Zeals

Predicting and Designing for anticipation and recollection
Abstract

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Content: This master thesis in interaction design deals with two major scopes. First, it will describe how a design concept regarding events is initiated. Second, and parallel, a practical tool for user representations will be formed and used to illustrate a foundation for design.

By providing examples of projects related to how anticipation and recollection can be experienced we highlight our work area. In addition to this, we present tools that we consider beneficial regarding user insights. Out of these two fields we describe a process where a mobile phone application is created situated within industrial borders.

The result of this process consequently consist of two parts each depending on the other. The application, Zeals, demonstrates both how anticipation and recollection can be experienced. The second part of the end result, PAF, demonstrates how we have represented users and concludes that it can be used in other projects as well. Hence, our final result needs to be interpreted depending on design approach and it’s nature.
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1 Introduction

Mobile phones penetrate yet larger markets, making the span of potentially targeted users yet wider. This thesis in interaction design will move within the borders of the mobile phone industry. An industrial view of a design process will influence this work. This means that the thesis holds two interesting approaches - A design concept and a more process-oriented investigation of user representation. The concept is aiming to find ways to enhance the experience of an event or occasion by allowing users to collaboratively share media connected to the event, both before, as a way of elevating expectations, and afterwards as a way to collect and cherish memorables from the event. The second scope of this thesis is to investigate ways in which the very definition of users and their behavior can act as a foundation for design and how this can affect the application from a industrial perspective.
1.1 List of contributions

This thesis project is carried out with two goals in mind, which makes a clarification of our contributions necessary.

- We aim to explore ways of representing users. This part of our work focuses on an industrial view of a design process and our goal will be to suggest a framework, called *Persona activity framework (PAF)*\(^1\) for comparing users in order to be able to design for multiple requirements. The process of exploring this will be visible as we research our surrounding landscape. In addition to highlight inputs relevant for our design, we will discuss user-representation through both *contexts* and *personas* in chapter 3.

- The design scope of this thesis will be to investigate in which ways anticipation for and recollection of an event can be enhanced. We will suggest an application, named *Zeals*\(^2\), which allows users to collaboratively build anticipation through sharing of media and information and also building a foundation for recollection based upon the shared items.

- The framework created will be applied to our own design, working as an input to the design process, but also being altered and iterated as a tool. This will render two end-results:

  1. An application targeting the time surrounding an event, exemplifying ways to share information and material as both *eagerness-builders* as well as *memory-preserving* items.

  2. A framework for understanding multiple users’ needs in order to be able to argue design

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\(^1\) The *Persona activity framework* will be described in chapter 5
\(^2\) *Zeals* will be described further in chapter 5
decisions concerning several users as opposed to a single persona.

This approach has meant challenges regarding the composition of our theoretical structure. In chapter three, where we approach the surroundings of this project, we will investigate ideas and concepts relevant for both of our end-goals. Thus, in many ways the process of designing for multiple users will be given as much attention as the research directly connected to handling of events relevant for the actual design scope.
2 Background

This chapter will describe the background of this thesis project. By providing a brief explanation of events, we will introduce our focal point regarding our design scope. Also, since the project moves within an industry where design and marketing are getting closer, we will explain the initial project settings.
2.1 Events

Events seem to be subject of many discussions among people. Talking to friends or family, even unknown people, we like to talk about what we have done or what we will do. Most people can probably picture themselves describing a wonderful trip to Spain, remembering how remarkable the ocean was and how excellent the wine tasted. Using events to talk to people almost seems obvious also when talking more speculative about something upcoming. As a person urges to tell a friend how awesome a weekend in Barcelona will be, the actual event is once again cherished and used for conversation. Of course events do not have to involve traveling, they can be anything from cooking dinner to taking steps on the moon. As people always await some kind of event as well as remember or refer to some kind of event, events seem to provide both expectations and remembrance to different extent.

