ARCHITECTURE

Breakout Session

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 epclitiy
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

