

University of Pisa

MSc in Computer Engineering

# Systems for Strategic Management and Support

## LECTURE 6

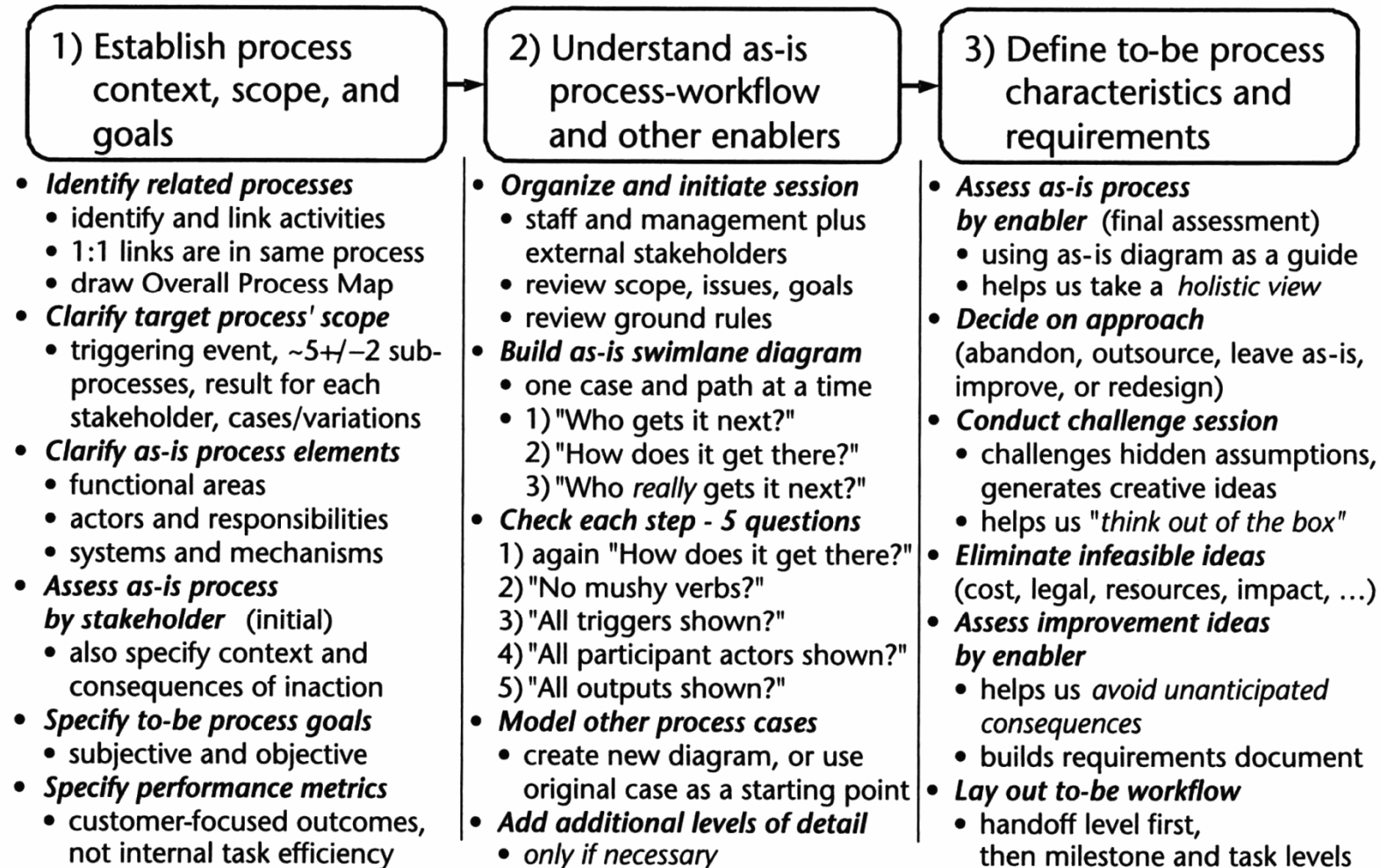
<http://www.iet.unipi.it/m.cimino/ssms/>

