INTRODUCTION

This is a continuation of articles exploring some of the concepts introduced in ITIL V3’s Service Strategy book. This first of five core volumes in V3 covers the overall business aims and expectations, ensuring that the IT strategy maps to these.

In part 1 of this Service Strategy series, I explained the concepts of utility (fit for purpose) and warranty (fit for use) and how, in order for a product or service to be seen as creating value in the eyes of the customer, it must provide both of these elements.

In part 2, we turn our attention to our resources and capabilities.

RESOURCES & CAPABILITIES

What are resources and capabilities? Do we have the resources and the capabilities in place to deliver the required utility and warranty of our services?

Resources and capabilities are types of assets used to create value in the form of goods and services. Resources are usually consumed in some way, shape or form while capabilities are the abilities of an organization to transform the available resources into products and/or services. Capabilities are used throughout the lifecycle of a product or service. Resources are used to plan, do, check and act (Deming’s cycle) against products and services.

Resources

There are five types of resources:

- **Financial** – Every organization requires money to function. It is the *fuel* of an organization
- **Applications** – These automate, enhance, codify and mimic the functions and activities of the capabilities
- **Infrastructure** – Hardware, software, network components, facilities components, etc.
- **Information** – Represents the context given to data
- **People** – Refers to people’s time, energy, skills and experience in various roles to help the organization produce and sell goods and services

Capabilities

Like resources, there are five types of capabilities:

- Management
- Organization
- Processes
- Knowledge
- People
Exploring Capabilities In More Detail

Management

Management influences and is influenced by the hierarchical structure of the organization, its culture, its history, and by the managers themselves. These influences can be both positive and negative. Some questions to ask include:

- How long does it typically take for management to make a decision? Wait too long and you may miss the opportunity; respond too quickly and you may miss the mark. This is represented in one of the Service Operation conflicts of stability vs. responsiveness
- Are decisions solely / mostly based on costs? Too much emphasis on cost cutting could result in sacrificing quality. This is represented in another of the Service Operation conflicts of cost vs. quality
- Is management a victim of “analysis paralysis”? The organization might be stuck in reactive mode instead of being proactive; however, the opposite might be true and the organization is too focused on being proactive

Management’s behavior needs to be understood in order to identify how resources are managed and how decisions affect the other capabilities as well. What we are really talking about is utility. The performance of the management capability can be enhanced, or we can remove constraints to assist them in making business decisions.

Organization

The organization’s capability, like the management capability, influences and is influenced by the hierarchical structure of the organization, its culture, history and management. Again, these influences can be both positive and negative. Some of the issues (constraints) raised by the organization capability might include:

- The culture of the organization
- The make up of the organization: centralized, localized, decentralized, etc.
- The customer's perception of the organization
- Age of the organization
- Industry, market segment, product positioning, legislation
- Vision, mission, goals and objectives
- Recent history such as mergers, acquisitions, divestiture, new products, moves, down-, right-sizing, stock value, union issues, good or bad press
- For the public sector, a change in government (at any level) could influence the organization

Processes

Processes may be thought of as an assembly line. Inputs go in, they get transformed through a set of activities, and outputs emerge at the other end.

Of course, processes are a lot more complex. They require control capabilities, such as ownership, policies, objectives, documentation and feedback mechanisms. Processes require critical success factors and key performance indicators, process activities, procedures and work instructions, process roles and process improvement. They also require process enablers such as process resources and process
capabilities. There’s the link right there. You may have a great process, but if it takes too long to accomplish anything (performance) or if it is not followed (constraints), what’s the use?

Knowledge

Knowledge is to understand and interpret information and give it meaning. Do the other capabilities such as management, people or the organization have the ability to transform the information into relevant knowledge such as revenues, expenses, production, trends, etc.? Is the knowledge available, do we have enough, is it secure (confidential? integrity?) and are the data sources continuous enough? Does this sound familiar? Of course! The warranty!

Information (and by inference data) is a resource. This concept is explained in greater detail in the Service Transition book. Basically, the values stored in the fields of a database or document is data. The information is the field types.

A series of numbers such as 1, 2 and 3 does not mean anything unless the fields are labeled. If 1, 2 and 3 represent temperatures or distances, then we have a better but still incomplete understanding of their meaning. Knowing that distances 1, 2 and 3 relate to the distances (in kilometers) between you and the three nearest coffee shops is knowledge. Data is the input going in the database or document and the information is the output.

Other capabilities, namely management and people, will have the capability to transform the information into knowledge. This knowledge will help to run, grow or transform the business.

People

People are both capabilities and resources. We employ people’s time, energy, skills and experience in various roles to help the organization produce and sell goods and services. This is the resource aspect. You do need the warm bodies to use their time, energy, skills and experience to execute the process activities, to make management decisions, to translate information into knowledge or to have an organization. In short, without people there are no capabilities and the resources certainly won’t spontaneously transform themselves into goods and services.

