Service archetypes, a methodological consideration

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Abstract

In practice based research, especially when working with non-research organisations, sometimes researchers face challenges related to the willingness of participants to openly share experiences outside the realms of the project. As a consequence, there are methodological challenges with showing results, and working with knowledge verification. In this paper we suggest that some of these obstacles might be dealt with by using service archetypes. These form a neutral basis on which the developed design knowledge may be applied.

KEYWORDS: service archetypes, design research, communication, verification

Introduction

Practice based and constructive design research (Koskinen et al 2011), where research is set in, or an integrated part of, actual design and development practice, is central in developing local as well as generic knowledge. On a general level this poses challenges on methodology, theory construction, methods and activities of practice and research, as well as knowledge representations (see e.g. Höök & Löwgren, 2012).

At a more specific level the challenges are more intertwined. To start with, there is the willingness of participants to openly share experiences outside the realms of the project. It is not uncommon that organisations are unwilling to share because they believe it will highlight and expose shortcomings of the organisation. Nor is it uncommon that organisations are unwilling to share because they believe that it would expose and uncover their means for gaining competitive advantage. Other challenges are of a methodological nature. In the scientific discourse of design research we have equipped ourselves with methods and techniques that make it possible to perform and understand studies that are based on single cases, design experiments, interventions, and studies of our own design practice (Koskinen et al, 2011). In other research areas these methods are not so common, and might even be viewed as inferior in terms of explanatory or reasoning power. Practitioners outside the specific project, that we as researchers ultimately target with the knowledge developed, might have difficulties transferring knowledge from one case domain to another. Sometimes even participants in specific projects might find it difficult to transfer the knowledge developed into the communities of practice of which they are a part. However, the strengths of these methods are the thick descriptions, the reflective nature of understanding, and their theoretically founded verification.

In this paper we suggest an approach for design research in service settings where service archetypes can be used as a means to provide 1) a neutral way of communicating research results, 2) a baseline-set for verification of knowledge developed in specific cases, and 3) a platform for describing the applicability of research results beyond the specific cases in the research project.

What is a service archetype?

We suggest that an archetype service is a service that articulates a selection of service features. That is, one archetype service will typically highlight a small set of service features, and a set of such archetypes will together cover a wider range of features. Different approaches might be used to define the archetypes.

One approach is to use analytic frameworks, to define the variation of archetypes. Such frameworks might be the 7P's from marketing, the defining characteristics IHIP, the defining elements of the service blueprints, or factors for choosing educational cases (Booms & Bitner, 1980; Holmlid, 2012).

Alexander's pattern language approach can be viewed as a way of keeping a catalogue of archetypes. The pattern language is based on an architectural knowledge and experience of spaces and usage. These have transferred into software development, and have become a central tool in developing common languages within software development projects, as well as across such projects. (Alexander 1977; Dearden & Finlay, 2006)

In interaction design, one well-known archetype technique used is personas. These are rich goal-oriented descriptions of archetypical users of a system. They are based on studies of actual people, and it is seldom that the full range of goals and attitudes can be captured in one personae. The repertory grid technique is used to differentiate between different arche-types, and a small set of personas can then be used as a means of spanning a wider variation. (Carroll, 2000; Grudin & Pruitt, 2002)

Another approach is to use genres. A genre is a convention that regulates that the producer of e.g. a movie and the consumer of that same movie understand what kind of movie it is. The idea of genres has travelled from the arts into organisational theory as well as design (Swales, 1990; Yates & Orlikowski, 1992).

As can be seen from these conceptions of archetypes, there are several variations to the theme. Some are grounded in analytic frameworks, some are based on designer's experience of the underlying phenomena, some are based on deep empirical understanding of that which will be made archetypes of, and some are based on conventions. In this paper we assume a position where it is the project participants' understanding of the underlying phenomena that directs the archetypes.

Choosing archetypes

Choosing what kinds of archetype services that will be used in a project is important (Holmlid, 2012). Given that there might be different, or combined, reasons to use service archetypes this would guide the first decision. Will they be used for communication, for verifying results and/or for showing transferability of results? In the first and last case it would be important that archetypes are easy to use in communication with the intended audience. In the middle case, it would be more important to choose a range of archetypes that show similar features as the services in the research project, as well as services that are extreme in relationship to the features of the services in the research project.

