



“An Introduction to Process Mapping for Systems Planning”

Process '101' Topics (Today's Agenda)

Process Mapping Overview, Definitions
Value Proposition

Potential Benefits of Process Mapping

Why and When to capture Process?

Notation Symbols and Event Flow

Process Capture roles and approach

Standards, Styles, Examples

Useful Resources and Contacts

Wrap-up and Feedback

Mapping for the Organization

Process Mapping is about...

The practice of capturing the various components of what an organization, department, or business unit's functions perform under routine operation which has impact on the organization in some measurable way. The linkage between these often disparate yet linked models is the essence of Process Mapping. An understanding of the Organizational Structure is essential to the arrangement of these activities in a way that catalogues and can document the organization's overall capabilities.

Why Process Mapping Matters

Defining Processes leads to a common understanding; by easing communication, empowering efficiency, raised awareness leads to improvement.

Helps encourage wider participation: knowledge of participants' roles/responsibility allows ideas and insights to flow in, for effectiveness and productivity.

Enables the organization to also base-line itself to establish performance standards and goals, gauge effectiveness, and ensure results meet business purpose.

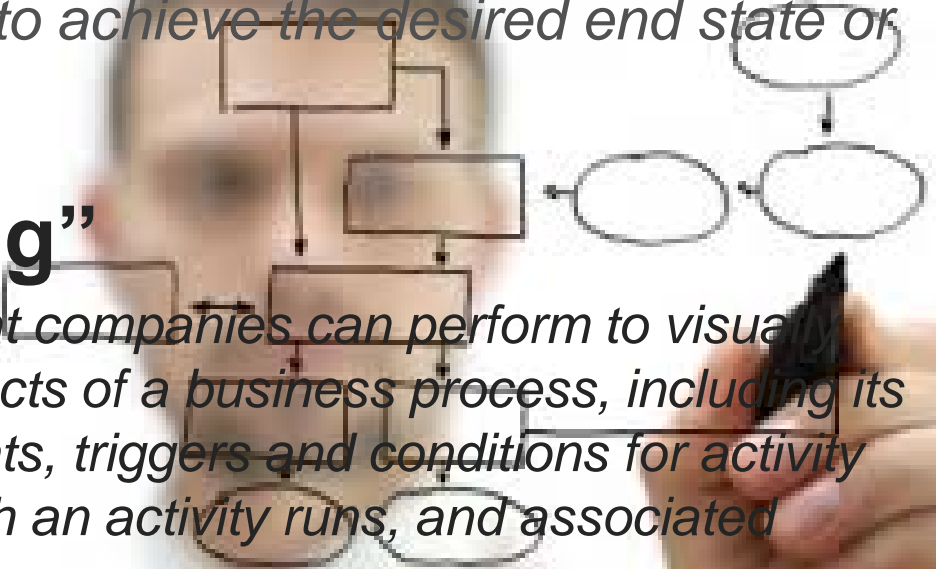
Definitions

“Process Model” [from UC EA Glossary]

A representative depiction of a sequence of Events [or “steps”] which trigger action and the associated sequence of events and rules involved in decision making and information flow along the event “steps” that progress to achieve the desired end state or outcome.

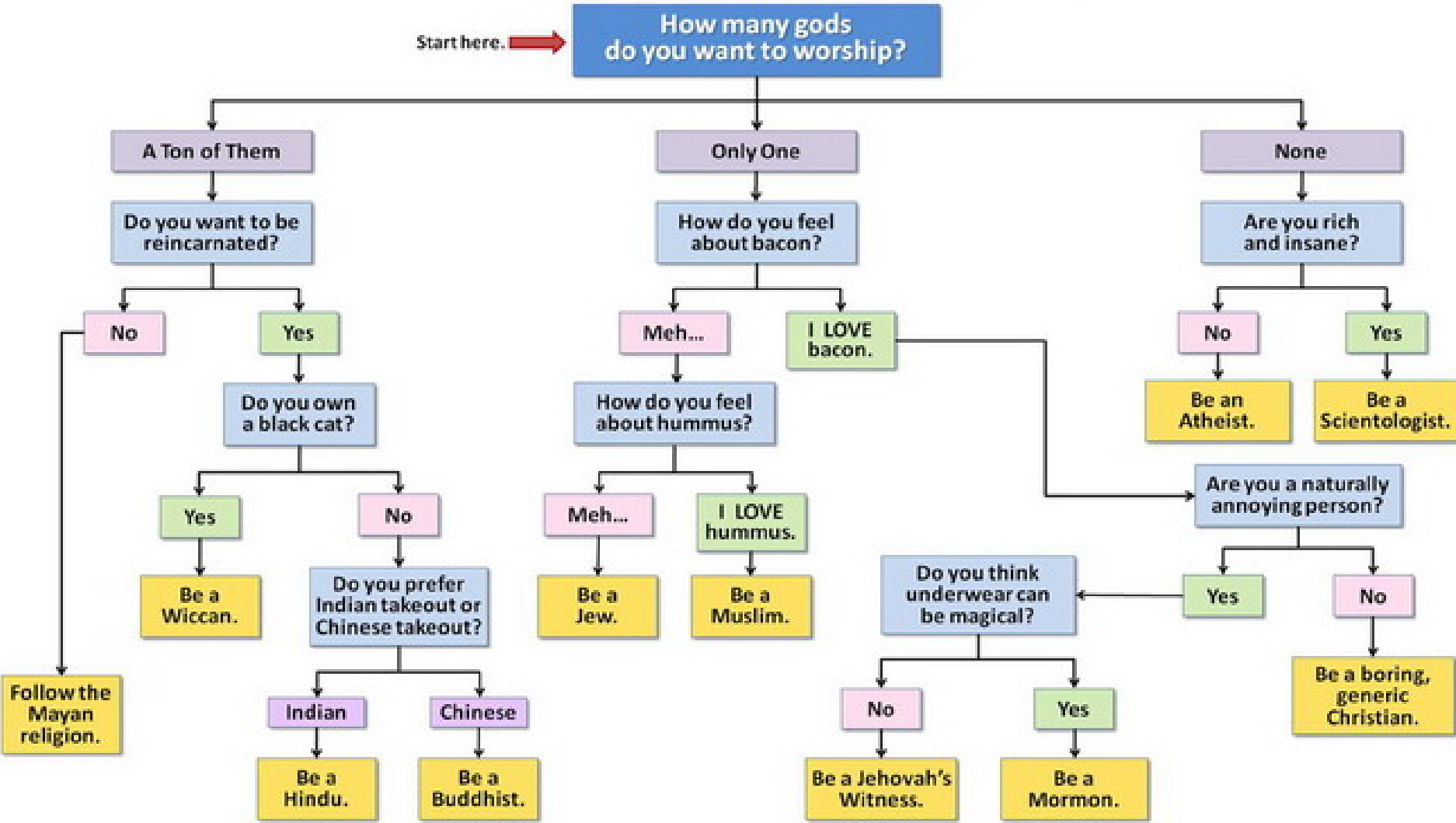
“Process Modelling”