Mario G.C.A. Cimino

Department of Information Engineering

# A THREE-PHASES WORKFLOW-DRIVEN METHODOLOGY

S083

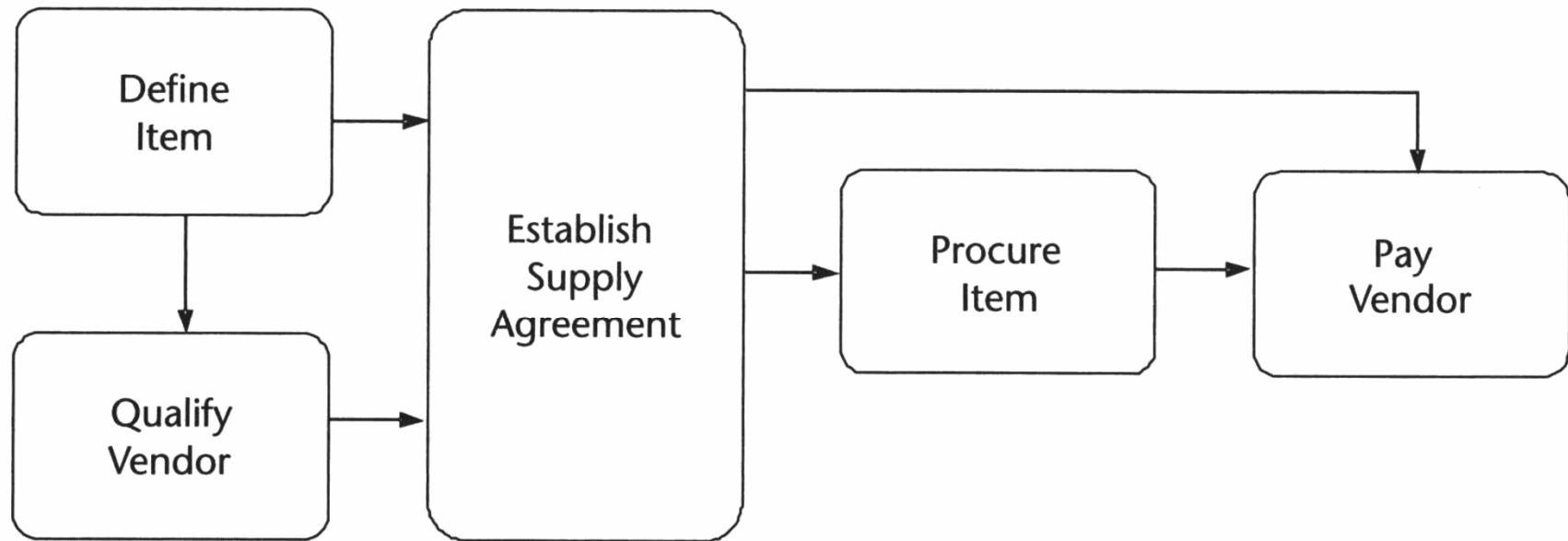


Three-phase project methodology.

# I) DISCOVERING BUSINESS PROCESSES

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S084 The goal: to determine a process area, 5-7 related processes  
Example: Supply Management area