The terminology *event* itself deserves further elaboration. If using a rock concert as an example of an event one might not wonder how to define it as a separate event. However, basically it holds data of time, but this data is also valid for many other events. By adding place or location to the definition we can further isolate and actually gain somewhat of an understanding of how an event can be grasped. When translating this into users’ perception of a system, this data may seem obvious but the rock concert also involves activities that are not tied to the actual location (or time) of the event, such as buying tickets or possible transport to and from the concert. Rather than being able to utilize the time and place stated at the concert poster as means for isolating it as an event, a visitor faces a series of events both temporally and spatially juxtaposed to the actual concert. If we look at a vacation trip as an event, the same pattern occurs. We are able to understand it as an entity, *a journey*, but as the journey in one way can be referred to as “My trip to Provence” in another sense the event
means many other small events, relevant in order to create and mold the experience of “My trip to Provence”. The time and place may be enough for me as an individual to use as separator, but when interacting with a network of peers relating to the same item, the event might no longer be perceived as separate, but rather a truncation of several. Thus, either further extraction and definition might be needed or a design discarding whether an event is unique or not, simply allowing the users to make interpretations of the event for themselves.

This way of socializing implies that social actability\(^3\) will become important for designing an application focusing on events. Describing social actability through exemplifying an ATM’s abstract result, Jonas Löwgren writes that an ATM does not only provide money when pressing buttons correctly. The result of an ATM’s digital design empowers people to act in new social ways due to the removal of the previous step of withdrawing money from the bank. Social actability refers to how products or services (such as the ATM) affect and/or empower the way people act.

Initially our design scope regarding events suggests an impact coming from social actability as a use-quality. As the intention of our design scope is to explore how discussions before and after events can be visualized, social actability will be considered interesting. However, it will not be our main focus in the sense that we will design for it especially, but rather will we keep the notion of social actability present throughout the design process.

Depending on the nature of the event, it can invite to high anticipation as well as low anticipation. Based on the frequency of how much or often a person is experiencing an event, anticipation is likely to be built up to larger extent compared to an everyday event. This suggests

\(^3\)Löwgren, 2004, page 137
that this design scope targets events with some sort of spectacular element attached to it.

### 2.2 Project settings

In the industry of personal mobile technologies designers are today facing a problem of users demanding more customized products. This is, within a company, often a marketing issue. By communicating a product in a certain way or by sub-branding it various groups of users can be attracted. However, for an interaction designer this is not as easy to achieve. Marketers and also industrial designers, to some extent, work with buyer personas and segmentation models created for attracting users and separating them. This is possible since both marketers and industrial designers work with one product per concept whereas interaction designers have to suit an interface for re-use in a number of products. For example, as a TV constantly goes through improvements both regarding physical shape and design that often is emphasized by marketers, interaction designers have fewer opportunities for making product-specific alterations since they develop user interfaces for several products at the same time.

The user interfaces of mobile phones today are mainly separated by their level of complexity and capabilities; generally advanced users are separated from basic or less experienced users. Furthermore, yet another possible distinction that has become more common is the usage of sub-branding. Overall product scopes might offer potential inputs for design as well as segmentation models created as a mean to define a company’s target users. The overall issue with the above-mentioned resources is that there is a gap between how marketers view a market landscape and how designers do. This means that marketing’s target segments might lack information that is relevant or even crucial for designers. Thus, new ways of defining users allowing cross-disciplinary usage might be needed in order to gain full insight.
2.3 Delimitations

Due to limited amount of time and resources in this project, delimitations will be made. When referring to user groups and market segments we will keep within standards and behavioral customs that are valid mostly in Western Europe and areas with similar composition. This is mainly because field-studies and alike will be conducted within this region.

Furthermore, we have chosen to work with illustrative examples when dealing with matters such as sub-branding, rather than actual case studies. We will limit our scope to focus on Imaging-oriented and music-oriented mobile phones as a way of positioning a design.

Even though much of our thesis involves discussions about definition and interpretation of contexts, we do not intend to make any attempts on designing context-aware applications, but rather a context-aware design process. This means that we will explore contexts as means for extracting and understanding user’s needs rather than suggesting how devices or applications may adapt to various situations.

2.4 Goals

As described in our list of contributions, one goal will be to create an application targeting the time surrounding an event. This concerns both how the experience of waiting and remembering can be enhanced by allowing users to share what they think is relevant for the occasion. We see possibilities for designing an experience of both anticipation and recollection, thus our aim will be to mold such an experience and try to fit relevant aspects regarding the notion of an event into it.

The dual scopes described in chapter 1 mean that we will throughout the process investigate ways to work with user-representation in industrial settings. One important goal will be to understand aspects of
different users’ behavioral similarities rather than differences. Thus, we intend to explore ways of creating a way to get an overview of a user group rather than one prioritized user, thereby creating an understanding of how different user-needs can be solved jointly.

