

Exchange Analysis

Overview

The Exchange Analysis is an assessment of value dynamics throughout the whole network. It focuses on finding overall patterns in the network, and surfaces key issues – such as health, robustness, and resilience.

It is designed to:

- Validate or disprove that the network pattern fits its espoused purpose.
- Clarify Roles and Participant attributes.
- Identify patterns of reciprocity.
- Reveal key value linkages, value flows, and “missing links.”
- Show overall patterns of value creation or value loss.
- Provide insights into Value Network Optimization.

How to use it

This is one of the core analysis tools for the methodology. If you have to choose ONE analysis to do, this would be it. The questions it addresses are grounded in systems thinking, classic network analysis, intangible asset management and living systems theory. Facilitators with experience in these traditions will readily be able to expand the questions and notice significant patterns.

When to do it

The Exchange Analysis should be conducted after completion of the value network map.

Exchange Analysis requires that:

- All Roles and Participants have been identified.
- All Transactions and Deliverables have been defined.
- Sequencing or other validation is complete.

How to do it

No one person can understand a complex system. Therefore, an Exchange Analysis is ideal as a sense-making exercise that is best conducted through dialogue and conversation. An Exchange Analysis provides a way to enter into dialogue with people who represent different Roles and who want to better understand the system or network. It expands the network narrative.

Methods

Exchange Analysis requires:

- Facilitated workshops or interviews with all Roles represented
- Visual assessment and judgment of patterns
- Using the value network indicators from the Full Reports generated by the ValueNetworks.com™ application

What to look for

- **Imbalances:** Is there an appropriate balance of Tangible/Intangible inputs and outputs for different Roles and in the network as a whole?
- **Critical Roles and Participants:** Are there particular Roles or Participants that are unduly carrying the burden of network interactions where disruption could put the network at risk?
- **Work arounds:** Are there patterns of intangibles that might indicate something is not working in the formal processes or a Role is not functioning as effectively as it could?
- **Reciprocity:** Are there reciprocal value relationships between Roles?
- **Disconnects:** Are there missing or dead links? Where does a value flow get stuck or break down? Where does a Role fail to transform inputs to appropriate outputs?
- **Interdependencies:** What are the structural interdependencies?

Questions to ask

1. **What is the overall purpose of the value network?**
 - a. Why does it really exist?
 - b. What other value networks does it serve?
 - c. What is its overall contribution in terms of economic and social good?

Every system fulfills its real purpose. Sometimes the espoused purpose of a value network is actually quite different from the purpose that is revealed by its activities.

2. **Are there influencers or beneficiaries that have been overlooked?**
 - a. Are key people being discussed in your conversations that are not represented in the value network map?
 - b. Who has been overlooked as a Role, Participant, stakeholder, or someone who is impacted by this network?

It is always important to ask what is missing or who has not been included. Look for key stakeholders who influence or are affected by the network activities even if it appears they are not directly involved.

3. **How does value gained by one Role extend to or “flow” to other Roles or strategic partners within the organization?**
 - a. Do the flows show that value gained by one Role actually accrues value for the company as a whole?

If a group of Roles belongs to the same organizational entity, then value that is gained by one Role from an external stakeholder should accrue both directly to that Role and either directly or indirectly to other Roles in that organization. When value gained by one Role is not accrued efficiently to its internal and external organizational partners, then value gain is diminished.

4. **What does the pattern of interaction suggest about the level of trust in the network?**
 - a. What norms of behavior are revealed in these exchange patterns?
 - b. What does the intangible activity indicate about transparency and trust?

The ratio of tangible to intangible transactions, or the depth and quality of knowledge flows, can be an indicator of trust.

5. Is one type of value exchange more dominant than another?

- a. Do Tangible exchanges significantly outnumber Intangibles? (Or the other way around?)
- b. If so, why do you think that is?
- c. What would the implications be if it were different?

The dominance of a particular type of exchange may be an indicator of assumptions about value that drive system behaviors. Value exchange patterns also may point to places there might be structural or behavioral constraints on maximizing value. A high number of Intangible exchanges is not always a positive sign. It could indicate that people are interacting informally to try to manage infrastructure problems or unhelpful behaviors. Some Intangible interactions are actually “work-arounds” where something is broken or a Role is not being well executed.

6. Are there places where people need to be engaged in exchanges but are not?

Every interaction is an opportunity to create value or build relationship.

7. How deeply enmeshed and interdependent are the Roles?

The number, type, and frequency of interactions are indicators of the degree of structural coupling between a pair of Roles and may indicate the quality of a relationship.

8. Is every participant both contributing and receiving value from the network as a whole?

- a. Which Roles are value “sinks” that absorb value but contribute little?
- b. Which Roles contribute more value than they receive? Is that a risk?

