Image building in the information governance discourse: Steps to economies of meaning
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“Everybody experiences far more than he understands. Yet it is experience, rather than understanding that influences behavior.”
~ Marshall McLuhan

“Bracketing has turned all my experiences, remembered and present, into a gallery of miracles where I wander around dazzled by the beauty of events I cannot explain.”
~ Martha Beck
Introduction

This chapter has the purpose to build the notion how the evaluative case studies can accommodate the testing of the hypotheses developed in chapter 5 and to describe the actual case studies done in this research. It is necessary to note that the empiricist phenomenological stance taken in chapter 5 affects the way one can evaluate the meaning-making framework. Therefore, I will revisit some concepts of phenomenological research, such as attitude and bracketing, in more detail. I will use these concepts to develop an appropriate case-study setup for executing a number of workshops that accommodate the phenomenological stance. Two examples on using the framework accompany the case-study setup. Essential in the evaluative case studies is the approach for collecting data. Therefore, this chapter also pays attention to data quality and data-collection techniques, which also involves the design of a questionnaire.

Although this chapter addresses techniques of sociological research, it is necessary to note that my research only uses the contours of sociological research for creating the appropriate setting in order to obtain legitimate research data. Again, the empiricist phenomenological stance demands this approach.

This chapter starts with building the notion on the case-study requirements. It then proceeds by using this notion to develop the case-study setup, followed by the technique used for collecting the data. The remainder of the chapter describes the case studies and ends with a summary and conclusions.

Case-study requirements

The overall purpose of the evaluative case studies in this research is to verify whether it is possible to develop an instrument that operationalizes meaning making in the information governance discourse. It is about evaluating whether the framework is useful in the meaning making of the informational issues that characterize the contemporary information society – the semiotic order. The design of the framework resulted in five falsifiable hypotheses; therefore, the evaluative case studies specifically concern empirically testing these hypotheses.

In developing the framework design-requirements, I have argued that one cannot simply design a framework without considering its operation; it requires an object perspective to be included in the framework design. This was a direct consequence of the empiricist phenomenological stance that dictates the inseparability of content and method – the what and the how (Lash, 2002, pp. 167-173). Apart from affecting the framework design, it also affects the evaluation of the

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96 Analyzing the results of the case studies is beyond the scope of this chapter; it is the purpose of the follow-on chapter.

97 See also the discussion starting at page 25 regarding the use of a case study to evaluate artifacts – falsification is what characterizes the case-study research (Flyvbjerg, 2006).
framework. For phenomenological research in general to create knowledge, it requires bracketing and reduction, as well as an appropriate attitude toward the object. This is where content meets method. Because this research assumes the empiricist phenomenological stance, in which governing actors experience objects, events, and processes in-the-world,\(^{98}\) the attitude toward the object and phenomenological reduction are pivotal concepts in creating an appropriate setup for testing the hypotheses. Therefore, these concepts deserve further attention.

**Attitude toward the object**

In arguing for meaning as a necessary concept in information governance, I followed Lash (2002) for developing the notion that the technical life-world that governing actors face is intrinsically phenomenological. The strong mediation of technologies in the contemporary information society makes them reflexively building up knowledge, the process of image building. Lash (ibid.) referred to this as a technical phenomenology that is radically empiricist.

In the contemporary information society, people have an interest in the objects and processes in the world. According to phenomenologists, people have an attitude to the objects they encounter in-the-world (ibid., p. 164). Earlier I visited the paradigm of play and also contrasted one-world with two-world paradigms, in order to emphasize that the relation people have with objects in their life-world is radically empiricist.\(^ {99}\) It refers to an attitude where people attend to objects and processes in a way that they experience them and become one with them; incarnating their life-world.

The evaluative case-study setup for testing the hypotheses must provide an organized setting such that people can incarnate a life-world; have a reflexive attitude toward the object. First, radical empiricism rejects the reflective attitude in which one analyses phenomenon from a distance, transcendentally. Second, ‘it is not consciousness, but organized settings that have an “attitude,” an attitude whose operation yields practical knowledge (Lash, 2002, p. 168).’

**Phenomenological reduction: bracketing**

Phenomenological research aims to identify and elaborate the phenomena that actors perceive in situations. In so doing, it involves studying experiences from the actor’s perspective (Lester, 1999). In order to ‘unpack’ the phenomena properly, the study must be free from common perceptions and self-evident assumptions from the actors. The phenomenological researcher establishes this by systematically removing the clutter of external signals and meanings that can interfere with the actor’s perspective and interpretations. This process of phenomenological reduction, called bracketing, goes back to Edmund Husserl (1859-1938), who

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\(^{98}\) See also the discussion on life-world objects starting at page 95.

\(^{99}\) See the argumentation on the phenomenological orientation of meaning starting at page 75.
proposed to suspend the existential question of the physical world while concentrating on the subject’s experience (Smith, 2008).

The meaning that people assign to the products and artifacts from the contemporary information society – the object – by large depend on their involvement with it. More specifically, what they do with it, how they use it or operate it. Different people, especially those with various jobs, roles, or functions, engage differently, have different involvements and, therefore, assign different meanings to objects. Their operational structure differs, because their operational actions differ. For example, a mobile field worker and a board member can assign different meanings to the same technologies even if those technologies provide similar information.100

The concept of phenomenological reduction – bracketing – contributes to the notion that, in order to rule-out taken-for-granted assumptions as well as cross-operational interferences, 1) the organized setting must provide an operational structure with activities that align to the actor’s job, role, or function and 2) when operational structures involve different roles, job, or function, they cannot mix.

**Synthesis**

The foregoing on the attitude toward the object and the phenomenological reduction or bracketing, in short attitude and bracketing, sets the context and constraints for the organized settings in the evaluative case studies. To illustrate this, imagine a management team using a mobile business reporting system – a product of the contemporary information society. The management team is an organized setting that has the purpose of managing an enterprise. It can consist of leadership functions such as business managers, sales managers, people managers, technical leaders, and portfolio managers. These leadership functions all do different things in contributing to the purpose of the team, managing the enterprise. As a team member fulfilling the purpose of the team, they have a common attitude toward the mobile business reporting system – the object. However, each member of the management team will use the system in a way that specifically aligns to its leadership function.

The example of the management team illuminates that the organized setting influences the attitude toward the object (cf. Lash 2002, p. 168). Actors with different roles have different operations – operational structures – but can be part of the same organized setting. From the radical empiricist stance, the mobile business system becomes the life-world of the members of the management team. To emphasize the empiricist phenomenological stance, where people incarnate their life-world, Lash (2002) has denoted the latter as empirical reduction. Figure 12 illustrates the process of phenomenological reduction and attitude toward the object.

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100 See also the development on the requirement for life-world objects at page 96 specifically.
Case-study setup

Testing the hypotheses involved the organization of five evaluative case studies that conducted appropriate organized settings for including integral bracketing and the right attitude toward an object. To arrange an appropriate setting, a number of workshops accommodated the evaluative case studies.