By combining the goals above we believe that we can gain both insights in how our model of user-representation can be practiced as well as how we can explore new ways of predicting users’ behavior surrounding events in particular.

2.5 About Sony Ericsson

We have worked in collaboration with mobile phone manufacturer Sony Ericsson who has hosted this thesis and supplied both suggested problem areas and project guidance. Designers at the user interface application design department have helped us understanding the reality of the industry and large-scale designs throughout the process.

Sony Ericsson Mobile Communications was established in 2001 by telecommunications leader Ericsson and consumer electronics powerhouse Sony Corporation. The company is owned equally by Ericsson and Sony and announced its first joint products in March 2002.

\[^{\text{4}}\text{ Sony Ericsson Mobile Communication, Sony Ericsson corporate presentation}
http://www.sonyericsson.com/spg.jsp?cc=global&lc=en&ver=4001&template=pc1_1&zone=pc&lm=pc1\]
3 Surroundings

As stated earlier we are working with dual focal points throughout this project. This means that extra efforts have been given to understand the surroundings of both scopes. We intend to, in this chapter, present projects and theory relevant both concerning how events have been regarded and targeted digitally as well as how different tools and methods for user representation can benefit a design process targeting mobile devices and various contexts.
3.1 Abstracting events

Several approaches to define experience have been conducted. As we will focus on events in this thesis, theories of experience can provide a starting point to approach events and their narrative nature. One way of attacking this is to follow what Peter Wright and John McCarthy have provided as a framework of experience\(^5\) - *Anticipation, connecting, interpreting, reflecting, approaching and recounting* - which can be viewed upon as an abstraction of the temporal aspects of an experience.

In order to be able to design for events this abstraction becomes a valuable platform for understanding users’ relation to an experience, thus also relevant for dissecting relationships towards events. As will be described later in this report, we have conducted field studies that, very much like Wright and McCarthy, pointed out the relevance of prior experiences and end-objectives as a way of understanding the current experience. However, we intend to approach experience of events slightly more linear when abstracting it, as opposed to Wright and McCarthy’s approach to experiences in general as they do not specifically argue a causal-reactional relationship between their sections\(^6\).

3.2 Designers’ ways of reaching users

In a world of design, people act within contexts no matter what. People are creators of contexts, which cannot be developed without human interaction. As design solutions are provided to fit contexts in different ways, they also need to be processed and adjusted accordingly\(^7\).

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\(^5\) McCarthy and Wright, 2004.

\(^6\) Anticipation, connecting, interpreting, reflecting, approaching, recounting.

\(^7\) As parafunctionality (Dunne, 1999) encourages reflection on how electronic products condition our behavior, we argue that the relationship between a parafunctional object and a context needs to be apparent in order to be reflective. This means that parafunctionality as a use-quality needs to be processed with context in mind even though the end goal of a parafunctional object is to demonstrate the inappropriateness between context and product.
Depending on the nature of a context addressed by a design, the development process is approached differently.

### 3.2.1 Ideas of a context

As described by Dan Saffer, *user-centered design* (UCD) is one approach and it employs a viewpoint where the user is considered to know best\(^8\). In UCD the users know their needs, goals and preferences for a product or a service. The designer’s objective is to find and understand these variables and help the user to accomplish his/her end-goal. Another approach is *Activity-centered design* that focuses on people’s activities instead of their goals and preferences\(^9\). Variables taken into account by a designer who practice activity-centered design can be *time, collaboration, intensity* and/or *ending*. Through Saffer’s description activity can be as simple as withdrawing money from an ATM. Activity can also be more time consuming and demanding such as losing weight.

Both approaches focus on their unique center of attention even though they initially target contexts. Since the generative components of these methods are incorporating users’ needs, goals and preferences, or user activity, contextual understanding on its own is often secondary since it is already framed for the upcoming design. This means that from the very beginning the designer has ideas about what context to fit the design.