“A set of practices or tasks that companies can perform to visually depict or describe all the aspects of a business process, including its flow, control and decision points, triggers and conditions for activity execution, the context in which an activity runs, and associated resources.”

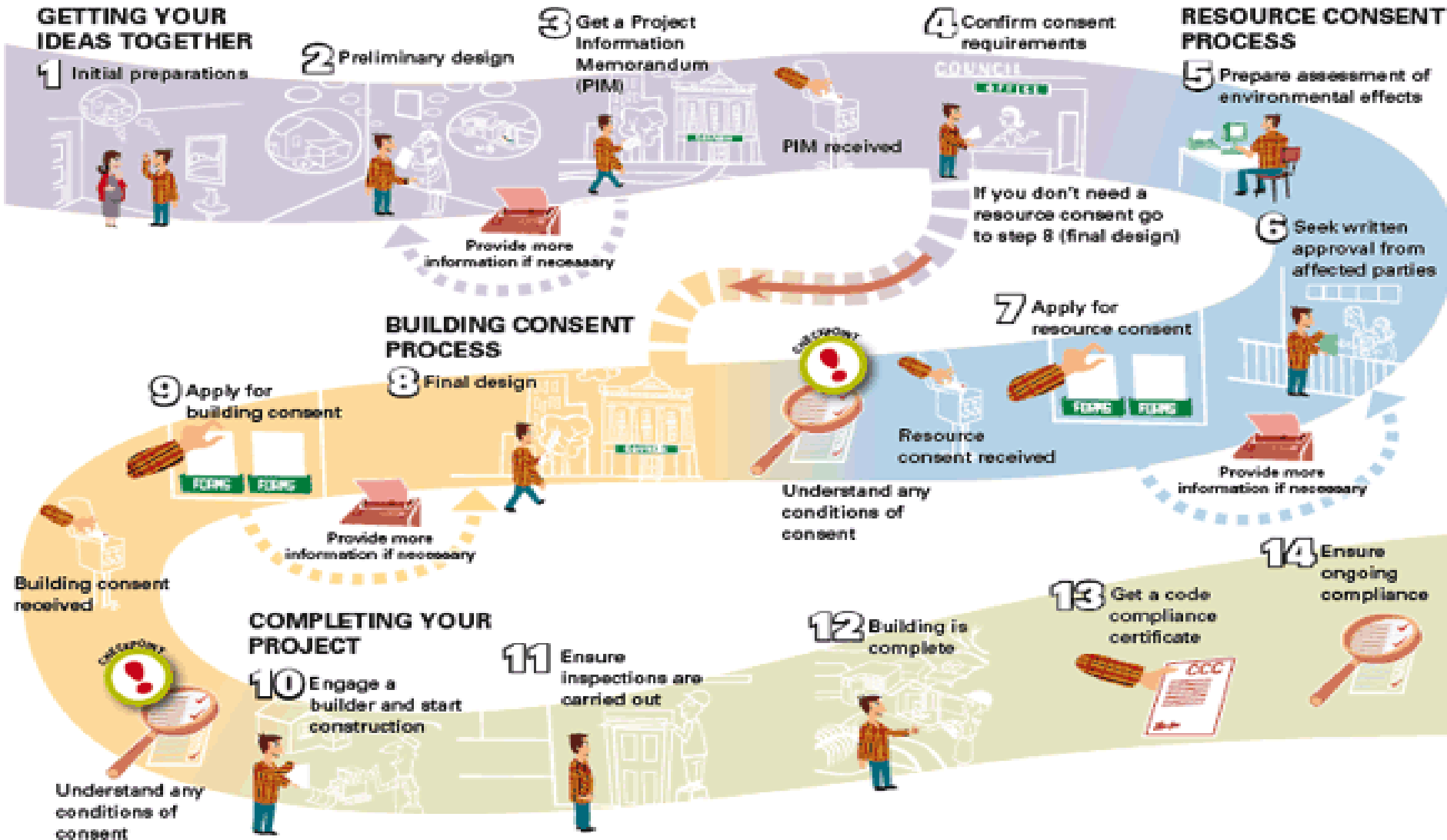


Process Diagrams and Formats

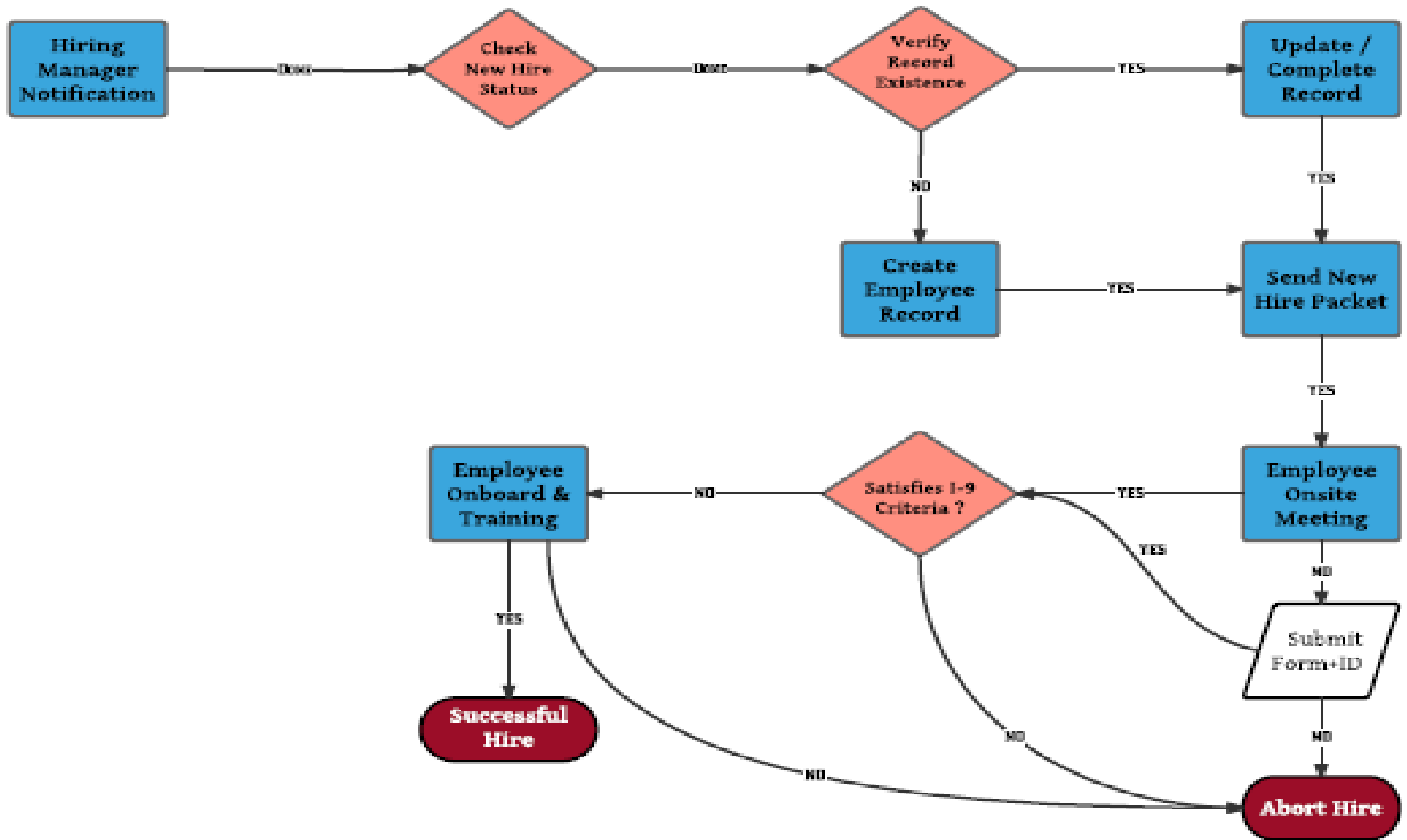
A Flowchart for Choosing Your Religion



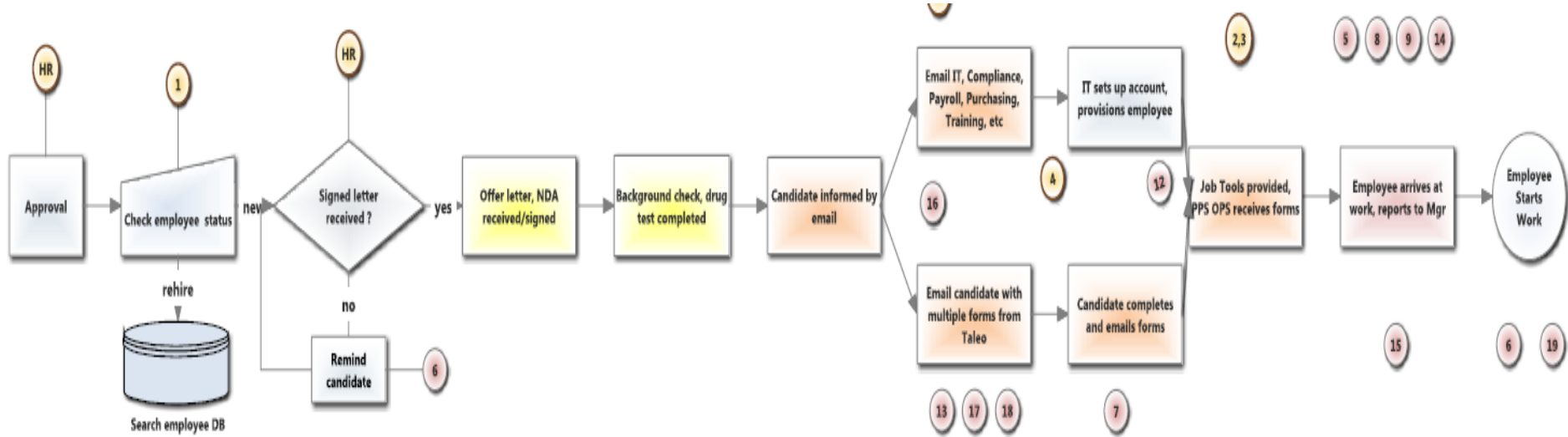
Process Overview and Workflows



A familiar UC Workflow ?



Workflow Chain with Infosystem "tags"



Tag/ID	Role/Person	Action
HR	Recruiting Team	Oversight
1	Admin	ADP Entries
2	Finance	TIMS Entry (PCC)
3	Operations	SFDC Entry (PCC)
4	IT Helpdesk	

Tag/ID	Idea	Actions
5	"Receiving party" for first day arrival	
6	Standard hire dates	"cadence" start dates
7	drive a "deadline" for doc completion	
8	Assisted document completion	
9	standard training on PPS resources and benefits	deepen attachment w/ self-guided learning

Tag/ID	Concern	Comments/Remedy
10	Equipment Collection	Not closed loop
11	Equipment Assignment	Not logged for accountability
12	Need standard template/equip. package setup	capture assignment details into forms to Present on receipt at HD
13	Efficiency	Template letter, Process communication to hiree
14	Protocol for 1st day (Mgr communication)	Standardize communication protocol
15	Professional/Repeatable experience	

