ITIL and Value Network Analysis

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The much anticipated ITIL V3 introduces some new language to the ITIL glossary. One such addition is the terminology around "Value Networks" in the Service Strategy life cycle element[1]. As can be inferred from the name, the "value" terminology helps define services in terms of mutually dependent relationships between customers and service providers, with business outcomes at the core. The "networks" terminology is an admission that "…in our real ITSM worlds – nothing is strictly linear"[2]. Removing the shackles of a "linear process" mindset will free the ITIL practitioner to collaborate, to add and receive value, at any point of the service management portfolio, rather than being limited to their immediate upstream and downstream partners.

In this article I will initially trace the evolution of the ITIL business model to the point where it is today with regards to value networks. I will then move on to put some "meat on the bones" by detailing the what and how's of "value network analysis" (VNA) and how it differs from more familiar analytical techniques like business process analysis and functional systems analysis. Finally, an example IT services "market level" value network will be introduced followed by a challenge to the reader to think about how value networks will play out in their own IT services domain.

So how did ITIL meet Value Networks?

The evolution of ITIL from an "Infrastructure Library" to "Service Management Practices" could be described as a classic example of "Knowledge Management

[1] ITIL V3 Service Strategy Book
[2] Taylor, S. "ITIL V3: The Future is here", Axios Systems, p5.

maturation". Two fundamental concepts in knowledge management (KM) are that knowledge can be characterised as both explicit (information), and tacit (in the minds of individuals). Early KM initiatives took the view that if the majority of our tacit knowledge could be codified as explicit knowledge, then it could be effectively shared widely in electronic form, hence the ITIL infrastructure library. What KM practitioners quickly discovered is that there were natural limits to which this scheme could work. Tacit knowledge was proving particularly "sticky" and difficult to extract for sharing in library form. Hence a movement toward a greater emphasis on "connections" over "collections" began. In order to share critical tacit knowledge, a mechanisms for having people connect, either in person or virtually, became the most effective way of sharing important knowledge. Once we start connecting people in large numbers (think about LinkedIn), it is only a short step to appreciate networks.

The other significant change is a relaxation of our thinking around "process". ITIL is a best "practices" framework. Practices are not equivalent to processes. When one observes an expert practitioner at work, one sees far more than a slavish adherence to process. One observes the expert improvisations, subtle relationship management tactics and a plethora of other "hard to document" activities that collectively constitute good "practice". This is not to say that process is abandoned. What it does say is that an optimum balance of process and practice is required[3]. VNA attempts to surface these intangible value contributions, along with the more tangible process flows, to enable more holistic analyses of the value flows across the business. This is totally consistent with the objectives of ITIL V3, to integrate the business and IT services management into a single ecosystem[4]. VNA is a tool to help study this ecosystem.

So what is VNA and how do we do it?

A value network[5] can be defined as:

[3] See Lock Lee, L. "Where Business Process Meets Business Practice", CSC Research Services Journal, November, 2002.

http://www.lef.csc.com/foundation/library/journal/11_02/413E6C3D3C6939394C52484D575442.pdf

[4] See ITIL Refresh News, 3rd Edition, p.3.

[5] For a Wikipedia definition see http://en.wikipedia.org/wiki/Value_network

"…any web of relationships that generates tangible and intangible value through complex dynamic exchanges between two or more individuals, groups, or organizations"

- Verna Allee, 2002

VNA[6] is therefore the business modeling technique for capturing, visualizing and then analysing the network of interactions for improvement opportunities, whether they result in an organisational structure change or the implementation of a new IT system. The technique inherits the attributes of a traditional business process mapping technique, with the addition of some unique features for identifying intangible flows.

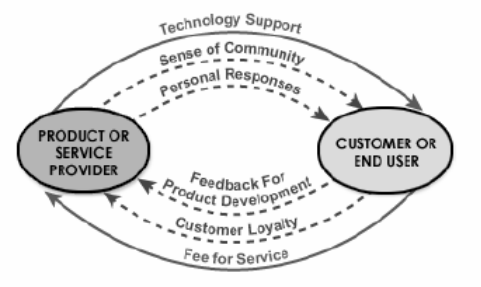


Figure 1 - VNA Map - Basic Components

A VNA map consists of three basic elements. The ovals identify "participants". Participants can be at the individual or group level, but at all times represent human decision makers. The arrows identify a flow between participants. They are always uni-directional. Solid lines represent tangible flows, dotted lines are intangible flows. Labels on the arrows are "deliverables" that move from one participant to the next. They can be tangible or intangible. Boundaries are typically drawn to limit the scope of the analysis to a workable level of detail.