If we take a look around us people are using mobile phones in almost every possible situation. Dealing with a specific context for mobile interactions is therefore a cumbersome problem originating from its dynamic existence. In the article *What We Mean When We Talk About Context*, Paul Dourish\(^{10}\) describes the relationship between design and context. Dourish argues that contextuality *is a relational property*

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\(^8\) Saffer, 2006, page 31  
\(^9\) Saffer, 2006, page 33  
\(^{10}\) Dourish, 2004, page 5
between objects and activities and not only information about the context itself. Depending on activity and performing party contextual features are being offered dynamically\textsuperscript{11}. For example, as a group of young kids riding on their skateboards at a staircase, they are being offered a contextual feature. If an old woman would walk up the exact same staircase, holding on to the railing, she would be offered a different contextual feature that would generate an alternative context (of course if the old lady and the skateboard riders were to be co-experiencing the same staircase simultaneously yet another context would be produced). Dourish describes that an activity (whatever it may be) is what actively generates, produces and maintains contexts. As activity is performed by a party in order to do this, contexts, when it comes to design, is according to Dourish present during the time someone inhabits it.

Through Dourish’s description of context, the nature of a mobile phone context can be present in two ways; first, when mobile phone usage or activity generates the context – for example, someone place a call while shopping. Second, when the mobile phone is \textit{not} what generates the context – for example, someone shopping. Additionally, we must regard the mobile phone as a peripheral device that always (more or less) generates more of an atmospherical context where the user is available.

### 3.2.2 Our definition of context

As described in the previous section, a mobile phone use-context is a very complex entity with many dynamic variables. In this thesis we are in need of our own context definition in order to be clear what we mean with context.

\textsuperscript{11}Dourish, 2004, page 5
Context according to us is a virtual or physical setting that responds to and changes with both physical and emotional interactions depending on actor(s).

This means that an empty room is a setting and not a context. Neither would the room become a context if for example a chair were placed in it. However, if a person were placed in it, together with the chair, it would become what we define as a context since someone is actually experiencing something.

3.2.3 Personas and characters

Personas are characters that can be presented in several different media-forms to support designers through their work process. As an effective tool rather than a complete method, personas need to be properly designed in order to guide designers. Kim Goodwin, Director of design at Cooper\(^\text{12}\) describes a persona as a “user archetype you can use to help guide decisions about product features, navigation, interactions, and even visual design”. (Mr. Cooper himself defines personas as “hypothetical archetypes of actual users”\(^\text{13}\) ) Goodwin argues that by understanding the archetype’s goals and behavior patterns well, a larger segment that is represented by the archetype can be satisfied. Most often, persona development starts with ethnographic research and with additional personal information including behavioral patterns, goals, skills, attitudes, and environment the persona comes alive.

Another important variable in order to get a persona powerful is a suitable name. During a project for a car workshop company a few years ago we used a persona named Mats\(^\text{14}\) for guidance. Today, the design students that were involved in the project still refer to Mats by

\(^{12}\) Goodwin, Perfecting your personas
\(^{13}\) Cooper, 2004. Page 124
\(^{14}\) Aleksieva et al, 2005
mentioning his name. Even though he was a fictional character, the group of students that worked close to Mats remember him as a real person. Despite the fact that the students had different opinions when it came to some of Mats’s characteristics, they all had a common target user to discuss during their design process. Even though the name Mats does not really mean anything, the character became so familiar that the very name eventually represented a vast set of characteristics common for everyone in the group. This is, in our opinion, one of the greatest advantages of using personas, a common starting point that allows elaborating upon in order to create a character that is both credible as well as actually generative from a designer’s point of view.

A persona’s levels of depth and complexity as well as how this is presented or visualized are subjects of continuous discussion and debate. Whereas Cooper tends to demand a fairly high level of detail regarding a character’s usage goals\footnote{Cooper, 2004}, many other theories regarding user descriptions suggest various other areas of interest regarding how a user would respond to a system or situation (and of course why she would do as she does). Carroll argues that a prospective user’s actions will mold the character\footnote{Carroll in Nielsen, 2002, page 101}. Thus, scenarios are created to highlight possible actions that affect a user’s interaction with a system. Lene Nielsen (2002) is of yet another opinion of how users should be represented. She connects fictional character portraits from scripts for screenplays to a design process. Her criticism towards both Cooper and Carroll lies in their focus on goals and actions rather than the characteristics of an individual.

“\textit{Both examples of user-descriptions lack insight into the user as a person and both examples derives from a story tradition that focuses more on actions rather than on character development.}”\footnote{Nielsen, 2002, page 101}
Nielsen exemplifies this through continuous parallels to the Thelma & Louise screenplay script. This approach creates a somewhat deeper understanding of how a character thinks. Nielsen makes a comparison to a task-oriented character description by Carroll and then re-makes it according to her approach. This renders a scenario with much higher focus on the depth of the character, rather than the actions he performs\(^{18}\).