Tag/ID	Comments	Sugg. Action
16	Clear communication	Standardize communication protocol
17	Multiple Employment docs confusing	Unify and index/label or glossary
18	Email is not synch- follow up not assured	directly contact prior to start date
19	Time to contribution	OJT, shadowing and learning resources

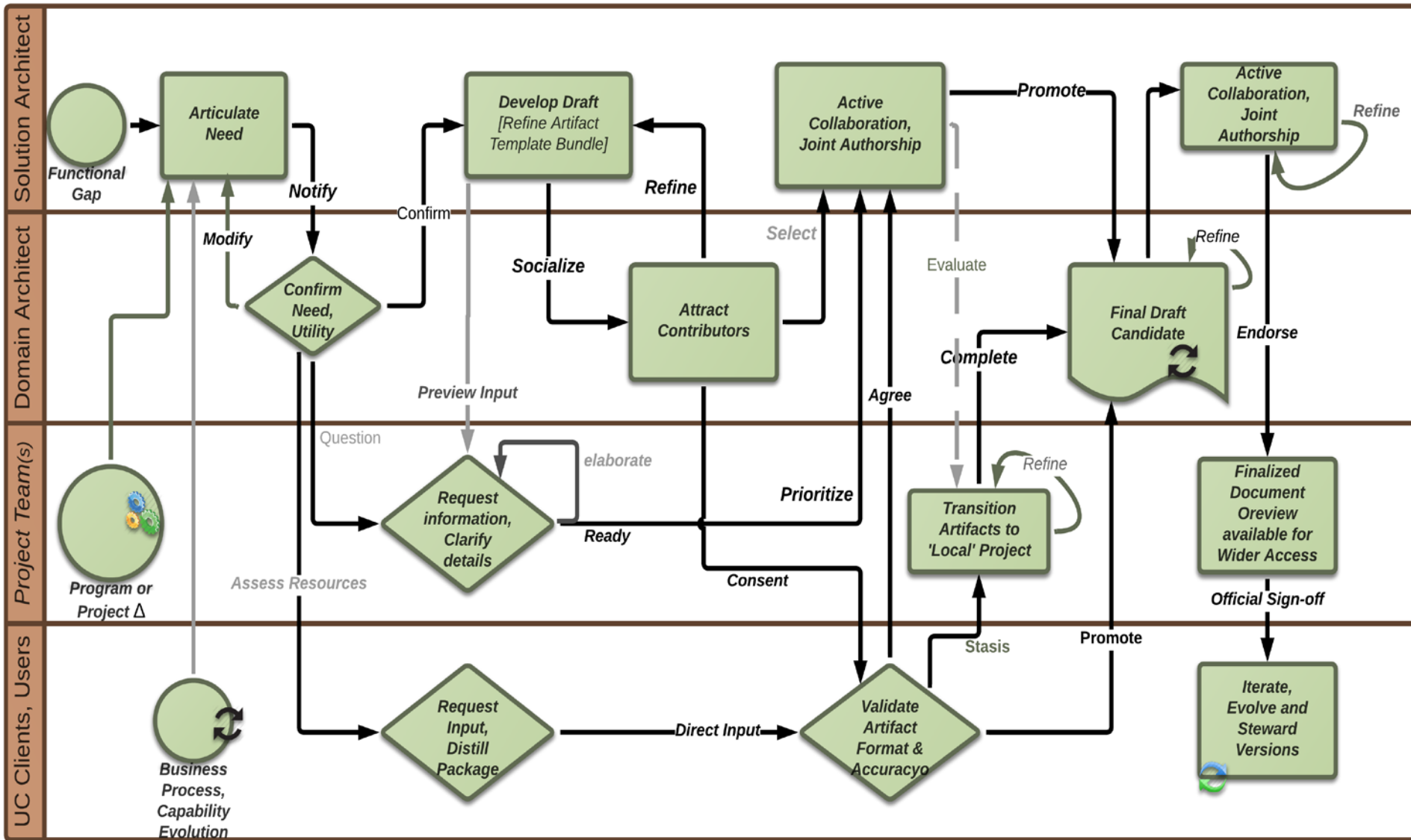
KEY	
	Hot spot 1
	Hot spot 2
	Hot spot 3