[6] Extensive material on VNA is available from the Open Value Networks web site: http://www.value-networks.com/

A methodology[7] for conducting a typical VNA workshop exercise may follow the following steps:

1. ***Review Current Project Status***

In the ITIL context, a business improvement project activity may be underway for say, installing a new change management and configuration facility. Prior to the workshop, it would be expected that a clear purpose will have been defined and appropriate stakeholders identified and ready to participate.

2. ***Define the Boundaries of the Question you are Exploring***

It is important to define the scope of the mapping exercise and the level of abstraction through posing a focusing question. For example, a question like "should we off-shore our data centre?" is likely to have a high market level scope. Alternatively, a question like "how should we organize the new change and configuration management function?" would dictate a more detailed internal focus.

3. ***Determine who needs to participate***

Once the scope has been determined, the participants for the mapping exercise should be representative of all the roles and activities that might participate in the scoped activity.

4. ***Facilitation, Materials and Room Setup***

VNA mapping is quite visual. White "butchers paper" and felt pens are common instruments[8]. A good workshop facilitator is essential. For larger groups it may be best to

[7] Adapted from Allee, V. "Value Network Mapping Basics" www.alleevaluenetworks.com
[8] More formal VNA support tools are available from http://www.value-networks.com/applications/pdf/8PageBrochure-01Mar07.pdf

split into groups and synthesize the results at the end. The important factor is that everyone has the opportunity to participate in the conversation around the map building.

5. ***Create the value network map***

The basic elements were described earlier. A good staring point is to define the core participants or roles. These are real people or groups, not computers or systems. Example nodes could be individuals, groups, business units, organizations, regions etc.. A good rule of thumb is to settle on five to eight roles. Arrows joining roles reflect a transaction or activity that results in a deliverable. Typically tangible deliverables can be thought of as "contracted activities". Intangibles are additional deliverables that are not formally contracted but are essential to achieving a smooth operation. For example, tips and hints passed on, informal references, market intelligence and the like.

6. ***Validate the map by sequencing activities***

A good validation step is to do some "walk throughs", sequencing the natural order of activities by numbering the flows between nodes. In this way you should be able to "tell the story" through the map.

7. ***Undertake analysis scenarios***

Once a map has been constructed the critical analysis can start. A number of typical analysis scenarios can be conducted like:

a) *Exchange Analysis* – looks at the value dynamics in the network. How equitable are the value flows? Are the roles clear or confused? Any gaps or redundancies? Are their obvious winners or losers? For example, do tight "time per call" metrics limit the capacity of the desktop technician from providing those little coaching tips that clients value so much.

b) *Impact Analysis* – looks at each role and whether or not value is being realized from its inputs. Ask a participant currently in that role what value they really believe they receive. Can we determine a cost/benefit for each input to the role?
c) *Value Creation Analysis* – looks at how each role or participant is adding value to the system. It is complementary to the impact analysis as it looks at what value the role creates for others with its outputs.
d) *Developing Performance Indicators* – in theory a performance indicator could be generated for each identified flow on the map. If some of the intangible deliverables appear too hard to characterize into a metric, then they are probably framed incorrectly. For example, an intangible deliverable labeled "increased trust" might be better labeled "increased reliability" as it leads more easily to a measurable indicator. A VNA map could therefore be used to populate a balanced scorecard for the network as a whole.

8. Take action

This is the "act" part of the Plan-Do-Check-Act cycle. Having created the value network map and conducted the value analysis, it is time to convert the findings to action. This typically might take many forms, from re-defining roles, re-defining value flows or creating a performance scorecard. While ITIL may identify some typical service management roles, the context for these roles may differ for each organization depending on the outsourcing, multi-sourcing or co-sourcing strategies that currently exist or are being considered.

How does VNA fit with other Modeling Methods?