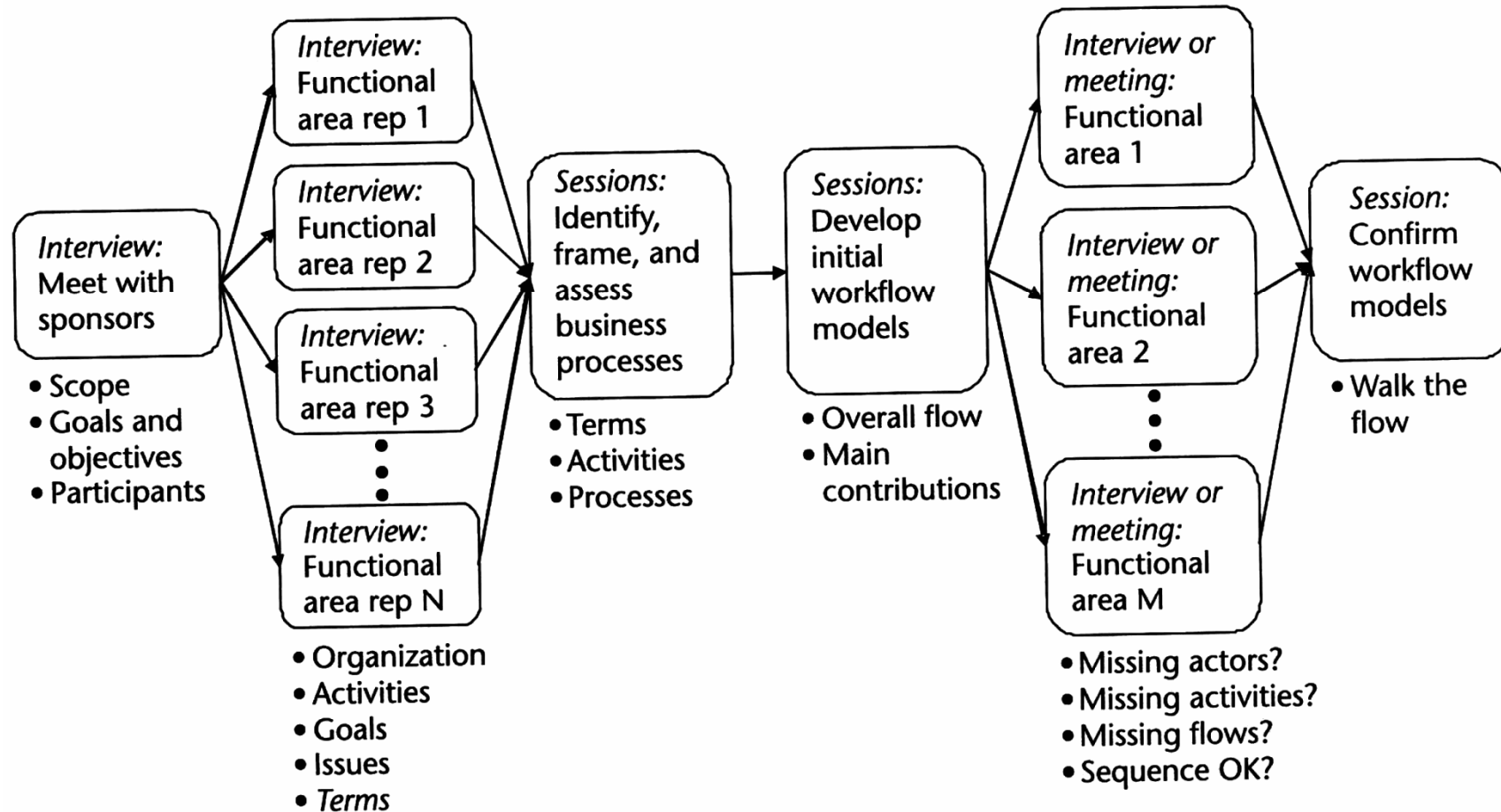


Overall process map for the Supply Management area.

S085 It clarifies what is out of scope and what is in (framing the process)

# I) DISCOVERING BUSINESS PROCESSES

S086



Phases I and II are a mix of interviews and sessions.

## **I) DISCOVER BUSINESS PROCESSES**

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- S087 Do not start with a Published Process Framework (ITIL, SCOR, APQC): they are at a higher (process area) or more granular (activity) level
- S088 Do not start with a problem statement: if you focus on problems prematurely you will be dragged by functional or departmental view into solution space, taking a local perspective
- S089 **I-1) Gathering background information**
- S090 - Invest some time in learning about the organization: mission, structure, key personnel, operating locations, major product or service lines, customer and markets served.
- S091 - Understanding the real business model: for example, a company making sophisticated product in field such as printing or cutting, but actually make money on low-tech consumable like ink or cutting tips.

## I) DISCOVER BUSINESS PROCESSES

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- S092 - Investigate the way in which a company seeks to differentiate from competitors and better serve its customer: operational excellence, innovative products, customer intimacy
- S093 A common error is to focus on operational excellence in an organization that competes on another differentiator
- S094 **I-2) Meeting with the Sponsor: important questions**  
(do not use it as a script)
- S095 - What is the overall purpose of the project initiative?  
E.g., “The initiative intends to improve order throughput time by implementing process and application improvements that will reduce exceptions and human intervention. We hope to have more than 80% of orders handled entirely by our suppliers and logistics partners without being touched at all by our employees”

## I) DISCOVER BUSINESS PROCESSES

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S096 - What is the current situation?

