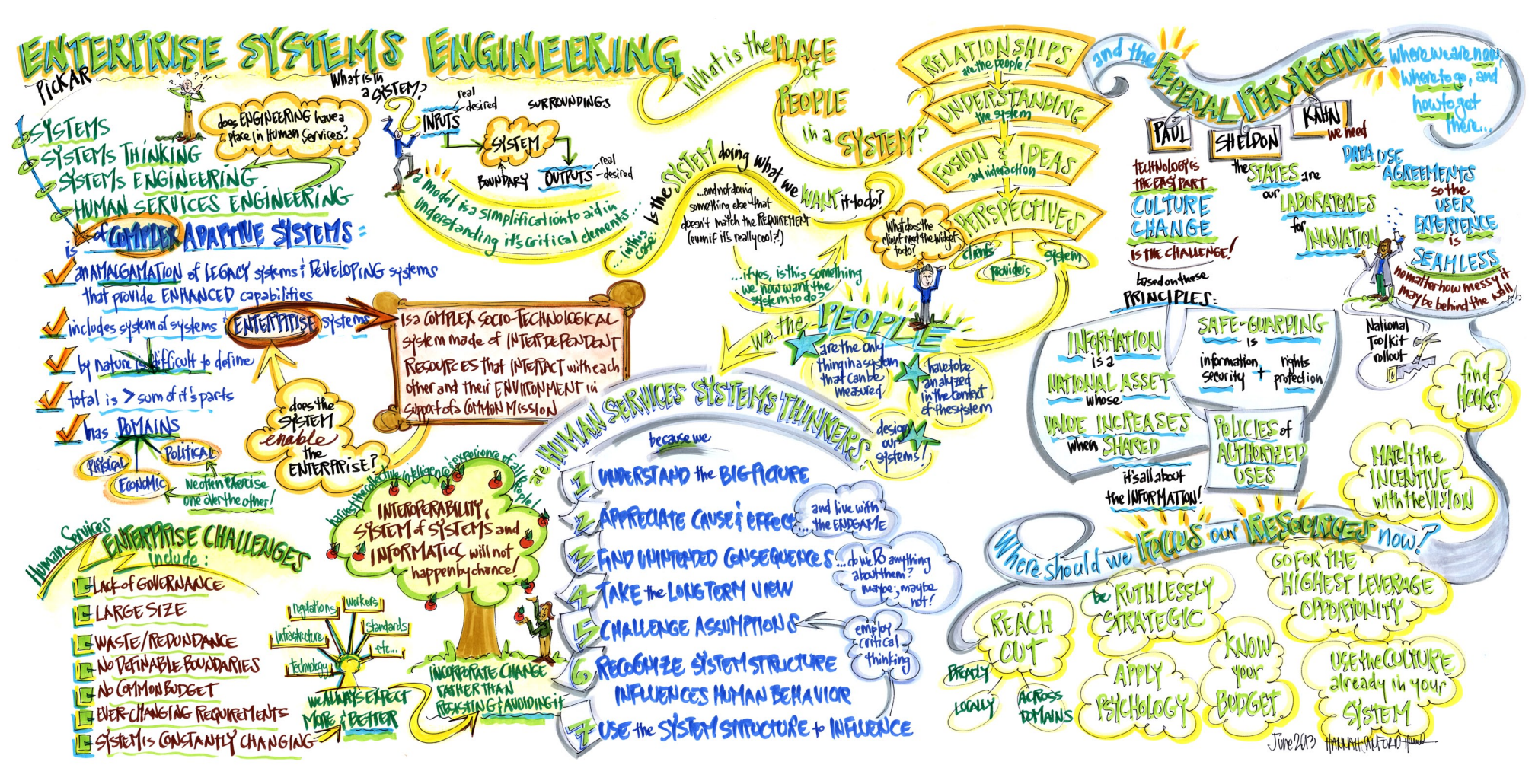
ENTERPRISE SYSTEMS ENGINEERING
PICKAR
SYSTEMS
SYSTEMS THINKING
SYSTEMS ENGINEERING
HUMAN SERVICES ENGINEERING
does ENGINEERING have a place in Human Services?
