What is “Process Architecture” and why is it Important? (selections from overall notes)

Its characteristics (we didn’t have an articulation of what it exactly is)

Includes mapping strategy

Aligns/supports performance improvement first, then compliance

It allows you to “map the delta” (figure out how to add new technologies) at the architecture level, not at the lowest levels of granularity or function

Structure that promulgates fundamental concepts for product and process activities

proc architecture makes it clear what we do as a business

Multiple views (architect, user, engineer; also model-based views; and other types of views)

Multiple levels of abstraction

It is driven by many factors

Models serve as reqts, informational feeds, as well as measuring sticks

Higher level than the process itself

Streamlined, easily understood; not “spaghetti process”

Puts the process into context

Enables resiliency (via a certain level of abstraction and stability)

Includes things besides the models

Enables tradeoff decision making, options analysis, flexibility
What is “Process Architecture” and why is it Important? (all notes)

Includes mapping strategy
Aligns/supports performance improvement first, then compliance
Allows you to “map the delta” at the architecture level, not at the lowest levels of granularity or function
Structure that promulstates fundamental concepts for product and process activities
  proc architecture makes it clear what we do a a business
  If you do it right, all the other things fall into place
Multiple views  (architect, user, engineer)
Multiple levels of abstraction
It communicates in the language of your organization/business culture
Can be done according to multiple valid approaches
  objectives drive architecture
  or technology selection
Makes clear the nontailorable/nonnegotiable process elements
You have one even if it’s not epclitly
It is driven by many factors
Models serve as reqts, informational feeds, as well as measureing sticks
Higher level than process itslef,
Streamlined, easily understood;  not “spaghetti process"
…explains the process
Enables resiliency
Includes things besides the models
Service based
What Solutions are Available?

Proprietary approaches
Various diagramming/decision techniques, but they are insufficient
   (proc mapping, xml, little jil, etc.)
COTS methods, but need translation
“purchased” COTS solutions/architectures
   but like all COTS, mneeds adjustment
   also, often compliance based
   and few “multimodel” solns available
Other SW/SE approaches, but we don’t know which ones, how to adapt, etc
   borrow from systems architecture & engineering
General systems theory methods
Some modeling and workflow tools, but usually narrow or limited in scope
What Research or Actions are Still Needed?

See previous slide -- need some common “how to” guidance
Understanding of
  the right level of granularity
  of the right degree of explicitness
What differentiates something as an “architecture” vs. a “collection of processes”;
  we have lots of pieces, what makes the architecture
Take a leap: figure out the “process theory”
  (xref other disciplines)
What are the Highest Priorities?
What should be Addressed Next?

Would like to see good examples
along with the approach that was used to create it

What differentiates something as an “architecture” vs. a “collection of processes”
includes what are the characteristics of a good architecture

Languages, methods and tools to define the architecture and subsequently define the processes that are ready for users
an integrated set of guidance/tools/methods
the total, interoperable system from architecture to process def to process enactment/implementation/execution
includes process modeling, workflow analysis