Organized settings

In the workshops, participants use the meaning-making framework to evaluate an idea that involves a product or concept from the contemporary information society on its innovation potential. Depending on the number of workshop participants, the workshops divide into breakout groups that maximize the number of participants to four or five; this allows efficient dialogues and active participation. Bracketing and attitude here unfolds as follows.

First, each workshop focuses on a specific organized setting such as managing an enterprise, medical treatment, insurance selling, and journalistic writing – in fact the overall context. Second, in order to prohibit vastly difference experiences to interfere with one and other, the workshop groups the participants that share similar jobs, functions or roles. Reusing the aforementioned management team as an example, this means that sales managers do not share the same group as people managers.

Workshop setup and execution

Organizing a workshop for each of the evaluative case studies involved careful planning with a sponsor to apply the aforementioned concepts regarding bracketing and attitude. It concerned choosing the right participants and agreeing upon an idea or concept that was actual and worthwhile to evaluate its innovation potential for the organization. Each workshop started with the introduction of one or more ideas.
or concepts that needed evaluation, presented by the sponsor or a subject matter expert. Next, I presented the way of working, which contained the introduction of the meaning-making framework. In two of the cases, a small brainstorm and/or discussion preceded the actual use of the meaning-making framework in order to scope the idea or concept to evaluate. Table 28 enumerates the steps involved in the workshop setup, execution and evaluation – the protocol of the evaluative case study.

Table 28: Workshop activities – case study protocol

<table>
<thead>
<tr>
<th>Phase</th>
<th>Process steps</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>1. Planning</td>
<td>Selected participants, agreed workshop context</td>
</tr>
<tr>
<td>Workshop</td>
<td>2. Introduction</td>
<td>Understanding of the concept or product for evaluating its innovation potential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Understanding of the meaning-making framework and the way of working</td>
</tr>
<tr>
<td></td>
<td>3. Brainstorm (optional)</td>
<td>Agreed idea, concept or product for evaluating its innovation potential</td>
</tr>
<tr>
<td></td>
<td>4. Execute meaning-making framework</td>
<td>Populated framework</td>
</tr>
<tr>
<td></td>
<td>5. Plenary presentation and discussion</td>
<td>Understanding of innovation potential</td>
</tr>
<tr>
<td>Evaluation</td>
<td>6. Hypothesis testing</td>
<td>Completed questionnaire</td>
</tr>
<tr>
<td></td>
<td>7. Sponsor interview</td>
<td>Interview data</td>
</tr>
</tbody>
</table>

In order to secure the right attitude toward the object, it is necessary to execute the meaning-making framework in a predefined manner. First, the user describes the product or concept – the object – by enumerating all what it makes available to him. Second, the user explicates what the results of the first step mean to him in terms of communicative, inherent, symbolic or contextual meaning. Third, the user assesses the combination of the first two steps – the object-meaning pair – against the three core innovations principles. All three steps require summarizing the results in writing in order to discuss them later. These three steps should give the actors a better understanding of the product or concept evaluated. Table 29 summarizes the steps involved in executing the framework as part of the workshop activities described earlier.
Table 29: Executing the meaning-making framework

<table>
<thead>
<tr>
<th>Steps</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enumerate what the product or concept – the object – makes available to the user</td>
<td>A written description of the user’s explication what the object makes available</td>
</tr>
<tr>
<td>2. Explore the orientations of meaning involved</td>
<td>A written description of the user’s explication of the meanings involved</td>
</tr>
<tr>
<td>3. Assess the object-meaning pair against the core innovation principles</td>
<td>A written description how the object-meaning pair matches one or more innovation principles</td>
</tr>
</tbody>
</table>

In introducing the meaning-making framework, I elaborated on the various framework perspectives and made the participants acquainted with the terminology. To clarify how it works, I have used two hypothetical examples. The first example illustrates the innovation potential of a tablet device for a hospital doctor (see Table 30). The second example shows how a new insurance concept has a business innovation potential for an insurer (see Table 31).

Table 30: Framework example 1: Tablet device for a hospital doctor

<table>
<thead>
<tr>
<th>Object</th>
<th>Habits of action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tablet device gives me access to patient data everywhere in the hospital as well as outside when I am traveling.</td>
<td>My connection with the hospital information infrastructure [contextual meaning] makes me monitoring the status of my patients more often during the day. I am directly involved with every change [communicative meaning], which makes me react faster and proactive. It feels like I am closer to my patients and have everything under control [symbolic meaning].</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time-converged activities</th>
<th>Disruptive construction</th>
<th>Radical connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct as well as remote access to patient data without interpretation from nurses etc.</td>
<td>More flexibility in obtaining patient status, and focused attention during patient-visiting rounds with the treatment team. The visiting rounds are more informative toward the patient.</td>
<td>None</td>
</tr>
</tbody>
</table>
Case–study data

The earlier described setup of the evaluative case study has the objective to put the framework user in a setting that provides legitimate data for testing the hypotheses. Literature on case-study research suggests collecting data from a variety of sources in order to obtain richness and confirmation of the data (Merriam, 1997; Yin, 2003). Several qualitative data-collection techniques, such as observations, interviews, group reflections, and evaluation forms, can enhance the case-study research (e.g. Kabakci Yurdakul, 2011).

Data collection and quality

The primary data-collection technique used for the evaluative case studies is a printed questionnaire that is filled-in by each of the workshop participants, after finishing the workshop. The questionnaire aims at testing the five hypotheses. I have discussed earlier that the evaluative case studies have an interpretive nature, categorizing and conceptualizing with the data from events.\(^\text{101}\) Social sciences widely criticized relying solely on the testing of hypotheses (Kaplan & Duchon, 1988). Therefore, I complement the testing of the five hypotheses with my own observations and a short interview with the sponsor of the workshop after the completion of the workshop. This provides a form of methodology triangulation and helps to increase the quality of the inquiry (Olsen, 2004; Thurmond, 2001). In pursuing reliability of the research, I have maintained the same structure in describing the evaluative case studies and capturing the resulting data.\(^\text{102}\) The case

\(^{101}\) See the discussion on case studies in chapter 2 starting at page 25.

\(^{102}\) The case descriptions start at page 151.
descriptions structure as 1) introduction that describes the context and sponsor objectives, 2) a capture of the questionnaire forms filled in by the workshop participants, and 3) a description of observations and results from the sponsor interview.