### 3.2.4 Personas in contexts

As the world of today involves interactions in use-contexts that might not be researchable in the same manners as earlier neither must the same aspects of a user be valid as input for design. Many established methods suggest ways of understanding the potential user’s behavior that are based on uncovering contextual information from the user’s everyday life. This is becoming increasingly important (but also maybe even more cumbersome) when dealing with today’s flexible computing as well as mobile applications. The actual use-context does not exist in the same manners as before which makes them harder to discover through traditional interpretations of methods such as Contextual Inquiry\(^{19}\). Instead, when dealing with portable consumer products, we need to understand and even embrace the more ambiguous and diverse use-contexts the users might create. When using a mobile phone as an example, this becomes evident. Jennifer Preece explains Contextual inquiry as “an approach to ethnographic study used for design that follows an apprenticeship model: the designer as an apprentice to the user”\(^{20}\). This definition is both feasible and highly understandable when approaching a system design for a corporate internal application where the use-context (and basically also the user) is fairly defined and reachable. When initiating the design process of a consumer product such as a mobile phone many of these

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\(^{18}\) Nielsen, 2002, page 104.

\(^{19}\) Holtzblatt & Beyer, 1998

settings change, basically there are too many possible use-contexts connected to a product to be able to cover them all through one contextual inquiry, as defined above, alone. Basically, we believe that ways of understanding contexts in a slightly more abstract way can be an important addition to established methods. Furthermore, social aspects are radically elevated in importance whenever mobile phones are involved which puts greater pressure on understanding how different user both interact with their peers as well as how they respond to a situation. As stated in chapter 3.1 the complexity of mobile contexts almost make them unique based on who inhabits it. This would suggest that a design targeting a set of users aiming for a certain use-context\textsuperscript{21} would need a contextual inquiry, for each one of the proposed users. This implies a need for understanding multiple users’ view of a context in order to be able to make any design decisions based on them. Thus, we see a need for a way of conducting contextual inquiry for a group of users.

3.3 Marketers’ ways of reaching users

We find it relevant to compare our search for generative user descriptions to marketers’ traditions of defining buyers and customers. We believe that there are aspects within marketing that could benefit also a design process. Differences might exist but in the end it will be necessary to partially understand the relationship between the worlds of buyers and users.

3.3.1 Sub-branding and value propositions

As a way to reach consumers and to define them, brand strategies are a fairly common tool. Among these strategies we find communication of a product’s benefits – or a Value proposition- interesting. Kotler claims, “\textit{Basically, the value proposition is a statement about the

\textsuperscript{21} By this we refer to products with a partly defined use-context such as Mobile phones adjusted to suit music playing or mobile phones designed to target imaging.
resulting experience customers can expect." Relating it to the mobile phone industry one can see various ways in which manufacturers have different value propositions, visible both in design and in marketing. LG’s slim design line, Chocolate, has become a way both to communicate the product referring to fine taste, but also a design element adding delicacy into the form of the phone. Motorola uses different associations with their way of naming devices, Rizr, Rokr, Pebl and Slvr. These names are now very much connected to Motorola but each with their own twist. Sony Ericsson also offers various lines and sub-brands. Walkman and Cyber-shot have been inherited from Sony Corporation. Different sub-brands can offer different values to the end-user. In the case of Sony Ericsson Cyber-shot is a line of imaging-oriented mobile phones and Walkman is a series of music-oriented phones. The differentiation between these devices is both within the physical design and within how they are communicated to a market together with the set of applications included.

By dividing a product portfolio into different lines a company offers a way for users to easier grasp the scope of a product and in the long run how it is supposed to be used. Imaging phones tend to be able to play music and many mobile phones with mp3-players have a built in camera, but sub-branding and separate value propositions offer ways to be more exact when vending a product.

This is however yet not the case when it comes to software in mobile devices. Separation is still made in marketing and industrial design, but software customization for fitting a value proposition entirely is yet not visible among the different mobile phone manufacturers. The possible applications connected to the value propositions may be highlighted and actually altered, but the remainder of a device is rarely affected. Also applications other than the camera application on an imaging phone and the music player application on a music-phone

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22 Kotler & Keller, 2006, page 143
may serve different purposes depending on different users. This would imply that a traditionally generic part of a device’s software could be subject of change in order to push the value proposition yet a bit further towards a more personal user experience.