Service archetypes in a design research project

In this project the focus is to develop terminology and visual support for specifying new services and describing existing service performances, there has been a decision to use a small set of service archetypes. The archetypes were chosen to be used for neutral communication, and for verification of research results. That is, they needed to be simple to communicate across project participants, as well as exhibiting feature combinations that the cases in the project might not. The research project works with two cases, one e-trading case and one energy case. Some features of e-trading that have been identified are that it is consumer oriented, that it uses limited physical resources, that there is a relationship with logistics. In the energy case some features identified were that the service is performed through multiple actors, that it is an ongoing service with some reoccurrence. The chosen archetypes then were:

- » Going to the movies (features: consumer oriented, event, experience, social, limited time);
- » Tax reporting (features: public service, limited physical resources, yearly reoccurring);
- » Retail purchase (features: public space, consumer oriented, logistics, repeated one-off);
- » Air travel (features: consumer oriented, transport, multiple actors, extended time, limited space);
- » Distributed elderly care (features: multiple actors, health focus, physical resources used, private space, ongoing).

As an example of an archetype we show *furniture retail*, using the visual support developed in the research project. There are some assumptions made in the example:

- » That the customer has gone through some processes in deciding to buy furniture (e.g. seen advertisements, the need for new furniture, etc.), and travelled to the store;
- » That the furniture the customer wants is not available in the store and has to be ordered.



Figure 1 The expected customer journey for retail purchase.

Figure 1 shows the service as intended, the so called expected customer journey for a service performance. Figure 2 shows the service as it happens, the so called actual customer journey.



M2: Customer does nor receive SMS stating that the furniture has arrived. A1: Customer calls furniture store to get information about the arrival of the furniture

Figure 2 shows an actual customer journey for retail purchase, where the customer does not receive the SMS with details about the arrival of the furniture (M1), nor the SMS stating that the furniture has arrived (M2). The customer therefore calls the furniture store (A1) to get information about this issue.

This use of an archetype does not reveal the actual project participant, and it highlights the knowledge developed based on differences between expected and actual journeys.

Discussion of service archetypes

In this specific project the goal is to develop terminology and visual support for service design. The archetypes were chosen mainly to be used for neutral communication, and for verification of research results. The archetype services were easily rendered with the knowledge about terminology and visuals developed from the real cases. The archetypes seem to be able to work as communicative devices about the knowledge developed without the risk of exposing specific knowledge about the participants of the project. As a consequence this allows the archetypes to be used to show the results, and the knowledge developed of a project to other organisations, which might even be competitors to specific stakeholders in a project. This increases the possibilities of spreading research knowledge in a swifter and quicker manner. Moreover, the archetypes are quick ways of communicating generic and transferrable knowledge developed within the project, and create a common ground to discuss the actual knowledge developed without getting caught in details specific to a certain case. In the toy example all participants can relate to expected and actual customer journeys.

When it comes to using the archetypes to verify knowledge developed, in the specific case this seems to have been working fairly straightforward. The terminology developed could be applied directly to the archetypes, as were the visual support. There was also an added benefit from using the archetypes. Some issues with the terminology and the visual support were identified through applying it to the archetypes, which had not been identified in the project cases, and solutions could then be suggested.

Challenges for service archetypes

A potential role for archetypes that we see might be possible to develop is with respect to knowledge development in itself. There are three levels here. The first level is to use the archetypes solely for application of knowledge on the archetypes. The second is to use the archetypes to identify missing knowledge, confusing knowledge, and knowledge that is not general enough. The third level is to use the archetypes as a development test-bed, meaning

that not only are knowledge gaps identified, but solutions and knowledge are then developed on the archetype as cases in themselves. The first and the second are unproblematic in relationship to using the archetypes for verification, whereas the third would be counter-intuitive for this purpose.

Another research topic that might be pursued, relate to how archetypes are construed and how they are chosen. Can archetypes e.g. be construed in the same manner as personas, instead of being based on the judgment and experience of the project participants? Moreover, the deliberate choice of archetypes in relationship to a project would need descriptive manners of features of services. Can such features be described, and is there a common language that can be used or developed to make such variation easier to achieve? Finally, when using archetypes, what are the benefits of feature variation? Are the borderline features important to work with, or is it sufficient to focus on similarity variation?

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