**Questionnaire**

In developing questionnaires, it is essential to consider what type of data the research requires because it directly affects the structure of the questionnaire and the type of questions required to obtain the necessary data (Frarry, 1996; Crawford, 1997). For example, questionnaires can have closed, open-ended, and open response-option type of questions. The structure of a questionnaire can be such that it builds up the appropriate context for the respondent in order to answer the questions accurately and meaningfully.103

In this research, the primary objective of the questionnaire is hypotheses testing; therefore, the data required is factual data. The targeted respondents for the questionnaire are the workshop participants, who complete the questionnaire straight after the workshop. Therefore, it is fair to assume that they know the context and no extra measures are necessary for context and structure of the questionnaire in order for the respondents to give accurate answers. The design of the questions is such that they directly reflect the hypotheses. A seemingly redundant question verifies the overall satisfaction of the case-study experience. In order not to burden the respondent with a lot of effort in thinking or articulating answers, I chose to limit the number of open-ended questions to one optional question. This also allows me to classify the responses for the analysis easier. I designed the wording and paper layout for the brief questionnaire following the suggestions and best practices from Frary (1996) and Fanning (2005). Table 32 lists the questionnaire used for the hypotheses testing. Appendix 1 and 2 show the finalized printed form of the questionnaire; the English version and the local language version in Dutch.

**Sponsor interview**

Earlier I discussed that the testing of the five hypotheses will be complemented with my own observations as well as a short interview with the sponsor of the workshop after the completion of the workshop. The interview with the sponsor follows a semi-structured interview approach in order to collect data without constraining the feedback (Leech, 2002). A semi-structured interview is the middle ground of the two ends of the spectrum of interview techniques, structured and unstructured interviewing. Journalists often use structured interviews with direct questions in order to confront interviewees with facts.

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103 Questionnaires often have explanatory texts and structured flows to create context and ‘guide’ the respondent.
The unstructured interview with open questions leans toward a conversation used by ethnographers in order to learn about the subject (ibid.). The questions used for the sponsor interview are of the open type questioning technique. Table 33 lists the questions.

Table 32: Questionnaire for participant experience of the framework

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall, using the framework gives me a better understanding of the concept or product that has been evaluated.</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>□ Strongly agree □ Agree □ Disagree □ Strongly disagree</td>
</tr>
<tr>
<td>2</td>
<td>In describing the concept or product – the object, it was possible to identify or express what it made available to me or to my organization.</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>□ Strongly agree □ Agree □ Disagree □ Strongly disagree</td>
</tr>
<tr>
<td>3</td>
<td>Which of the orientations of meaning from the product or concept create potential new habits for you or your organization?</td>
</tr>
<tr>
<td></td>
<td>Select one or more:</td>
</tr>
<tr>
<td></td>
<td>□ Communicative meaning □ Inherent meaning □ Symbolic meaning □ Contextual meaning</td>
</tr>
<tr>
<td></td>
<td>□ None of the above</td>
</tr>
<tr>
<td>4</td>
<td>How would you characterize the innovation potential of the concept or product – the object – that has been evaluated?</td>
</tr>
<tr>
<td></td>
<td>Select one or more:</td>
</tr>
<tr>
<td></td>
<td>□ Time convergence □ Disruptive construction □ Radical connections</td>
</tr>
<tr>
<td></td>
<td>□ None of the above</td>
</tr>
<tr>
<td>5</td>
<td>In discussing and populating the framework, how would you score the language that has been used?</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>□ Very informal □ Informal □ Neutral □ Formal □ Very formal</td>
</tr>
<tr>
<td>6</td>
<td>Would you use (parts of) the framework to interpret the outcome of other models, approaches, or methodologies you are familiar with?</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>□ Completely □ To some extent □ Not at all</td>
</tr>
<tr>
<td>7</td>
<td>Can you remember any or all parts of the framework, and how they connect with each other?</td>
</tr>
<tr>
<td></td>
<td>Select one:</td>
</tr>
<tr>
<td></td>
<td>□ Completely □ To some extent □ Not at all</td>
</tr>
<tr>
<td>8</td>
<td>Do you have any comments or suggestions regarding the structure, usage or application of the framework?</td>
</tr>
</tbody>
</table>
Table 33: Sponsor interview questions

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Can you describe how your expectations of the workshop were met?</td>
</tr>
<tr>
<td>2</td>
<td>What is your opinion on the way the framework operates?</td>
</tr>
<tr>
<td>3</td>
<td>How and to what extent would you use the framework in the future?</td>
</tr>
<tr>
<td>4</td>
<td>Can you describe any new insights in the way of looking at innovation?</td>
</tr>
</tbody>
</table>

Evaluative case 1 – Innovation team of a municipality

Introduction

The municipality of Haarlemmermeer has a dedicated team to foster innovation with information technology. Their focus is to support the overall goals and initiatives of the municipality by innovative use of information technology. Initiatives range from increasing the efficiency of internal front and back-office processes to pro-actively increasing the participation of civilians in order to make life easier and increase brand image of the municipality.

Description

The CIO of the municipality sponsored the workshop. After introducing the objectives of the research and the resulting instrument for fostering the governance discourse – the framework, he was motivated to tryout the framework by evaluating two innovative ideas with the innovation team. We agreed to run a two and half hour workshop with the team on an off-site location.

Prior to the workshop, I had a meeting with the manager and a co-worker of the innovation team in order to discuss and select the innovation ideas. In total, we made an inventory of four concepts, which they put in presentation form for presenting them briefly at the start of the workshop.

The ten participants in the workshop consisted of the innovation team, the CIO and three external consultants. We started the workshop with a short welcome and introduction, followed by a presentation of the four concepts by the manager of the innovation team. The next step was presenting the research and the resulting framework. I briefly explained the background and motivation of this inquiry and elaborated on the various parts of the framework; this included the two earlier examples showed in this chapter.104

After these introductions, a voting took place that selected unanimously two out of four concepts. The first concept concerned the reporting of irregularities with objects in the public space. For example, have civilians upload information from a

104 Table 30 and Table 31 starting at page 147 list two examples.
broken streetlight with formats such as photographs, QR codes, and location data. The second concept focused on the virtualization of case management with the aid of a digital coach. The need was to decrease the effort for everyone to find case information and customer information; reducing the need for communication such as email traffic and phone calls.

The group divided into two teams, each taking one concept to evaluate using the framework. The steps followed were 1) enumerating what the concept makes available, 2) explore the types of meanings involved, and 3) assess the object-meaning pair against the three core innovation principles. When the population the framework was finished – the assessment of the innovative idea, the two teams presented the results to each other. This whole exercise took a little less than two and a half hours.

When finished, each participant filled in the questionnaire and I interviewed the manager of the team and the CIO.

Results

Table 34 lists the total score of the filled-in questionnaire by the workshop participants. A quick evaluation of the results indicates that they are seemingly positive. The participants were capable of working with the framework and helped them better understanding the evaluated concept as well as assessing its innovation potential. A detailed analysis of the results goes beyond the purpose of this chapter; the next chapter will further analyze the data.

Five out of ten participants responded to the last question of the questionnaire “do you have any comments or suggestions regarding the structure, usage or application of the framework?” The following lists my interpretation from the responses.

- Make the terminology simpler using local language. Increased simplicity makes it stick.
- It is also possible to use the framework to verify and audit project proposals.
- More elaboration of the innovation concept would benefit populating the framework.
- Use less English vocabulary; stick to local language.
- Make it less instrumental by including visuals.