The most distinguishing feature of VNA, when compared to other modeling techniques adopted by the IT industry, is the incorporation of intangibles into the analysis. As business applications move beyond simple automation to more sophisticated decision support activities, the impact of intangibles is significant. The majority of modeling tools developed for the IT industry were developed with automation of processes in mind.

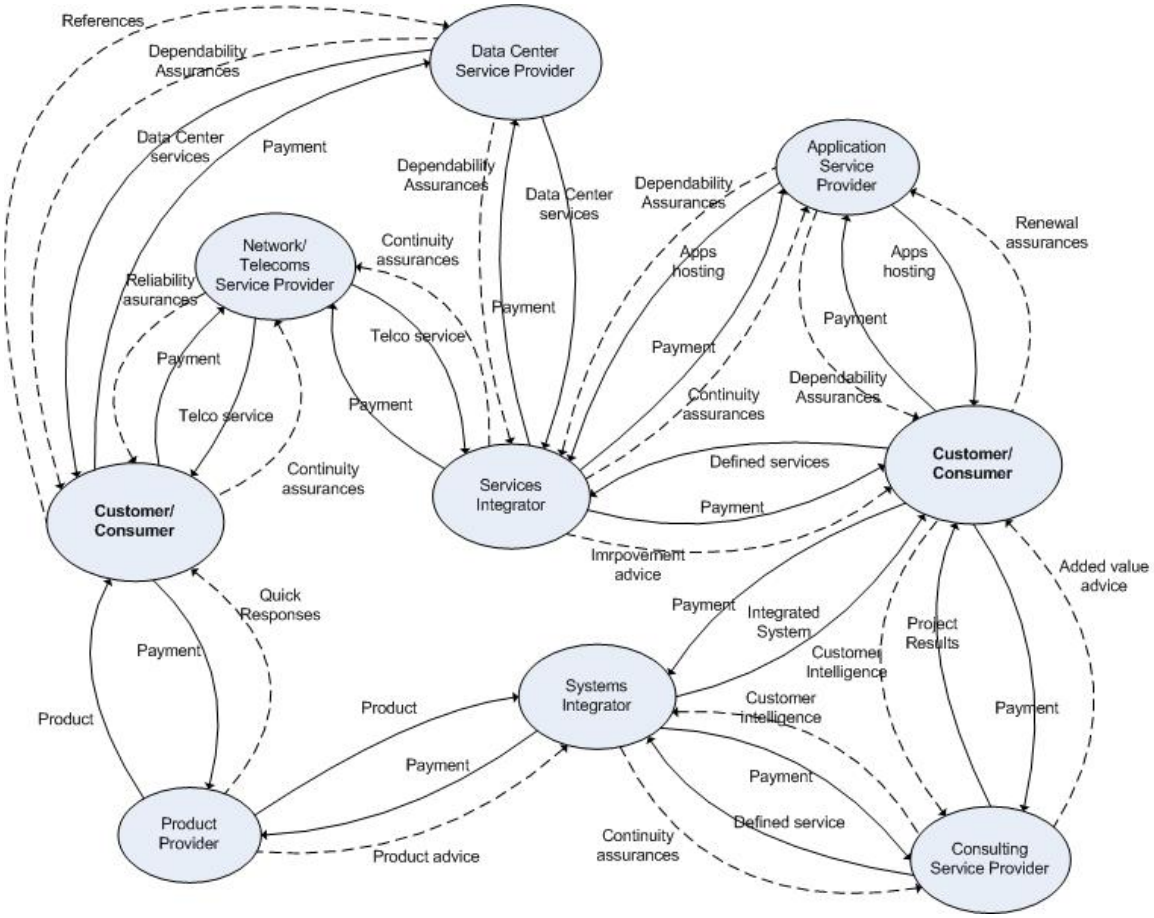
Where people played a role it was usually cast as facilitating a process, rather than as an independent decision maker. Techniques like data flow diagrams and business process mapping effectively remove the individual from the analysis in favour of a process focus. This is fine when automation is the objective, but disastrous for decision support, where the end user is an independent agent.

Perhaps the closest modeling technique to VNA can be found in the object oriented (O-O) techniques and "Use Case" modeling. Use Case models do preserve the individual actor or role in the model. The use case interaction model could be cast as a VNA model by adding intangibles into the list of interaction deliverables[9].