A value proposition, as discussed above, might work as a way of communicating and proposing a use-context to an end-user. Thus a connection can be defined between value propositions and use-contexts. However, a suggested use-context, or value proposition, differs somewhat from an actual experienced use-context.

3.3.2 Segmentation

There are many ways to use segmentation in order to reach various efficiency goals. Since it is not possible to target every single user when mass-producing products, segmentation is used to define the end-user or consumer. In *Marketing - an introduction*, Kotler et al describe several levels of marketing with complete segmentation, or *micro marketing* in one end of a scale. “Because buyers have unique needs and wants, each buyer is potentially a separate market.” This is however rather difficult to deploy in the industry and also when designing for a larger audience, which is confirmed by the authors; “However, although some companies attempt to serve buyers individually, many others face larger numbers of smaller buyers and do not find complete segmentation worthwhile.” The opposite of complete segmentation is then no segmentation at all, or what the authors refer to as *mass marketing*. The levels in between the two extremes, mass marketing and micro marketing are *segment marketing* and *niche marketing*. We will highlight segment marketing as this way of separating consumers in one way can be related to a designer’s usage of personas. Similarities, however, only occurs in the definition of a target group and a persona.

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23 Kotler and Armstrong, 2003
24 Kotler and Armstrong, 2003, page 236
25 Kotler and Armstrong, 2003, page 236
Segment marketing is practiced by isolating different parts of the intended market in order to reach them as a group. The isolated segments can be defined based on various aspects, Kotler et al exemplifies age, gender and income as three major differentiators.\textsuperscript{26}

The approach of segment marketing can be helpful in creating a larger understanding of a widely divided market, but may also be limiting in such way that the rather simplified definitions of segments that Kotler suggests might not give all the answers needed for a designer, even if a persona would be created based on the segment.

As described in chapter 3.1.3 a persona or character can consist of many aspects, but demographic information such as age and gender are often mandatory parts in the description. This is very much alike how buyer segments are created. A sample segment, based on Kotler’s \textit{Major segmentation variables for consumer markets} may be as follows:

\begin{description}
\item [The Techy Wiz-kid] \vspace{-8mm}
\item [Male]
\item [20-34 years old]
\item [Lives in a major city in North America]
\item [Single]
\item [Student]
\item [Heavy user of technology]
\item [Enthusiastic about new technology]
\end{description}

As described above a segment can render a fairly understandable image of a type of a person. The nomenclature of a segment helps stakeholders discuss the potential buyers of a product in a way that very much is comparable to how Cooper refers to the usage of a persona. However there are fundamental differences between a segment and a persona, even if a segment would be narrowed down to a persona. Marketing segmentation is skewed towards consumers and buyers of a product and is not constructed as a tool for understanding

\textsuperscript{26} Kotler and Armstrong, 2003, page 237
usage behavior and patterns. Thus, a segment used in a design setting could be considered to render what Cooper refers to as an elastic user by being too accepting when it comes to features.

3.4 Social actability

As this project regards mobile phones, social aspects generated by the communication abilities inherited with the platform have to be illuminated. A need for understanding and anticipating social hacking and usage of our design is evident. As an example of social hacking, Myspace can be mentioned. Myspace was originally an entirely open platform for personal visibility but has now transformed into a social network where bands are more or less social hubs.

Social actability is a use-quality that serves a purpose of allowing users to mold a structure by their own means. Jonas Löwgren explains it as follows:

“The extent to which a digital design empowers you to act is called (social) actability”

This definition allows several examples to be fitted within it. Communities in general tend to succeed if a certain amount of actability is allowed. The sole definition, in a sense, implies that users are part of the creation of content and defining of features. Therefore, an open structure generally suggests a higher level of user interpretation. However, by open we do not refer to an entirely undefined use-context, neither is this to be seen as similar to a participatory design process. To illustrate our interpretation of Social actability, Collaborative MC can be mentioned. The concept

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27 Cooper, 2004, page 127
29 Löwgren 2006, page 9
consisted of a platform for creating hip-hop music through collaboration.

“By being part of a story, participants can improve their skills and inspire others for future collaboration.”

By suggesting story-telling as means of collaboration, the platform allows any user to mold his experience by participating in a process of creation. Rather than strictly limiting the forum to be a way to share ones’ musical pieces, Collaborative MC endorses the continuing of others’ work by layering every track, allowing it to take many different paths before being finalized.