When Processes are most useful

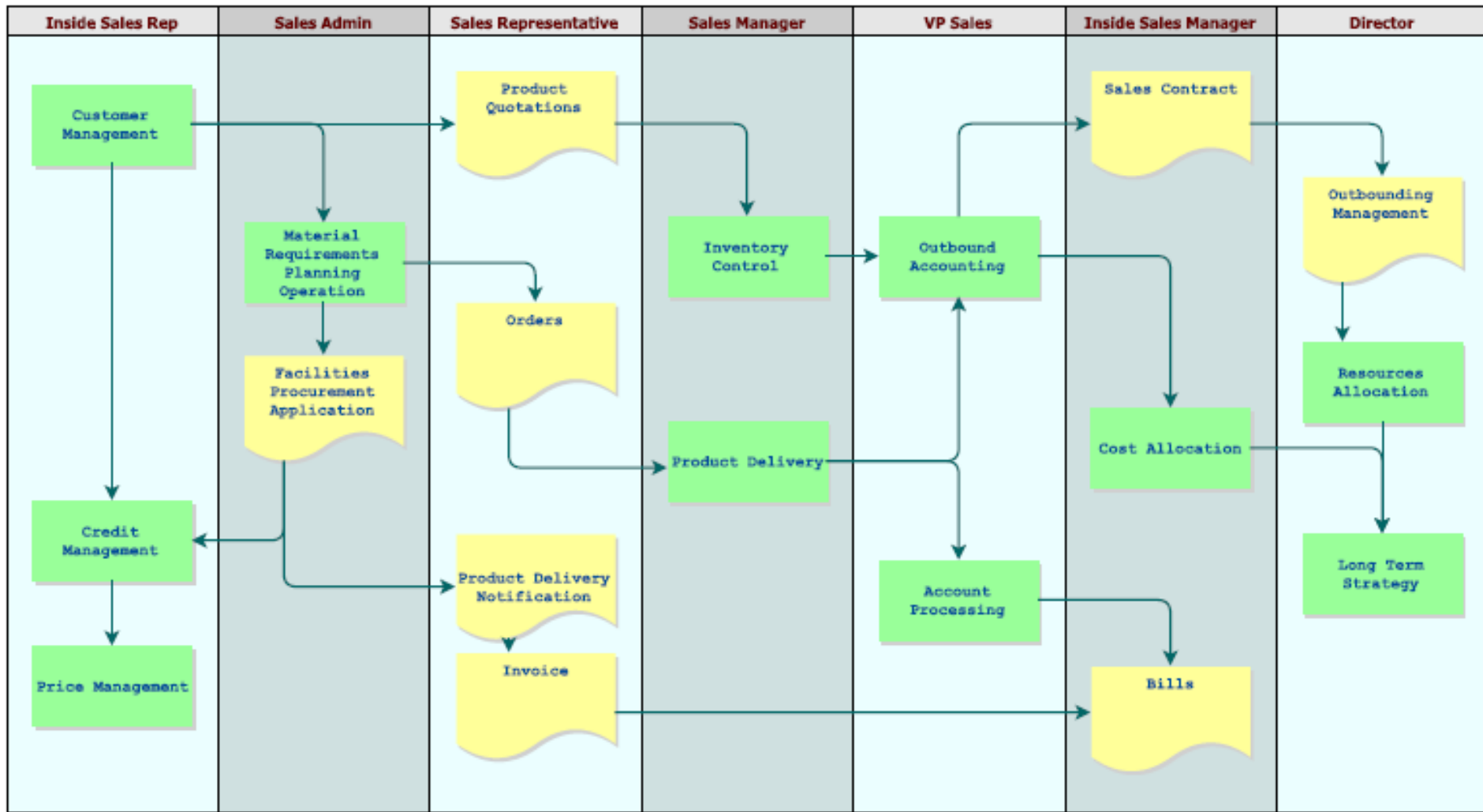
- For examining the function/product of a business unit, or analyzing activities.
- In reviewing all the contexts in which it is leveraged, assessing “value” to business.
- To raise awareness of “effectiveness” and “quality”, toward ultimate Optimization.
- During redesign: as the basis for proposed functional enhancements; also in widespread / transformational change.

Process – Workflow Hybrid Model

UC Solution Architecture Engagement Model



Workflow- style Process-role Overview



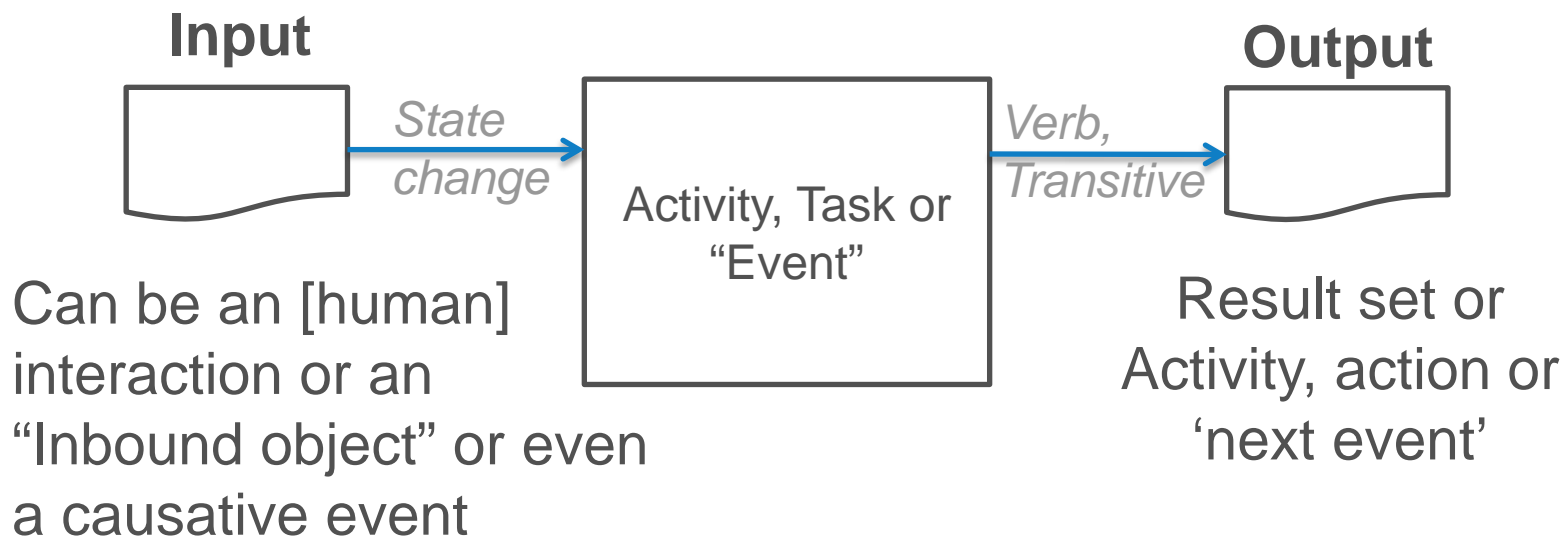
Process Capture roles and ‘perspectives’

The following are useful during process capture efforts:

- Facilitator – guides the process/discussion path
- **Modeler*** – organizes steps in sequence, builds model
- *Stakeholder* – Business sponsor + interested party
- *Steward* – Manages the evolution of the process/functions. Responsible for currency/update
- Program / Project Lead – keeps time, flow, interactions on point and coordinates resources
- **Documenter*** – annotates w/details, context, format
- **SME*** – historic, human workflow perspective
- *Architect* – delineate system, internal interactions

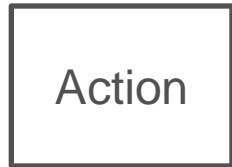
Flow capture and chaining

The general manner used in the progression of the Process; chaining into a sequence.