A Value Network Map for the IT Market

The following map is an example of a VNA map created at the IT industry level. A typical focusing question that would have preceded the creation of a map like this might be "What value could we achieve my adopting a different IT sourcing model?" Participants could be drawn from internal sources plus representatives from external providers representing the nodes identified, either currently contracted providers or prospective providers.

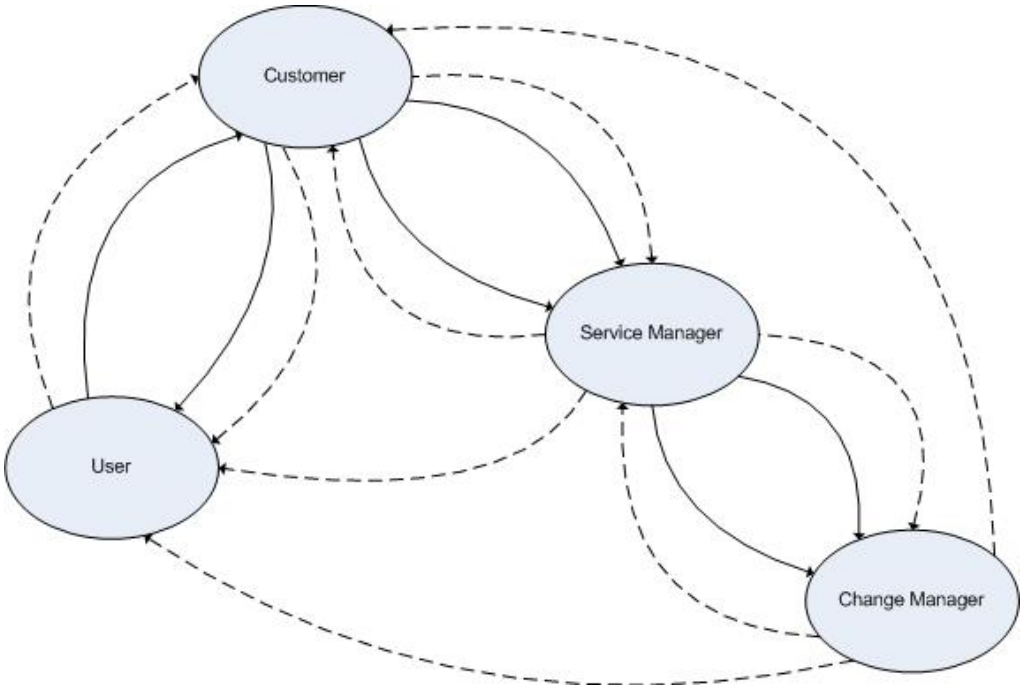
[9] See Lock Lee, "What's Wrong With Current Systems Development Methods?: A Case for Value Network Analysis" http://www.value-networks.com/Articles/VNA%20&%20Systems%20Analysis.pdf



The solid lines show the “contracted” transactions that might typically be identified in a Use Case analysis. The dotted lines show the added intangible flows. It is the intangibles that will create the most discussion and debate. Note that in many cases the intangible contributions are balanced i.e. reciprocity is being demonstrated. Where there is an imbalance in value flows, for example, when intangibles only flow one way, one might question the longer term stability of that relationship. Where no intangible flows exist (e.g. the Systems Integrator and the Customer), either the transactions are purely for commodity services or alternatively an “arms length” relationship exists which again could be quite fragile. Other examples show where the systems or service integrators are “receivers” of intangible benefits that are not explicitly flowing on to the customer.

Now its Your Turn

Assume you are implementing a new change management and configuration system in your organization. The question in focus is: “How can we best implement our new change management and configuration service?”



Try and label the deliverables. Feel free to add extra flows if they exist in you context.

Some hints:

- Hard lines are expected or “contracted” flows.
- Deliverables are actual “things” that move from one actor to the next.
- Deliverables must be specific enough for someone to be accountable for it i.e. it could be comfortably included in a scorecard.
- Think of intangible deliverables as “beyond the call of duty” extras that help build relationships and ensure smooth operations.
- Deliverables are not attributes of an actor.
- Deliverables are not “assets” like “competence”.
- Deliverables must be deliverable!