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105 See also Table 29 on page 147.
Table 34: Questionnaire results case 1

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall, using the framework gives me a better understanding of the concept or product that has been evaluated.</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 (30.0%)</td>
</tr>
<tr>
<td>2</td>
<td>In describing the concept or product – the object, it was possible to identify or express what it made available to me or to my organization.</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (10.0%)</td>
</tr>
<tr>
<td>3</td>
<td>Which of the orientations of meaning from the product or concept create potential new habits for you or your organization?</td>
<td>Comm.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 (30.4%)</td>
</tr>
<tr>
<td>4</td>
<td>How would you characterize the innovation potential of the concept or product that has been evaluated?</td>
<td>Time convergence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 (33.3%)</td>
</tr>
<tr>
<td>5</td>
<td>In discussing and populating the framework, how would you score the language that has been used?</td>
<td>Very informal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (11.1%)</td>
</tr>
<tr>
<td>6</td>
<td>Would you use (parts of) the framework to interpret the outcome of other models, approaches, or methodologies you are familiar with?</td>
<td>Completely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 (80.0%)</td>
</tr>
<tr>
<td>7</td>
<td>Can you remember any or all parts of the framework, and how they connect with each other?</td>
<td>Completely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 (30.0%)</td>
</tr>
</tbody>
</table>
In a small interview, the manager of the innovation team noted that in general, the framework would be very helpful in keeping the team focused such that innovative ideas really contribute to the needs of the municipality, all against the background of the political dynamics of the council members. According to the manager, the framework would help to better justify and communicate innovation ideas to these members and all others involved. She also noted that instead of verifying innovation ideas it would help her to create ideas.

The CIO noted the framework would help him to judge project proposals. He also brought up the idea of using the framework for creating innovative ideas. Another perspective he introduced was exercising the framework in reverse order: look at the effects of an innovation project and find out whether a simpler or cheaper concept would have been capable of creating the same successes. He wondered what council members would need in order to be politically successful and felt that reversely executing the framework could shine more light in this.

From my own observations of the preparation discussions and the workshop itself, I conclude that it is necessary to have a well ‘pre-cooked’ idea in order to ‘bootstrap’ the dialogue in using the framework. An idea, that is just-enough described in order for the participants to imagine what it is, what it comprehends. I noted during the workshop that the majority of the participants had difficulties to separate the object description from the habits of action. They tend to mix them and have problems in describing the object. Even though I prepared the introductory presentation in local language, some of the English words were difficult to comprehend for some of the participants. I had to explain more in-depth the meaning of the words and concepts. Another thing I noted was that the participants quite fast entered into very fundamental discussions; discussions about the very essence of the idea that they evaluated.

Evaluative case 2 – A service delivery team

Introduction

Being a full service provider, Hewlett-Packard (HP) has a dedicated account team to deliver outsourcing services to a large global retailer. The office of the CTO (Chief Technology Officer) of this HP account has the objective to safeguard the quality of services and foster innovation in order to increase the quality of services, as well as introducing new ideas that are beneficial for the client. The latter introduces a proactive attitude for the members of the CTO office to look for opportunities how IT can add value to the service processes as well as to the retail processes.

Description

After a brief introduction of this research and the resulting framework to one of the members of the CTO office, an enterprise architect, he introduced the CTO with the idea of assessing two innovation initiatives they have on their radar by using the
meaning-making framework. The CTO agreed to sponsor a two-hour workshop to assess two ideas. First, the idea of real-time tracking consumer movement and buying information that enables precision in-store consumer interaction in order to influence accurately consumer-buying behavior. For example, depending on the location in the store and buying pattern, the consumer gets product suggestions displayed. Second, the concept of customer-dedicated utility services that exploits a pay-per-usage model for the full stack of information infrastructure components, eventually delivered as cloud-based services. In short, infrastructure-as-a-service specially designed for customer constraints.

The seven participants of the workshop consisted of the CTO, the enterprise architect and five IT strategy consultants and architects working in the information management domain – altogether, a well-balanced team in terms of frames of reference, mode of reasoning. I had a brief meeting with the CTO to align expectations. Because the CTO was already quite determined to assess the two aforementioned ideas, I only had a brief meeting prior to the workshop in order to align expectations. We agreed his team would prepare a short presentation to introduce the two cases to the workshop participants.

We started the workshop with a short introduction, followed by presentations from the CTO and the enterprise architect on the two innovation ideas that needed assessment. They quite elaborated on the innovations, which introduced some discussions without overly going into details. The next step was presenting the research and the resulting framework. I briefly explained the background and motivation of this inquiry and elaborated on the various parts of the framework; this included the two earlier examples showed in this chapter.106

The group divided into two teams, each taking one concept for evaluation with the framework. The steps followed were 1) enumerating what the concept makes available, 2) explore the types of meanings involved, and 3) assess the object-meaning pair against the three core innovations principles.107 When the two teams had finished populating of the framework – the assessment of the innovative idea, they presented the results to each other. The workshop took two hours. When finished, each participant filled in the questionnaire and I interviewed the CTO.

**Results**

Table 35 lists the total score of the filled-in questionnaire by the workshop participants. A quick evaluation of the results indicates that they are positive. The participants were capable of working with the framework and helped them better understanding the evaluated concept as well as assessing its innovation potential. A detailed analysis of the results goes beyond the purpose of this chapter; the next chapter will further analyze the data.

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106 Table 30 and Table 31 starting at page 147 list two examples.
107 See also Table 29 on page 147.
<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Answers</th>
<th>Score</th>
<th>Score</th>
<th>Score</th>
<th>Score</th>
<th>Score</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall, using the framework gives me a better understanding of the concept or product that has been evaluated.</td>
<td>Strongly Agree 2 (28.6%)</td>
<td>Agree 5 (71.4%)</td>
<td>Disagree 0 (0.0%)</td>
<td>Strongly Disagree 0 (0.0%)</td>
<td></td>
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<tr>
<td>2</td>
<td>In describing the concept or product – the object, it was possible to identify or express what it made available to me or to my organization.</td>
<td>Strongly Agree 1 (14.3%)</td>
<td>Agree 4 (57.1%)</td>
<td>Disagree 2 (28.6%)</td>
<td>Strongly Disagree 0 (0.0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Which of the orientations of meaning from the product or concept create potential new habits for you or your organization?</td>
<td>Comm. 6 (46.2%)</td>
<td>Inherent 1 (7.7%)</td>
<td>Symbolic 3 (23.1%)</td>
<td>Contextual 3 (23.1%)</td>
<td>None 0 (0.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How would you characterize the innovation potential of the concept or product that has been evaluated?</td>
<td>Time convergence 5 (33.3%)</td>
<td>Disruptive constructions 6 (40.0%)</td>
<td>Radical connections 4 (26.7%)</td>
<td>None 0 (0.0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>In discussing and populating the framework, how would you score the language that has been used?</td>
<td>Very informal 0 (0.0%)</td>
<td>Informal 3 (42.9%)</td>
<td>Neutral 2 (28.6%)</td>
<td>Formal 2 (28.6%)</td>
<td>Very formal 0 (0.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Would you use (parts of) the framework to interpret the outcome of other models, approaches, or methodologies you are familiar with?</td>
<td>Completely 2 (28.6%)</td>
<td>Some 5 (71.4%)</td>
<td>Not at all 0 (0.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Can you remember any or all parts of the framework, and how they connect with each other?</td>
<td>Completely 6 (85.7%)</td>
<td>Some 1 (14.3%)</td>
<td>Not at all 0 (0.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Five out of the seven participants responded to the last question of the questionnaire “do you have any comments or suggestions regarding the structure, usage or application of the framework?” The following lists the responses.