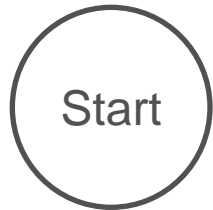


Modelling Notation (basic overview)

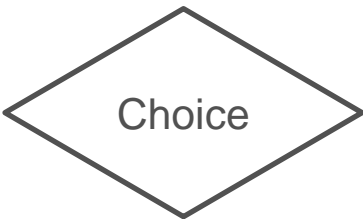
Core symbols and their meanings:



Activity or Task [Step] – denotes a procedure, function or series of them, depending on nesting level



Terminus – can represent a starting/ entry point or end of the Process, depending on location.



Decision – indicates conditional logic, with either values, events, choices or calculations.



Document – denotes organized input, output of information flowing into or out of a step.

Process Capture – ‘Noble’ end-goals

Some longer term potential to explore:

- **Base-lining** allows process to be captured at a point in time: later on analysis, learning and “playback” can be performed for optimization.
- Ensure a common **understanding** of steps, methods, objectives and gaps, *bottlenecks*.
- **Benchmarking** against external references and best practices, productivity bottlenecks can be Optimized or simplified, modularized.

Standards and Methods

Core Standards: BPMN [WS-]BPEL

Business **P**rocess **E**xecution **L**anguage is an orchestration language for specifying business process behavior based on Web Services, with a focus on “executable,” as opposed to abstract business processes XML-based business process models that can be executed, stored, and exchanged Contains no graphical notations. [WS-]BPEL is an execution language to describe the behavior of business processes in a standards-based environment.

This language describes the syntax for the elements of a process, such as the partner links, service invocations, data variables, correlation sets, defining a format in XML. Having a standard means that a process defined by one vendor's tool set can be consumed by the run-time of another vendor, though WS-BPEL from one vendor might require modification prior to running another's run-time engine.

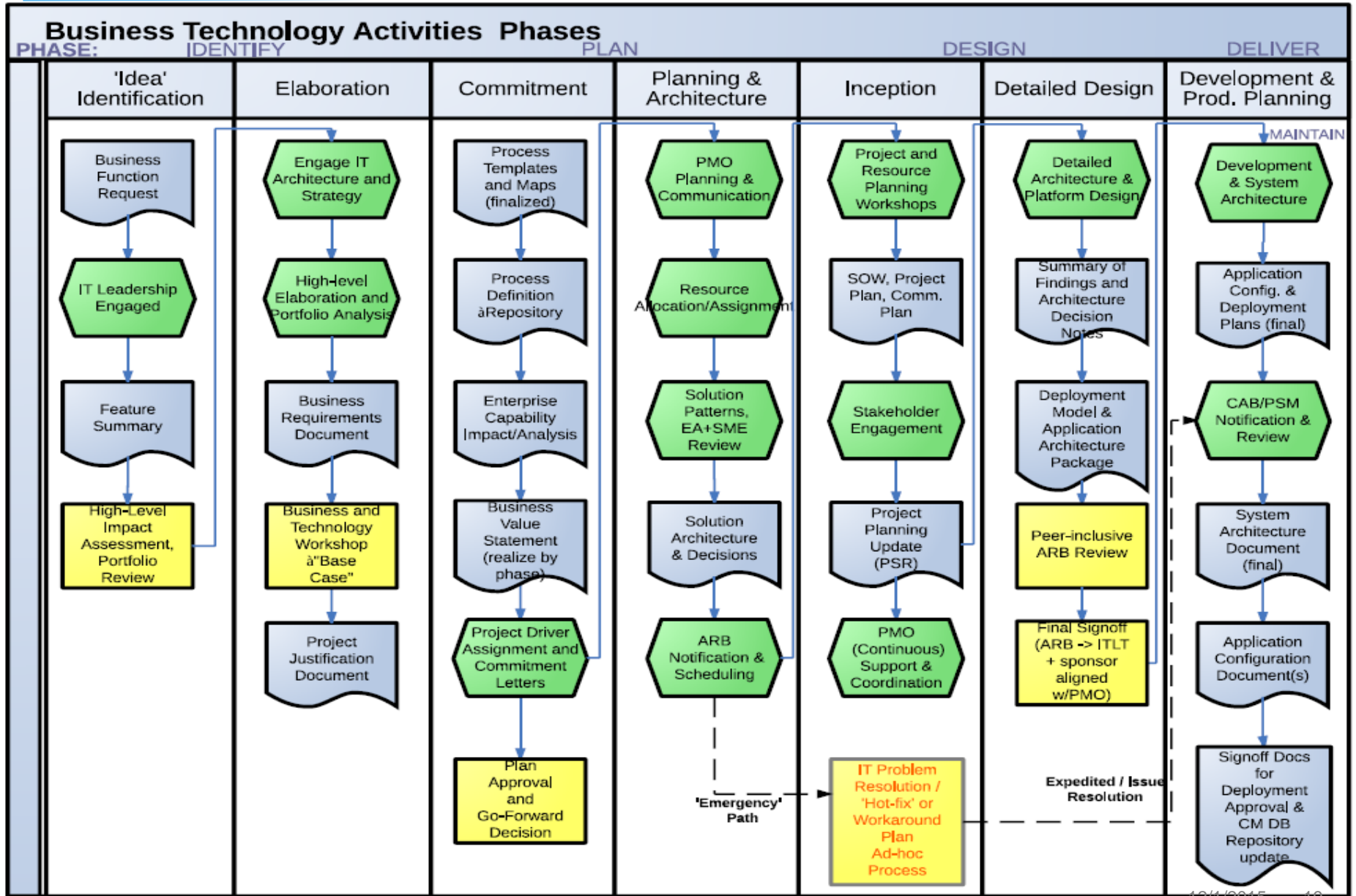
Standards and Methods

Core Standards: **BPMN** [WS-]BPEL

Business **P**rocess **M**odelling **N**otation aims to be readily understandable by all business users, from the business analysts that create the initial drafts of the processes, to the technical developers responsible for implementing the technology that will perform those processes, and finally, by the business people who will manage and monitor those processes. Thus, **BPMN** creates a standardized “bridge” for the expected gap between the business process design and the process implementation.