E.g. particular problems, how the operations currently work, why is not that good enough, what is changed in the environment

S097 - What is the primary business objective driving the project?

How to measure benefits (e.g. using 3T framework)? Are you serving customer or markets? Are you providing products or services? What is the differentiator?

S098 - What is in and what is out of the project (scope)?

Use the “Organization/application/data” framework: who will be impacted organizationally (departments, job functions operating locations)? which existing/new applications are involved? Which business data areas/bases/files that will be/won't be involved?

## I) DISCOVER BUSINESS PROCESSES

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S099 - If this is essentially a business process improvement project

Which cross-functional processes are/are not in the scope? What starts the bp? What is the result of the bp? How each stakeholder assess the current process? Are there areas that clearly need improvement? What would differentiate the process? How would success be measured (3T framework)?

S100 - What are technical or project objectives and deliverables?

Who do you expect to use the application to do what, i.e., a preliminary list for use cases. Is a new application to be developed, existing ones enhanced or integrated.

S101 - Who is the sponsor?

Do you have the final say on scope, resources, acceptance. What is the relative priority of the project.



## I) DISCOVER BUSINESS PROCESSES

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- S102 - What are links and dependencies?

Sources: where will data/work arrive from. Sinks: where will data/work be passed to. Interfacing and conversion work can account for to 70-80% of the development effort .

Other initiatives we should be aware of, related projects, past project (why did not succeeded).

- S103 - What are the known issues and constraints?

Conflict, policy decision, technical difficulty, deadlines, regulations, security, resources, staff, space, equipment, budgets. Which of the three main variables scope/timeframe/resources are fixed and which are elastic. Have important decision already been made (approach, hw/sw platform, consulting firm, industry framework)

- S104 - Any advice on how to succeed with this project? Things to avoid to increase the chances of failure?

## I) DISCOVER BUSINESS PROCESSES

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S105 - Team organization:

S106 Core team: responsible for all aspects running the session, a project leader + 1 | 2 process analysts + 1 | 2 domain experts

S107 Participants: representatives of organizational units/areas, by geography, by product line, by customer or market

S108 Try to have a range of personalities and styles (avoid all free-wheeling, all creative types, all heads-down, all analytic types)

S109 Avoid involving people with busy schedule. This is a main responsibility of the sponsor

# I) DISCOVER BUSINESS PROCESSES

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## S110 I-2) Conduct Pre-Session Interviews

- S111 - The purpose is to prepare for the sessions, not trying to accomplish work that is planned for the sessions such as clarifying terminology and identifying/framing/assessing/mapping processes
- S112 - Conduct interviews in an informal, conversational manner (alternating background, direct, open-ended questions).
- S113 - Do not arrive with a clear sheet of questions.
- S114 - Schedule interviews for no more than one hour.
- S115 - Speak only 25 percent as much as the interviewee.
- S116 - Regularly paraphrase their answers for confirmation and to show that you are listening
- S117 - Do not show off your knowledge. Invite them to contact you for any further ideas that come up

## I) DISCOVER BUSINESS PROCESSES

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- S118 - Adopt a “breadth first, detail later” approach: common failing among interviewers is to dive in prematurely, taking discussion into the problems with a *single* tool used for *one* activity by a *narrowly focused* group, before establishing even the basics of the organizational structure
- S119 - After introducing yourself, summarize the purpose of the interview in 30 sec, and ask if there are any question about
- S120 - Look at pages 112-113 of Sharp 2009, for sample questions.