- The explanation of the object part of the framework felt short; the image is quite subjective.
- The step toward innovation is too big to have more innovative ideas emerge.
- The habits of action go beyond meanings. It describes behavior, actors and value; a kind of use-case plus business case.
- An interesting concept!
- My organization is HP. I was looking from the client’s perspective.
- Very handy and well structured. A good way to look at innovation.

The post-workshop interview with the CTO revealed that he had no special expectations of the workshop except a better understanding of the two innovation initiatives. In that respect, he emphasized it met his expectations. He found the framework quite manageable and practical in its operation. He noted that the habits-of-action dimension of the framework shed a new light on the customer-dedicated utility services initiative: “a real eye-opener because we never covered the notion how the customer would change their way of working with this proposition.” He found that, with this initiative, several actors are involved. According to him, the habits-of-action dimension of the framework involves aspects of the actor, its behavior, and value.

He mentioned that, in communicating a proposition to his customer, he would not use the framework as such, but use it on a meta-level: analyzing a proposition with the framework and use the results to emphasize the benefit of the innovation proposition. Put differently, it enables him to better argue customer benefits. Another thing he mentioned was that he could use the framework to filter-out the real innovative propositions. He used the term radical innovation versus business-as-usual efficiency measures.

In observing the workshop, I noticed that a proper presentation of the innovative idea is necessary. During its presentation, the participants asked a lot about reasons and functionality. During the introduction of the framework, the participants tended to go into details by analyzing and reasoning its structures and underlying thoughts. During the population of the framework, I noticed the participants had difficulty in choosing a position: the service provider, the client, or the client’s client. I also noted that a few participants found it difficult to separate the object description from the habits of action.
Evaluative case 3 – Board of directors from a comprehensive school

Introduction

The board of directors from the Bernardinuscollege, a comprehensive school, has the daunting task to secure the quality of learning against the background of new developments from the information society. Being one of the first schools in the Netherlands to introduce the iPad as an interactive learning device demonstrates its innovative culture. In general, learning methods change and increasingly make use of information technology. For example, electronic learning environments lower the burden of school administrative tasks for teachers; schools widely adopt them. With the emergence of social media – a product from the contemporary information society, however, a new trend develops in a sense that these electronic learning environments become more student focused; the administrative domain converges with the social domain.

Description

The advisor to the board of directors sponsored the workshop. After writing him a brief introduction of the research objectives and a possible workshop format that is suitable to verify innovative ideas, he suggested running a two-hour workshop with the board of directors. Prior to the workshop, I met with the advisor to the board of directors in order to introduce the meaning-making framework in more detail and discuss innovation ideas that require verification.

From the four potential innovation ideas, we agreed to verify an idea concerning a new electronic learning environment because it was a dilemma currently discussed in the board of directors. Two students together developed a state-of-the-art electronic learning environment that incorporated social media among the traditional administrative functions. This resulted in an electronic learning environment that is very personalized with increased user-friendliness for a variety of typical users such as teacher, learner, and parents. They made it available as an app to download on mobile devices such as smartphones and tablets. The dilemma for the board of directors was to make a choice between the non-popular but legitimate electronic learning environment and the cheaper popular invention of the two students.

We started the workshop with a short introduction of the electronic learning environment. It did not require any detailed introduction because all board members had intimate knowledge of the innovation idea – the students had held a presentation and demonstration for the board. Next, I presented the research and the resulting framework. I briefly explained the background and motivation of this
inquiry and elaborated on the various parts of the framework; this included the two earlier examples showed in this chapter.108

Because there were only five participants, the discussion remained plenary with one participant populating the framework. The steps followed were 1) enumerating what the new learning environment makes available to the school, 2) explore the types of meanings involved, and 3) assess the object-meaning pair against the innovation dimension.109 After the population of the framework, we could quickly wrap-up the workshop because no other team was involved. When finished, each participant filled in the questionnaire and I interviewed the advisor of the board.

**Results**

Table 36 lists the total score of the filled-in questionnaire by the workshop participants. A quick evaluation of the results indicates that they are positive. The participants were capable of working with the framework and helped them better understanding the implications of introducing a student-made electronic learning environment. A detailed analysis of the results goes beyond the purpose of this chapter; the next chapter will further analyze the data.

Three out of five participants responded to the last question of the questionnaire “do you have any comments or suggestions regarding the structure, usage or application of the framework?” The following lists the responses.

- No suggestions, but the workshop was illuminating. I have my doubts if this new electronic learning environment will be the innovation for us.
- It contributes to making the rights choices.
- It makes a good discussion possible such that meanings diverge.

The post-workshop interview with the sponsor – the advisor to the board of directors – revealed that the workshop met his expectations because it enabled a good discussion on the subject: “The workshop provided a good discussion in a very pleasant way with many new viewpoints on a different level of abstraction than usual.” Overall, he found the framework illuminating and emphasized that it provided him latitude to discuss culture and meaning in various perspectives. He also revealed that, by discussing issues on an appropriate level of abstraction, he realized that, as an organization, they already had done many innovative things to increase the learning experience of students. The framework provided him more insight in the pros and cons of the proposed electronic learning environment. He would use the framework for himself to assess new situations and propositions.