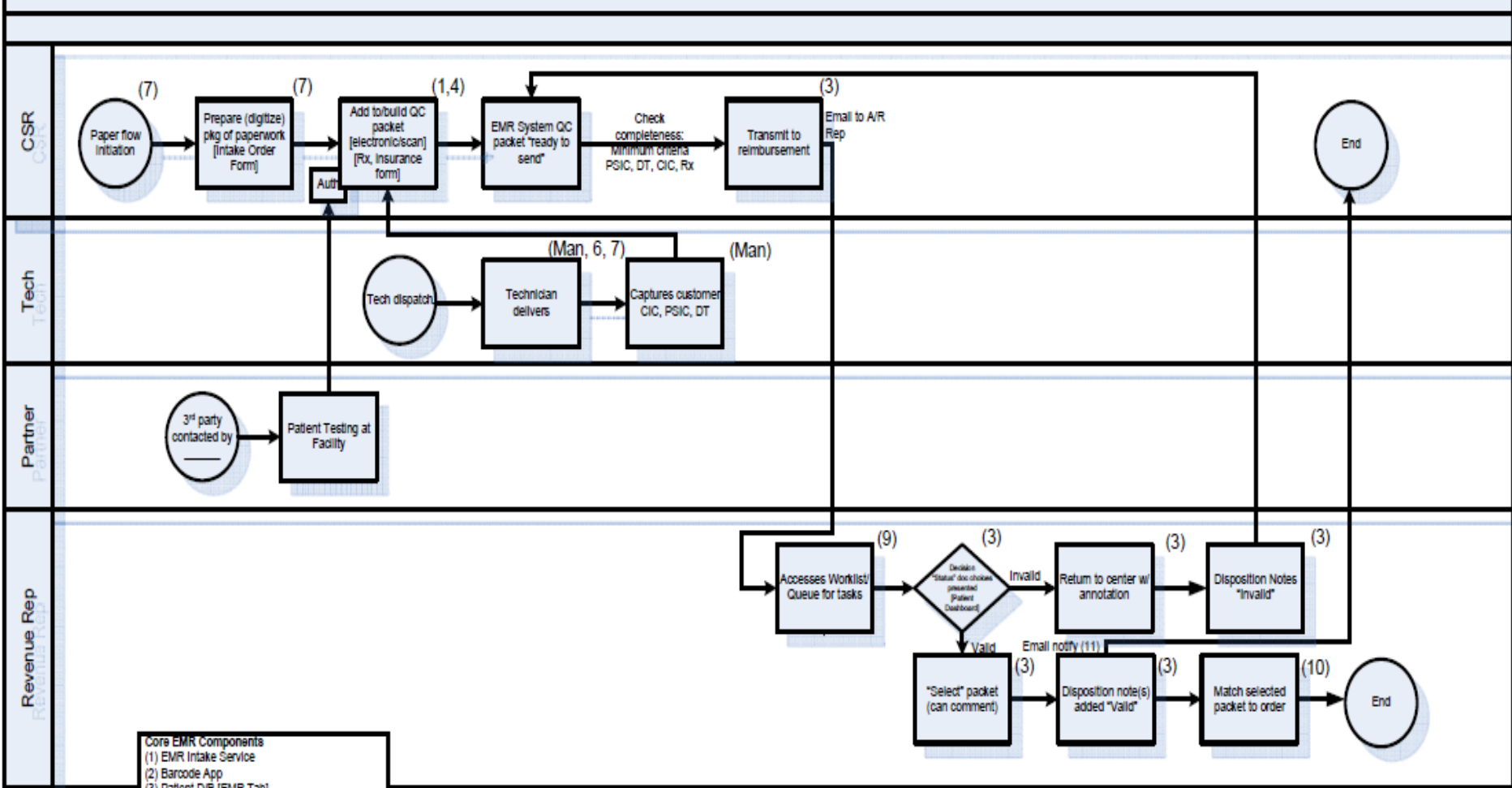
Added Benefits of BPMN: ...to ensure that XML languages designed for the execution of business processes, such as **WSBPEL** (Business Process Execution Language), can be **visualized** with a business-oriented notation.

Swimlane Diagrams and Variations



Process Diagrams & Formats (3/3)