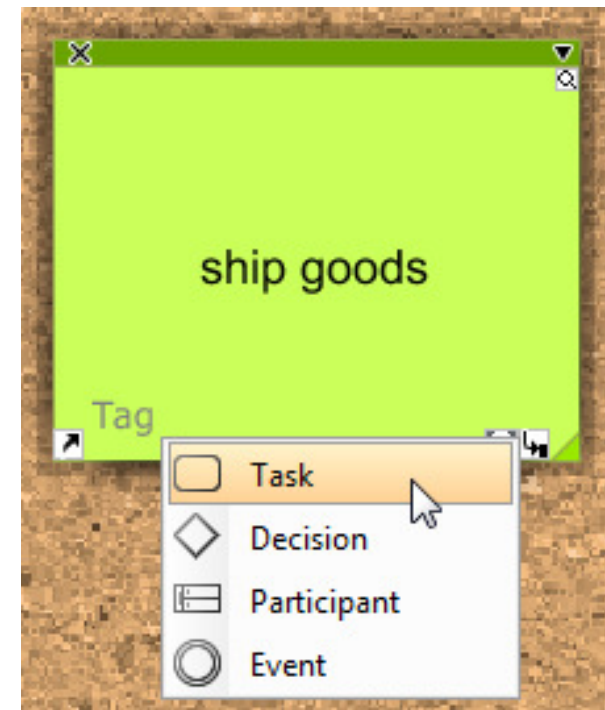
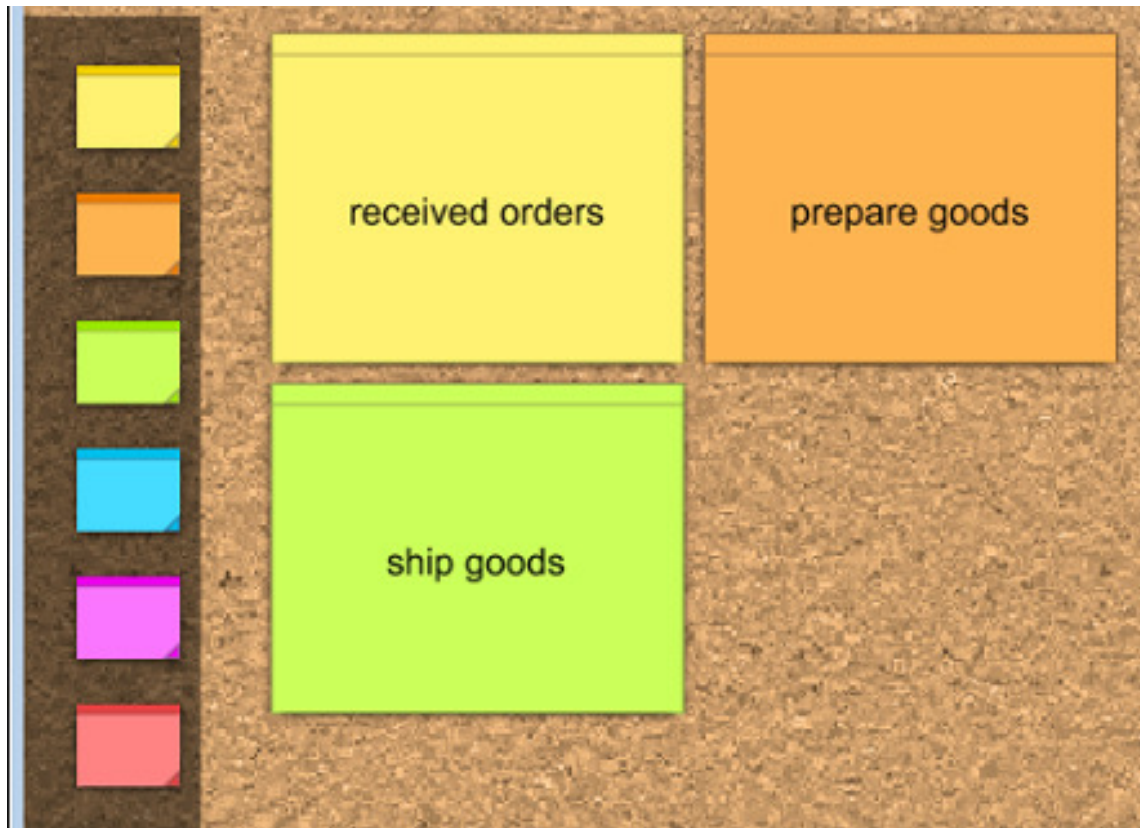
### I-3) Prepare for First Session

- S121 - Terms, activities, and issues: find and highlight every piece of terminology, every noun; enter them into a table, sort them, sot and eliminate minor variations; print each term onto a post-it note. Usually you will have 60-80 terms. Arrange the post-its onto sheets of flipchart paper. Do the same with activities. Summarize recurring issues on flipcharts, if any.

