Abstract

Products and enterprises evolve over time. This presentation explores the impact of these changes on the system and on the business by making (small and simple) models of life cycle aspects.
Product Related Life Cycles

- **individual systems**
  - service
    - system production
      - upgrades and options production
    - system sales
      - upgrades and options sales
    - system creation
      - upgrades and options creation
  - disposal
system order
ordering components
manufacturing
shipping installation
add option
upgrade
using
using
Local changes, e.g. accounts procedures
sales shipping refurbishing shipping installation secondary use maintenance dispose
maintenance
 dispose
System Life Cycle
## Approach to Life Cycle Modeling

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify potential life cycle changes and sources</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Characterize time aspect of changes</td>
<td>how often, how fast</td>
</tr>
<tr>
<td>3</td>
<td>Determine required effort</td>
<td>amount, type</td>
</tr>
<tr>
<td>4</td>
<td>Determine impact of change on system and context</td>
<td>performance, reliability</td>
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<tr>
<td>5</td>
<td>Analyse risks</td>
<td>business</td>
</tr>
</tbody>
</table>

See reasoning for further analysis and decision-making.