Cutit’s Business Process Modeling and Service Modeling

**Cutit SOA Project Team Assignment: (Elhadi, Josh, and Murali)**
The Excellent Service Consulting SOA project proposal for the Cutit SOA Automation System is approved. The Cutit SOA project team works with its business department and agrees that Cutit’s immediate priority is to streamline their internal supply chain process. The order process in particular needs to be supported by the planned services so that orders and back-orders can be fulfilled as soon as possible.

The SOA Project team received some Business Process Modeling training on:
- Model process (tasks, process steps, activities and orders; alternatives and exceptions), business items, specific input/output data, roles and resources, services, policies
- How to consider all possible improvement and key performance indicators to achieve a better outcome
- Modeling tools (as suggested below)

The team is expected to serve as Business Analyst and needs to define and outline the following two processes and requirements, information flows, data stores, and supporting systems. The deliverables are the two process models with proper documentations and process diagrams:
- Internal Supply Chain Process (pp. 100-101)
- The Lab Project Business Process (pp. 119 – 121)

**Excellent Service Consulting Assignment: (Doug, Leedra, Matt)**
The Excellent Service Consulting staffs conducted a study on Cutit’s internal supply chain process and identify and classify an initial set of services (service candidates) planned to support the following types of processes:
- Keeping track of orders and back orders,
- Chain manufacturing,
- Tracking required manufacturing materials, and
- Inventory management of manufactured and purchased products

These service candidates are Order, Inventory, Chain, Saw, Kit, Materials, Formulas, Notification and Patent Sweep. Note that all services shown are entity services, with the exception of Patent Sweep and Notifications, which are based on the utility service model. A task service will be added later. Brief descriptions for the service candidates are listed below:
- Everything originates with the manufacturing of chain blades in the Cutit lab, which requires the use of specific materials that are applied as per predetermined formulas.
- The assembly of chains results in products being added to their overall inventory.
• **Saws** and **kits** are items Cutit purchases from different manufacturers to complement their chain models.

• **Notifications** need to be issued when stock levels fall below certain levels or if other urgent conditions occur.

• Finally, a periodic **patent sweep** is conducted to search for recently issued patents with similarities to Cutit’s planned chain designs.

The Excellent Service Consulting staffs need to conduct SOA service modeling related activities as shown below:

• Service Modeling
  - Internal Supply Chain Process Model (tasks, process steps, activities and orders; alternatives and exceptions), business items, specific input/output data, data store, roles and resources, services, policies
  - Consider all possible improvement and key performance indicators to achieve a better outcome

The **deliverables** are

• User Cases for the nine services
• The Cutit Internal Supply Chain Process Model with proper documentations and BPM diagrams

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Suggested Tools and other Considerations:

• UML Use cases – for capturing the information about users and business processes; and User stories for capturing more details
• Microsoft Visio Gane & Sarson approach and symbol
• Visio – EPC (Even-Driven Process Chain) diagrams: File => New => Business => EPC
• Context diagramming: roles of context diagram in BPM, methods of context diagramming
• Creating Business Process Models in flowcharting: conventions used in flowcharting for process modeling
• Functional decomposition: decomposing a process model to atomic levels
• Model documentation: Visio documentation and other diagrams
• Validating and presenting business process models