## I) DISCOVER BUSINESS PROCESSES

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- **Visual paradigm Logizian** is a Business Workflow Design Software supporting this stage
- Brainstorm diagram: producing notes and model elements



# I) DISCOVER BUSINESS PROCESSES

- Creating textual analysis: identifying important terms, candidate tasks and sub-processes

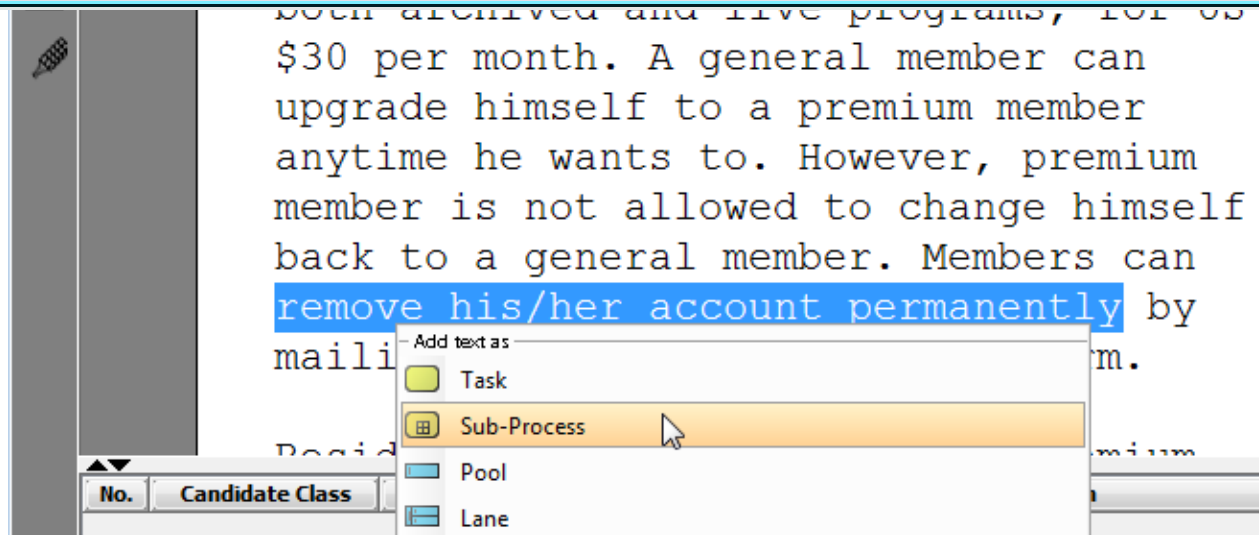
No.	Candidate Class	Extracted Text	Type	Description	Occurrence	Highli...
1	Watch archived programs	watch any archived	Task		1	
2	upgrade himself to a prem	upgrade himself to a	Task		1	
3	posting their opinion	posting their opinion	Sub-Pro...		1	
4	update the program sched	update the program	Sub-Pro...		1	

been archived and five programs, for \$30 per month. A general member can upgrade himself to a premium member anytime he wants to. However, premium member is not allowed to change himself back to a general member. Members can remove his/her account permanently by maili

Process

Add text as:

- Task
- Sub-Process
- Pool
- Lane



## I) DISCOVER BUSINESS PROCESSES

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- S122 - Usually, 2-3 half-day sessions will be sufficient to clarify terminology, discover a related set of processes, and possibly prioritize those processes for subsequent analysis and improvement
- S123 - Do not schedule all-day sessions, because productivity goes down after 2:00 or 2:30 pm.
- S124 - Look at page 116 of Sharp 2009, for a sample agenda. Do not produce an agenda for the second session until the first has been completed.
- S125 - Facilities. A room with lots of plain wall space, for posting 30-40 flipcharts of “group memory”. Seating in a “wide U” configuration, or a “Chevron” (zig-zag) setup if there are too many participants. Avoid room equipped with PCs: many people are distracted by the Internet. Low lighting makes people sleeping. Want participants seated close to one another, with no gaps.