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108 Table 30 and Table 31 starting at page 147 list two examples.
109 See also Table 29 on page 147.
<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Answers</th>
</tr>
</thead>
</table>
| 1   | Overall, using the framework gives me a better understanding of the concept or product that has been evaluated. | Strongly Agree: 1 (20.0%)  
Agree: 4 (80.0%)  
Disagree: 0 (0.0%)  
Strongly Disagree: 0 (0.0%) |
| 2   | In describing the concept or product – the object, it was possible to identify or express what it made available to me or to my organization. | Strongly Agree: 0 (0.0%)  
Agree: 5 (100.0%)  
Disagree: 0 (0.0%)  
Strongly Disagree: 0 (0.0%) |
| 3   | Which of the orientations of meaning from the product or concept create potential new habits for you or your organization? | Comm.: 5 (71.4%)  
Inherent: 0 (0.0%)  
Symbolic: 1 (14.3%)  
Contextual: 1 (14.3%)  
None: 0 (0.0%) |
| 4   | How would you characterize the innovation potential of the concept or product that has been evaluated? | Time convergence: 4 (44.4%)  
Disruptive constructions: 2 (22.2%)  
Radical connections: 3 (33.3%)  
None: 0 (0.0%) |
| 5   | In discussing and populating the framework, how would you score the language that has been used? | Very informal: 0 (0.0%)  
Informal: 3 (60.0%)  
Neutral: 1 (20.0%)  
Formal: 1 (20.0%)  
Very formal: 0 (0.0%) |
| 6   | Would you use (parts of) the framework to interpret the outcome of other models, approaches, or methodologies you are familiar with? | Completely: 2 (40.0%)  
Some: 3 (60.0%)  
Not at all: 0 (0.0%) |
| 7   | Can you remember any or all parts of the framework, and how they connect with each other? | Completely: 2 (40.0%)  
Some: 3 (60.0%)  
Not at all: 0 (0.0%) |
In observing the discussion during the workshop, I noticed that in discussing the first part of the framework – the object – the participants focused mainly on obstacles such as the risks in system continuity of a student-built system versus a commercial-built system. They tended to go into formal innovation discussions.\textsuperscript{110} The habits-of-actions discussion revealed a number of implementation constraints that resulted from various orientations of meaning. The participants also discussed fundamental issues that directly related to learning science and cultural habits of teachers. In assessing the object-habits pair against the key innovation principles, the participants recognized previous innovation activities and got the insight that they already had done quite innovative things. Considering the electronic learning environment, they gained insight on implementation effects. One of the participants said: “this [the way we look at the problem] transcends the level of instrument-thinking.”\textsuperscript{111} In the discussions, the participants differentiated in looking at the system from an overarching perspective and to the user individually. I also noticed that even though this was a group of people with the same role, except or the sponsor, they all had a different image of the object. Although all participants knew the innovation idea, a re-introduction of it probably would have benefited the discussion.

**Evaluative case 4 – Commercial team of an IT solutions vendor**

**Introduction**

The key activity of $\text{i}^3$ groep is integrating information infrastructures driven by the information explosion in the contemporary information society. Their ambition is to help organizations to manage the continuity and resilience with regard to the explosion of data by providing solutions such as archiving and backups. Their mission is to help organizations to focus on their key activities by taking away the burden of making information available, manageable and secure.

The commercial team has the task to define and maintain appropriate business models and go to market models, as well as defining capability requirements for the project delivery organization.

**Description**

The business manager for the healthcare and education sector sponsored the workshop. He was interested whether this approach could help him better

\textsuperscript{110} See also the discussion on the distinctly different creative phase and formal phase in innovation in designing the framework starting on page 111.

\textsuperscript{111} This is conforms the device paradigm, the essence of the object dimension of the framework (c.f. Verbeek, 2005).
communicating a solution to the healthcare market, which is a complex market because it involves specialized IT domains with a large variety of standards. After introducing the meaning-making framework, he suggested assessing the concept of vendor neutral archiving, a rather new concept, within his own organization. Vendor neutral archiving is gaining ground in the healthcare market because it provides a solution for the many data formats involved, in terms of business continuity as well as uniform access to information. For example, in a hospital there is a large variety of images, documents, and any other data format with clinical relevance, that needs to be stored in such a manner that other systems can retrieve it.

During the pre-meeting with the sponsor and a business developer, the notion developed that introducing vendor neutral archiving requires two perspectives. First, there is the communication toward clients to create awareness on the benefits of the concept. Second, there are the organizational aspects on how to engage and deliver projects deploying vendor neutral archiving. We agreed to run the workshop in that manner, by differentiating in an internal and external perspective.

The business developer started the workshop with a presentation of the vendor neutral archiving concept. I followed this with a brief introduction of the research, after which I introduced the resulting meaning-making framework by elaborating on each of the domains of the framework. I used the two examples showed earlier to illustrate the working of the framework.¹¹²

The seven participants attending the workshop divided into two teams. The first team of four participants focused on the overarching question on how vendor neutral archiving reflects on the organization, the internal perspective. The steps this team followed where 1) enumerating what vendor neutral archiving gives the organization in terms of business aspects, 2) exploring what organizational habits they would encounter, and 3) assess the object-habits pair against the three core innovation principles.¹¹³ During the discussion, a fifth participant joined this team.¹¹⁴

The second team of three participants looked at the innovation potential for healthcare clients such as a hospital, the external perspective. The steps this team followed where 1) enumerating what vendor neutral archiving brings to a healthcare organization, 2) exploring what meanings can develop in healthcare organizations, and 3) assess the object-habits pair against the three core innovation principles.¹¹⁵

After both teams had populated the framework, they presented the results to each other in a plenary session. When finished, each participant filled in the questionnaire and I interviewed the sponsor and the business developer. In total, the workshop took two and a half hours.

¹¹² Table 30 and Table 31 starting at page 147 list two examples.
¹¹³ See also Table 29 on page 147.
¹¹⁴ I will come back to this event later, because it reveals a noteworthy effect.
¹¹⁵ See also Table 29 on page 147.


Results

Table 37 lists the total score of the filled-in questionnaire by the workshop participants. A quick evaluation of the results indicates that they are positive. The participants were capable of working with the framework and helped them better understanding the organizational implications of introducing vendor neutral archiving, as well as articulating the benefits for healthcare organizations. A detailed analysis of the results goes beyond the purpose of this chapter; the next chapter will further analyze the data.

Six out of the seven participants responded to the last question of the questionnaire “do you have any comments or suggestions regarding the structure, usage or application of the framework?” The following lists the responses.

- A good session. I would like to use this with big projects. Objectives for me personally met: how to create awareness on innovative projects with persons in the organization.
- The abstractive approach provides a new and meaningful perspective on the case.
- Adjust the examples to the targeted group. Assess whether people have understood the approach.
- Applying this without guidance seems difficult to me.
- Good agreements regarding view and context lead, must lead, to clarity; leadership and guidance are important.
- It takes a while to connect to an abstract model.

The post-workshop interview was with the sponsor and the business developer – I met them both in the pre-meeting of the workshop. The workshop met the expectations of the sponsor in a sense that it had forced the participants thinking through what is at stake with the new concept of vendor neutral archiving. To operate the framework better, he would like to have questions that are more direct regarding the characteristics of the concept under evaluation. He would use the framework particularly with the bigger innovative projects in order to convince customers in his communication. Working with the framework gave him the notion that it puts you closer to the product – concept – and better in the mindset of his clients.