O2 Paper Flow

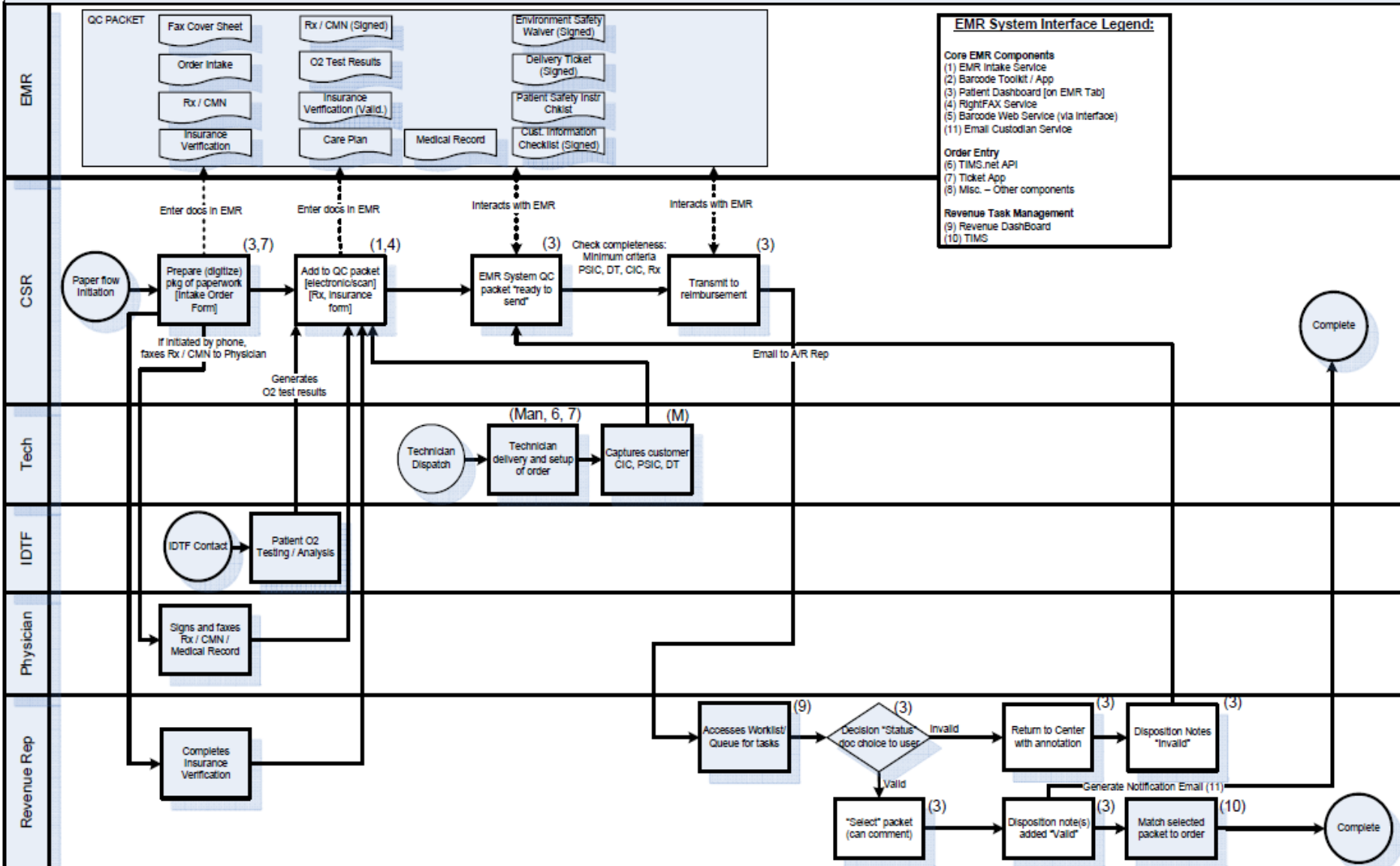


- Core EMR Components**
- (1) EMR Intake Service
 - (2) Barcode App
 - (3) Patient D/B [EMR Tab]
 - (4) RightFAX (Appliance)
 - (5) Barcode W.S. Interface
 - (11) Email Custodian Service
- Order Entry**
- (6) TIMS.net API
 - (7) "Ticket App"
 - (8) Misc. Components
- Revenue Task Management**
- (9) Revenue DB
 - (10) TIMS

= Integration Point

Process Diagrams & Formats (3/3)

O2 / Nebulized Medications Paper Flow



Highest Level of Detail, Suitable for Information technology audience, Process Leads, & SMEs

When to do Process Modelling

Popular times:

- Coincident with start of 'Change' efforts
- On customer request i.e. "new delivery"

'Required' Times:

- Gathering Business requirements, input
- Understanding perspectives on Trade-offs
- Deciding on an approach to System Design

Optimal Times:

- Strategic Planning and Issue analysis
- Organization Transformational change

Useful Modelling Tools *(you can try)*

Microsoft [Office] Visio – upgrade std. UCOP Office license

SmartDraw – a personal favorite, versatile and intuitive

Adonis CE – freeware BPMN2 tool, try before you buy

Dia– **Apache project**; **Pencil Project** - **Download**
(browser-accessed)

Draw.IO – comes equipped w/Confluence Wiki/ JIRA plug-ins

Lucid Chart – currently used by UCOP EA Team, so many diagrams already exist; has modest folder and share capabilities.

Gliffy.com – slightly simpler than LucidChart, w/BPMN template and color themes included. Also has Confluence Wiki plug-ins.

How to Start your efforts

Where to go for help in organizing or planning a process capture for my group?

@ UCOP & ITS

Prepare a short description of the context, frame the need and choose target domain, send to Jonathan Kahn or Jerome McEvoy

@ Berkeley - BPAWG — Business Process analysis working group, best practices / networking with practicing Analysts.
Contact: Isaac Mankita

Reference Models and Standard Organizations

BPMN.org; XPDL.org; APQC.org

Q & A, Wrap-up

Questions: [chat or live]

Feedback, Sharing

Appendix Content

Resources and Background Info / Groups

Glimpse of Follow-on Topics

Additional Resources & Background Info

Key Reference Standards / Sponsor Groups

OMG – Object Management Group (www.omg.org) stewards:
Business Process Modeling Notation (**BPMN.org**)
Business Process Definition Metamodel (BPDM); XPDL.org

Workflow Management Coalition (www.wfmc.org) stewards:
XML Process Definition Language (**XPDL**)

W3C – *or* World Wide Web Consortium –
Web Services Choreography Description Language (WS-CDL)

OASIS (www.oasis-open.org) evolves:
Business Process Execution Language (**WSBPEL**)- and ebXML

Modelling Approach *(future topics)*

Process Capture Best Practices *(how to begin)*

- Selecting the right Notation Method

- Effort Timing, Objectives and Scope

- Process Family Maps and Layering

- As-is vs. To-be - mapping the transition

Capture Methods and Tooling

- Facilitation: Setting perspective, mindset

- Requirements Elicitation and Role Assignment

- Tool Benefits and complexities

Process Stewardship and Maintenance

Project Estimation: Capture Planning and Scoping

Modelling Approach Tips

Best Practices for “Process Capture” Session

- Choose a starting point or state to focus on
- Decide on what will be captured and how
- Define the viewpoint[s] and style
- Invite key participants
- Assign roles or view[s] to individuals
- Know the process delimiters and endpoints.
- Keep conversation moving, revisit details
- Try to keep detail level consistent in drafts
- Identify and note informational “soft spots.”
- Validate findings leveraging SMEs & Leads

Process Capture – Best practices

Start with the value or issues as “**Motivation**”

- Target gaps, to derive real cost and project benefits
- Try selling up chain – to gain Executive Buy-in

Scope and set capture expectations early on

- Short circuit confusion, resistance and sabotaging
- Align with corporate direction and initiatives
- Solidify value by delivering early observations

Start with core or common process areas

- To stimulate fuller, widespread engagement
- Higher Visibility can drive recognition and power with added momentum to cover more ground.