If people feel they are not gaining positive value from the network they are more likely to withdraw.

9. Does it appear that some Roles are gaining value at the expense of another?

- a. If so, what are the implications?

If Participants in the network feel a particular Role or Participant is behaving unfairly, they are more likely to reconfigure Roles and interactions in ways that diminish that Participant’s place in the network – or alter the value interactions.

10. What do the patterns of reciprocity tell you about this network?

A consistent pattern of reciprocity in exchanges between Roles is an indicator of healthy value flows and whole-system optimization.

11. Are there bottlenecks, constraints, or instability in the flow of value?

Network patterns can be affected by control mechanisms and decision making. When one Role unduly constrains or controls Transactions it is an indicator of structural or behavioral constraints impeding value flow. Missing links, dead links, and broken value flows are indicators of missed opportunities for maximizing value. Sequencing transactions as they occur in the overall activity helps reveal missing links and poorly configured value paths.

12. Does every action elicit a response?

Every action either triggers another Transaction or has an internal impact on the Receiver. If an action does not trigger a positive value-creating response or generate additional value interactions, one needs to ask why is that activity happening? Is it really necessary? Is there a better way to utilize assets?

13. How does the pattern or rate of growth in knowledge and other Intangible exchanges compare to corporate growth and profitability?

Knowledge in the form of Human Competence and expertise is the Intangible Asset that is easiest both to grow and to convert to other types of value. So networks that generate high value probably would have correlating high growth rates for value-added knowledge exchanges. If there is high growth of knowledge exchanges, yet corporate profitability and growth remain flat, then there may be problems with value realization or conversion.

14. Who might play a new or different Role in the network?

- a. What would happen if certain Roles disappeared or were combined?
- b. What if the position of a Role changed and the Participants suddenly forged new ties to those with whom they currently have little or no contact?

Questions around “What Role(s) do you really play in this value network?” or “What other Roles might you be able to play?” can be very powerful. By imagining themselves in different Roles people will often spot unseen opportunities.

15. How closely aligned are your Role and your personal or group brand and reputation?

What do the Intangibles tell you about the different brands and reputations that are represented in this network?

Intangible Deliverables often point things that people are known for – they often work like little “brand enhancers.” There can sometimes be disconnects between the Roles people are intended to play and the Role that is actually represented by their interactions. Looking at outgoing Intangibles can sometimes indicate certain kinds of attributes or qualities that are unique to the individual playing that Role. Intangibles that are dependent upon a single person or type of personality can potentially disappear if someone else plays the Role.

16. If there is a “heartbeat” in this network, where is it?

- a. What Role(s) is most essential in the life of this network?
- b. What would happen if the person in a “heartbeat” Role is replaced with someone else?

Sometimes the most important Roles are simply overlooked. Either the Role is taken for granted or it appears to be peripheral to the network (such as a champion or resource provider or even an unnoticed administrative Role). But if that particular Role were not there or someone else took on that Role the whole dynamic of the network could change in – well, in a heartbeat.

17. Where are the “pulse points” in the network, those key interactions that provide important clues about the health of the entire network?

It isn't necessary to monitor every single interaction in a network. However, there are some interactions that are particularly critical to the overall health and vitality of the network. Surprisingly people can readily identify two to three key of these "pulse points" even in very complex networks. Pulse points are places where monitoring performance is essential.

Useful indicators

The following are from the ValueNetworks.com™ application. You will find many of these helpful in understanding overall patterns of exchange in the network. These are described in more detail in the Help Library topic Value Network Indicators.

Resilience

- Number of Intangible/Tangible Transactions
- Percentage of Tangible/Intangible Deliverables
- Ratio of Tangible/Intangible Transactions
- Number of Roles
- Number of Participants

Reciprocity

- Reciprocity All Transactions
- Reciprocity Intangible Transactions
- Reciprocity Tangible Transactions
- Reciprocity by Participant
- Reciprocity by Participant Pair

Risk

- Structural Dependency and Risk

Structure and Value

- Number of Incoming Deliverables by Participant – All Transactions
- Number of Incoming Deliverables by Participant – Intangible Transactions
- Number of Incoming Deliverables by Participant – Tangible Transactions
- Number of Outgoing Deliverables by Participant – All Transactions
- Number of Outgoing Deliverables by Participant – Intangible Transactions
- Number of Outgoing Deliverables by Participant – Tangible Transactions

Agility

- Average Degree of Separation – All Transactions
- Average Degree of Separation – Intangible Transactions
- Average Degree of Separation – Tangible Transactions

Stability

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Density All

Density Intangible

Density Tangible