The business developer did not have any expectations, but noticed that a guiding framework avoids conflicts in the discussions because it made participants respect the variety of interests. He liked the operation of the framework because it made things simple and practical, resulting in a better understanding of what a concept can do for a customer situation. He would use the framework typically with customers to enable communication, talk about concepts, create understanding; gaining trusted advisor status as he called it.
<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Answers</th>
</tr>
</thead>
</table>
| 1   | Overall, using the framework gives me a better understanding of the concept or product that has been evaluated. | Strongly Agree: 5 (71.4%)  
Agree: 2 (28.6%)  
Disagree: 0 (0.0%)  
Strongly Disagree: 0 (0.0%) |
| 2   | In describing the concept or product – the object, it was possible to identify or express what it made available to me or to my organization. | Strongly Agree: 4 (57.1%)  
Agree: 3 (42.9%)  
Disagree: 0 (0.0%)  
Strongly Disagree: 0 (0.0%) |
| 3   | Which of the orientations of meaning from the product or concept create potential new habits for you or your organization? | Comm.: 5 (41.7%)  
Inherent: 2 (16.7%)  
Symbolic: 1 (8.3%)  
Contextual: 4 (33.3%)  
None: 0 (0.0%) |
| 4   | How would you characterize the innovation potential of the concept or product that has been evaluated? | Time convergence: 2 (16.7%)  
Disruptive constructions: 5 (41.7%)  
Radical connections: 5 (41.7%)  
None: 0 (0.0%) |
| 5   | In discussing and populating the framework, how would you score the language that has been used? | Very informal: 0 (0.0%)  
Informal: 6 (85.7%)  
Neutral: 0 (0.0%)  
Formal: 1 (14.3%)  
Very formal: 0 (0.0%) |
| 6   | Would you use (parts of) the framework to interpret the outcome of other models, approaches, or methodologies you are familiar with? | Completely: 3 (42.9%)  
Some: 4 (57.1%)  
Not at all: 0 (0.0%) |
| 7   | Can you remember any or all parts of the framework, and how they connect with each other? | Completely: 3 (42.9%)  
Some: 4 (57.1%)  
Not at all: 0 (0.0%) |
In observing the discussions in the breakout-groups of the workshop, the first thing noticed was that an additional participant joined one of the groups. The consequence was that this participant did not have the introduction of the meaning-making framework and the vendor neutral archiving concept. Although his colleagues had quickly introduced him briefly the context, which made him actively participating in the discussions, I had to exclude his post-workshop questionnaire results in order to maintain the integrity of the case study. Later I noticed a lack of understanding of the concepts used in the meaning-making framework such as the different orientations of meanings involved. This event demonstrated though that the framework needs a proper introduction before one can work with it. In general, the participants needed some time to get familiar with the framework. It was noticeable that some participants had difficulties to separate the object from the habits-of-action domain.

The team involved in the external perspective noted that insight in the way the framework works depends on the level in the organization one addresses – the level of abstraction. The discussion in this team led to new interpretations of the concept and the way they can communicate this to their customer.

The team involved in the internal perspective of the vendor neutral archiving concept was predominantly looking at how an introduction of the concept would affect the way they organize – requirements thinking. The discussions touched upon fundamental issues such as new roles and management of change. This team developed the notion that one of the key innovation principles would have a large effect on their organization; it would require special attention in a management-of-change program or project.

**Evaluative case 5 – Collaboration for a healthcare innovation**

**Introduction**

The municipality of Almere launched the Almere DataCapital program in order to attract economic activities that leverage on the emerging theme of big data.\(^{116}\) It aims to concentrate firms, services, knowledge and facilities involved in collecting, storing, analyzing, sharing and visualizing big data. The program envisions that big data introduces new disciplines because of the new skills and tools required. The program created the Big Data Value Center in order to foster cross-sector and

\(^{116}\) Big data has become a container term that encompasses many technologies. Its premise is that enhanced analytics of an overabundance of data can create new values for enterprises. The United States Government announced in 2012 a ‘Big Data Research and Development’ initiative (http://www.whitehouse.gov/blog/2012/03/29/big-data-big-deal) and Gartner estimated in 2012 that there will be $34 billion of IT spending on big data in 2013 (http://www.gartner.com/newsroom/id/2200815).
interdisciplinary big data related developments. One of these developments fostered by the Big Data Value Center is the start of a joint venture that aims to explore the value of big data in the healthcare sector.

Description

The program manager for the Big Data Value Center sponsored the workshop. The objective of the workshop was to explore the innovation deliverables for an e-Health solution and identify possible gaps that would require recruiting additional parties to this venture.

At the pre-meeting with the sponsor, I introduced the meaning-making framework and one of the members, the secretary of the Dutch Health Hub, briefly introduced the e-Health idea. The Dutch Health Hub is an association of big data service vendors, targeted to life sciences and health. It is the first spin-off from Almere DataCapital. The idea concerned the technologies required to explore the possibilities of centralized healthcare data in a safe and sustainable manner. The idea of centralizing healthcare data draws a lot of political attention in the Netherlands because of privacy laws and regulatory constraints. The idea was to introduce a concept that demonstrates that today’s technology is capable of dealing with these issues and constraints.

The concept involved aspects of the Quantified Self,\textsuperscript{117} which let humans collect data from several bodily functions measured by a device attached to the body. The intention was that a community forms for people freely uploading and selectively sharing their data, for general or a particular interest. A proof of concept could, 1) demonstrate all the technical challenges involved such as identity, privacy, connectivity, interfaces, security and auditing-reporting, and 2) avoid the regulatory constraints and privacy laws because it is a community-driven initiative where people freely participate.

Six people participated in the workshop, representing the device manufacturer, a technology vendor for security, a research institute, a big data computing platform provider, a consulting firm on healthcare and the Dutch Health Hub. The workshop started with the secretary of the Dutch Health Hub who did a twenty-minute presentation on the innovation idea on the concept of quantified self. Next, I briefly introduced the research and made the participants familiar with the meaning-making framework. I elaborated on each of the domains of the framework and used the two examples showed earlier to illustrate the working of the framework.\textsuperscript{118} The introduction of the framework also took about twenty minutes.

We decided to do a plenary discussion because all participants were stakeholders in the initiation of a joint venture with a clear defined and delineated

\textsuperscript{117} ‘The Quantified Self is a movement to incorporate technology into data acquisition on aspects of a person’s daily life in terms of inputs (e.g. food consumed, quality of surrounding air), states (e.g. mood, arousal, blood oxygen levels), and performance (mental and physical) (Quantified-Self, 2013).’

\textsuperscript{118} Table 30 and Table 31 starting at page 147 list two examples.
innovation objective, and, therefore, eager to hear and discuss the complete perspective. The steps followed where 1) enumerating what the concept of quantified self would make available to an individual as well as to a health provider, 2) exploring what new habits would emerge from the orientation of the individual, and 3) assess the object-habits pair against the innovation dimension.\(^{119}\)

After the population of the framework, there was a quick wrap-up, where the secretary of the Dutch Health Hub committed developing a flyer by using the results of the workshop. When finished, each participant filled in the questionnaire and I interviewed the sponsor. In total, the workshop took two hours.

**Results**

Table 37 lists the total score of the filled-in questionnaire by the workshop participants. A quick evaluation of the results indicates that they are positive. The participants were capable of working with the framework and helped them better understanding the potential of the concept and the feasibility of becoming a member of the joint venture. In more detail, how the idea of the Quantified Self could demonstrate the technological capabilities of centralizing healthcare data for the benefit of several parties. A detailed analysis of the results goes beyond the purpose of this chapter; the next chapter will further analyze the data.