Some questions need to be asked regarding people such as:

- Number of employees
- Skills and knowledge levels (obsolete? current?)
- Aptitudes vs. attitudes
- Age distribution of the workforce
- In-sourced or outsourced
- Contractors vs. full time employees
- Work schedules
- Benefits
- Informal vs. formal leaders
- Informal vs. formal communication channels

Some of the above questions can be asked of the organization or can apply to management. The truth is that the capabilities overlap and influence, and are influenced by, the others. The capabilities will also be as good as the resources at their disposal. Using the wrong tools or having no tools can be a constraint and may affect performance.
How Do Processes Affect Utility & Warranty?

The following table provides some examples of the impact (some positive, some negative) the ITIL processes could have on either utility, warranty or both. The following only represents potential effects. Each process can affect any and all components of utility and warranty.

<table>
<thead>
<tr>
<th>Process</th>
<th>Impact</th>
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<tbody>
<tr>
<td><strong>Service Strategy</strong></td>
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<tr>
<td>Service Strategy</td>
<td>Wrong market positioning, wrong product definition, etc.</td>
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<tr>
<td>Demand Management</td>
<td>Utility: Performance</td>
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<tr>
<td>Financial Management</td>
<td>Both</td>
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<tr>
<td>Service Portfolio Management</td>
<td>Both: Incorrect service definition and model</td>
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<tr>
<td><strong>Service Design</strong></td>
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<tr>
<td>Service Catalog Management</td>
<td>Wrong definitions for utility and warranty</td>
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<tr>
<td>Service Level Management</td>
<td>Incorrect identification of requirements</td>
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<tr>
<td>Availability Management</td>
<td>Warranty: Available enough</td>
</tr>
<tr>
<td>Capacity Management</td>
<td>Warranty: Enough capacity?</td>
</tr>
<tr>
<td>IT Security Management</td>
<td>Warranty: Secure enough?</td>
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<tr>
<td>IT Service Continuity</td>
<td>Warranty: Continuous enough</td>
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<tr>
<td>Management</td>
<td></td>
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<tr>
<td>Supplier Management</td>
<td>Both</td>
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<tr>
<td><strong>Service Transition</strong></td>
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<tr>
<td>Transition Planning &amp; Support</td>
<td>Both</td>
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<tr>
<td>Change Management</td>
<td>Availability if changes are made without permission</td>
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<tr>
<td>Configuration Management</td>
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<tr>
<td>Release &amp; Deployment</td>
<td>Both: Improvement not deployed properly</td>
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<tr>
<td>Management</td>
<td></td>
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<tr>
<td>Service Validation &amp; Testing</td>
<td>Both: Incorrect assumptions that things will work</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Utility: Predicted vs. actual performance</td>
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<tr>
<td>Knowledge Management</td>
<td>Both: Incorrect understanding</td>
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<tr>
<td><strong>Service Operation</strong></td>
<td></td>
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<tr>
<td>Access Management</td>
<td>Warranty: Security and availability</td>
</tr>
<tr>
<td>Incident Management</td>
<td>Warranty: Available enough ➔ perception = downtime</td>
</tr>
<tr>
<td>Problem Management</td>
<td>Utility: Performance ➔ perception = keeps failing</td>
</tr>
<tr>
<td>Event Management</td>
<td>Both – depends on what is being monitored</td>
</tr>
<tr>
<td>Request Fulfillment</td>
<td>Utility: Constraints</td>
</tr>
<tr>
<td><strong>Continual Service Improvement</strong></td>
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<tr>
<td>7 Step Improvement Process</td>
<td>Both</td>
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Summary Of Resources & Capabilities

We have now seen two sets of concepts, utility and warranty and resources and capabilities. They are different, but they are connected. We can apply the concept of value creation to all the capabilities.

Utility
- Are the capabilities enhancing performance or inhibiting it?
- Are the capabilities removing or reducing constraints?

Warranty
- Do we have enough capabilities? Example: People? Knowledge? Organization?
- Are the capabilities continuous enough to operate in times of crisis? Example: People? Processes? Management?
- Are the capabilities secure enough? Applies to all

But can we apply the concept of utility and warranty to the resources? Of course we can.

Utility
- Are the resources enhancing performance or inhibiting it?
- Are the resources removing or reducing constraints?

Warranty
- Are the resources available? Do I have the raw materials?
- Do we have enough resources? Do I have enough for all my orders?
- Are the resources continuous enough to operate in times of crisis? Can I order more in time from the same or from difference source without compromising quality?
- Are the resources secure enough? Can my resources be easily stolen or spoiled?

Resources and capabilities have been around for a long time. It is simply that the concept is new to many in IT and it is a new addition to the Service Management framework. You can actually apply the utility and warranty concepts throughout history; from the hunter-gatherers to the pyramid builders; from the Great Wall of China to the aerospace industry. What do they have in common? They all consumed resources and required capabilities.

It is all about integration.