What is in a SYSTEM?
INPUTS
real
desired
SURROUNDINGS
SYSTEM
BOUNDARY
OUTPUTS
real
desired
a model is a simplification to aid in understanding it's critical elements...
...in this case: Is the SYSTEM doing what we WANT it to do?
...and not doing something else that doesn't match the REQUIREMENT (even if it's really cool?!)
...if yes, is this something we now want the system to do?
What does the client need the widget to do?
RELATIONSHIPS are the people!
UNDERSTANDING the system
FUSION & IDEAS and interaction
PERSPECTIVES
clients
providers
system
and the FEDERAL PERSPECTIVE
where we are now, where to go, and how to get there...
PAUL
SHELDON
KAHN
we need
TECHNOLOGY is THE EASY PART
CULTURE CHANGE is THE CHALLENGE!
the STATES are our LABORATORIES for INNOVATION
DATA USE AGREEMENTS so the USER EXPERIENCE is SEAMLESS
no matter how messy it may be behind the wall
National Toolkit rollout
is of COMPLEX ADAPTIVE SYSTEMS:
an AMALGAMATION of LEGACY systems & DEVELOPING systems that provide ENHANCED capabilities
includes system of systems & ENTERPRISE systems
by nature is difficult to define
total is > sum of it's parts
has DOMAINS
PHYSICAL
POLITICAL
ECONOMIC
we often exercise one over the other!
does the SYSTEM enable the ENTERPRISE?
is a COMPLEX SOCIO-TECHNOLOGICAL system made of INTERDEPENDENT RESOURCES that INTERACT with each other and their ENVIRONMENT in support of a COMMON MISSION
we the PEOPLE
are the only thing in a system that can be measured
have to be analyzed in the context of the system
design our systems!
based on these PRINCIPLES:
INFORMATION is a NATIONAL ASSET whose VALUE INCREASES when SHARED
SAFE-GUARDING is information security + rights protection
POLICIES of AUTHORIZED USES
it's all about the INFORMATION!
find HOOKS!
MATCH the INCENTIVE with the VISION
are HUMAN SERVICES SYSTEMS THINKERS
because we
1 UNDERSTAND the BIG PICTURE
2 APPRECIATE CAUSE & EFFECT
and live with the ENDGAME
3 FIND UNINTENDED CONSEQUENCES
...do we DO anything about them? maybe; maybe not!
4 TAKE the LONG TERM VIEW
5 CHALLENGE ASSUMPTIONS
employ critical thinking
6 RECOGNIZE SYSTEM STRUCTURE INFLUENCES HUMAN BEHAVIOR
7 USE the SYSTEM STRUCTURE to INFLUENCE
harness the collective intelligence & experience of all people!
INTEROPERABILITY, SYSTEM of SYSTEMS and INFORMATICS will not happen by chance!
INCORPORATE CHANGE RATHER THAN RESISTING & AVOIDING it
Human Services ENTERPRISE CHALLENGES include:
Lack of GOVERNANCE
LARGE SIZE
WASTE/REDUNDANCE
NO DEFINABLE BOUNDARIES
NO COMMON BUDGET
EVER-CHANGING REQUIREMENTS
SYSTEM is CONSTANTLY CHANGING
regulations
workers
infrastructure
standards
etc...
technology
we ALWAYS EXPECT MORE & BETTER
Where should we FOCUS our RESOURCES now?
REACH OUT
BROADLY
LOCALLY
ACROSS DOMAINS
be RUTHLESSLY STRATEGIC
APPLY PSYCHOLOGY
KNOW your BUDGET
GO FOR THE HIGHEST LEVERAGE OPPORTUNITY
USE the CULTURE already in your SYSTEM
June 2013 HANNAH ALFORD Hand