All of the six participants responded to the last question of the questionnaire “do you have any comments or suggestions regarding the structure, usage or application of the framework?” The following lists the responses.

- The power is found in its simplicity.
- A lot of overlap with known concepts such as a paradigm shift and Schopenhauer’s creative destruction. I found the aspect time convergence too limited. I would use Porter as a basis for assessing a successful product.
- Good that the framework allows flexibility; it must serve to think through an innovative concept. Therefore, its usage justifies a somewhat loose interpretation of the questions and definitions.
- Excellent as is.
- I would also rate the three individual innovation aspects in order to better qualify an idea as being innovative.
- It occurred to me that, during the workshop, we were assessing as well adjusting the innovative concept. This creates an interaction between brainstorming and diagnosing the concept.

\(^{119}\) See also Table 29 on page 147.
<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall, using the framework gives me a better understanding of the concept or product that has been evaluated.</td>
<td>Score: Strongly Agree 1 (16.7%), Agree 5 (83.3%), Disagree 0 (0.0%), Strongly Disagree 0 (0.0%)</td>
</tr>
<tr>
<td>2</td>
<td>In describing the concept or product – the object, it was possible to identify or express what it made available to me or to my organization.</td>
<td>Score: Strongly Agree 1 (16.7%), Agree 5 (83.3%), Disagree 0 (0.0%), Strongly Disagree 0 (0.0%)</td>
</tr>
<tr>
<td>3</td>
<td>Which of the orientations of meaning from the product or concept create potential new habits for you or your organization?</td>
<td>Comm. 5 (35.7%), Inherent 3 (21.4%), Symbolic 1 (7.1%), Contextual 5 (35.7%), None 1 (6.7%)</td>
</tr>
<tr>
<td>4</td>
<td>How would you characterize the innovation potential of the concept or product that has been evaluated?</td>
<td>Time convergence 4 (28.6%), Disruptive constructions 5 (35.7%), Radical connections 5 (35.7%), None 0%</td>
</tr>
<tr>
<td>5</td>
<td>In discussing and populating the framework, how would you score the language that has been used?</td>
<td>Very informal 0 (0.0%), Informal 3 (50.0%), Neutral 3 (50.0%), Formal 0 (0.0%), Very formal 0 (0.0%)</td>
</tr>
<tr>
<td>6</td>
<td>Would you use (parts of) the framework to interpret the outcome of other models, approaches, or methodologies you are familiar with?</td>
<td>Completely 1 (16.7%), Some 4 (66.7%), Not at all 1 (16.7%)</td>
</tr>
<tr>
<td>7</td>
<td>Can you remember any or all parts of the framework, and how they connect with each other?</td>
<td>Completely 4 (66.7%), Some 2 (33.3%), Not at all 0 (0.0%)</td>
</tr>
</tbody>
</table>
The interview after the workshop with the sponsor revealed that he expected the workshop would help to identify aspects of the innovative concept on how to make a plan for pursuing this further. He was curious to experience how the framework could help in capturing valuable notions concerning the innovative concept. He commented that he found the approach interesting, but would not mind to explore the three core innovation principles further by ranking them. According to him, it would substantiate even better why a concept is innovative and worth pursuing. Regarding the operation of the framework, he felt that the object was still fluid after enumerating what it gives to the user; he questioned whether all participants had the same image of the concept. He would use the framework in the future in some sense, but he would really fix the object and examine its consequences, followed by some iterations in order to delineate the innovation. He then would use it to evaluate the project and intervene when necessary. He clearly saw the use of the framework in the creative part of the innovation life cycle but also limited to that; innovation requires formal processes, in order to instantiate the idea, make it tangible. “We now have qualified an idea, but how can we bring it alive, make a formal plan?” The sponsor gained the insight that governing with meaning is indeed possible – how one can apply complex theories in an elegant manner in order to see how users adapt their behavior.

My overall impression of the discussion was that this group wanted to ‘sell’ the idea because they refrained from using constraints and obstacles in populating the framework. They had fundamental discussions on object properties and how they would affect the habits of its user, as well as other stakeholders such as insurers and medical professionals. The consideration of different stakeholders appeared not to be a problem for the group because they enumerated without hesitation aspects in the various dimensions of the framework that concerned a variety of stakeholders. It was remarkable that some users revisited some parts of the framework during the discussion; they seemingly had a holistic view on the framework. The secretary of the Dutch Health Hub used the populated framework to write a flyer for approaching other parties such as other technology vendors, insurers, and health organizations. My interpretation from the flyer was that it was compelling – meaningful – and very to the point, while I recognized all the content from the framework. He commented that having the populated framework at hand made it very easy for him to write-up such a flyer.

**Summary and conclusions**

In designing the framework, in chapter 5, it became already clear that the empiricist phenomenological stance would constrain the evaluation of the framework because it dictates the inseparability of content and method. Therefore, this chapter started with developing requirements for the evaluative case studies. It was necessary to elaborate on the empiricist phenomenological stance in order to create an appropriate setup for testing the hypotheses developed in the previous
chapter. This setup involves the application of bracketing and reduction as well as an appropriate attitude toward the object that the framework evaluates. They are concepts from phenomenological research in general and appeared to be pivotal in testing the hypotheses because governing actors experience objects, events, and processes from the contemporary information society in-the-world.

Attitude concerns how people attend to objects and processes in a way that they experience them. It assumes the phenomenological stance, to which I referred to earlier as incarnating a life-world along with the example of the paradigm of play in order to emphasize that the relation people have with objects in their life-world is radically empiricist.

Phenomenological reduction – bracketing – concerns the way researchers want to rule-out taken-for-granted assumptions as well as cross-operational interferences. In the case-study setup, this refers to creating a setting that provides an operational structure with activities that align to the actor’s job, role, or function.

In synthesizing these concepts, it became clear that the organized setting influences the attitude toward the object. In order to get legitimate results from the evaluative case studies, it was necessary to create an appropriate organized setting that included integral bracketing and the right attitude toward the object; a key requirement for executing the evaluative case studies.

In describing the case-study setup, the chapter focused on creating the appropriate organized setting for the case studies. The evaluative case studies organized as a number of workshops that secured the relevant operational structure(s) and an attitude toward the object that allowed it to experience it. It involved selecting similar jobs, functions or roles as workshop participants in order to create the right structure. This appeared to be a key notion developed in this chapter: one cannot mix different roles, jobs, or functions in such a setting. In order to experience the object using the meaning-making framework, the workshops followed a protocol that started with describing the object using the device paradigm – what does the object make available to the user, followed by assigning meaning to this and complete it by assessing the object-meaning pair against the innovation dimension.

Next, the chapter elaborated on the approach for collecting legitimate data for testing the hypotheses. It produced a questionnaire that directly relates to the hypotheses to be tested. Workshop participants should complete the questionnaire straight after the workshop. The notion developed that the questionnaire must be easy to understand and not burden the participant with difficult questions.

The remainder of the chapter described the evaluative case studies along with the results of the questionnaires.