Another example is Live Battles. Like the above-mentioned concept, Live Battles moves within the borders of co-created music. However, the latter example suggests the hip hop-tradition of battling as the motivator for collaboration through competition.

“By broadcasting live battles performed by artists performing from home wherever this may be, the concept would be easily accessible for both artists and fans. In short, the concept would be a suggestion to how a more realistic online live concert experience could be created with participants from all over the world.”

Participation in Live Battles would, through each battle, generate a unique track, where artists, DJs and audience would be co-creators.

Both concepts imply collaboration in the creation of an end product as a means of empowering the users, but there are also other examples, using other aspects for empowerment.

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32 Gran, Live Battles, http://www.gran.nu/projectsindex.html#SocialActability
33 Gran, Live Battles, http://www.gran.nu/projectsindex.html#SocialActability
We have deliberately circumvented the obvious opportunities for designing for socializing. Thus, our project will focus less on how a user is represented in a closed community and more on the possible user-contributions. Nevertheless, the structure would be likely to be subject to social hacking. By allowing a certain level of openness in the system, individuals aiming for visibility are likely to find ways of getting their representation visible. Likewise, people wanting to connect to other users should have the possibility to do so, but again this is something that is likely to evolve from a need rather than something that should be formalized by us.

From this we can extract important use-aspects needed to be targeted by our design. As will be discussed further in chapter 5, we will try to create a design that will empower users, letting them lead the way when constructing the social ties that eventually may appear within the boundaries of our concept.

3.5 Influences – Applications and services

In many ways previous attempts have been made to create platforms for elevating expectations and anticipation before an event. Likewise, web sites such as Flickr might serve as platforms for cherishing memories from an experience. In this section we intend to briefly describe some examples we find relevant to our project.

3.5.1 The Vega online event-calendar

Anticipation can take many forms. The Danish concert venue Vega hosts various events and uses a web page to communicate them to potential visitors. This is neither spectacular nor new, but works as a hub for connecting people and events. The calendar is sorted by date and offers extended view of what the band or artist is likely to offer. Also, Vega supplies possibilities for listening to parts of an artist’s

34 Flickr, Welcome to Flickr!, http://www.flickr.com
work as a way to either get acquainted with the artist, or to build up the expectations. Either way, this rather simplified way of looking at anticipating an event is relevant to us as it shows a way to connect relevant media with an event. However, the web page naturally focuses more on building up motivation for buying tickets, rather than anticipation.

Fig. 3.1 Screenshot from Vega.dk. The starting point, offering further exploration of gigs.

3.5.2 The Swedish soccer association’s web-page
A game of soccer shares many of the characteristics of a concert in many ways when it comes to how preparations can be made. The Swedish soccer association’s web page\(^\text{35}\) is built upon the sport as a whole in Sweden and not solely around any particular game. This means that news are presented that could be of interest regarding upcoming games and events. Tickets can be bought as well as fan club memberships and souvenirs. The density of the webpage means opportunities for consuming large amounts of related media regarding an event, but yet the space left for social interaction concerning a game

\(^{35}\) Swedish Fotboll association, Startside – svenskfotboll.se, http://www.svenskfotboll.se
or event is limited or hidden. The structure of the first page is clearly focusing on games as phenomena and not on any games in particular. As it presents a number of upcoming games this is relevant for us as it involves distribution of media connected to events on different levels.

![Fig. 3.2 Screenshot from Svenskfotboll.se. A lot of information and a place for starting preparations before a game.](image)

### 3.5.3 Last.fm

Last.fm\(^{36}\) is a community that is initially built upon the members’ music consumption. By installing a software program collecting data from her media player the user automatically will start generating lists of tracks played. The meta-data of mp3 music-files allows many ways of sorting lists and have scripts automatically render recommendations. The community has grown both regarding members and features. The feature we find the most relevant is the event-scheduler that displays both upcoming and past concerts. Through the moderation of Last.fm members, information about events gets posted. Members can announce their upcoming attendance through an attend-button that adds to a counter visible for others. This simple action raises personal

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visibility within the community and adds to the event’s visualization of visitors. As members can be tracked from the event to their own profile, existing data differs from traditional ticket sales that only provide statistics without the personal characteristics.

![Fig. 3.3 Screenshot from Last.fm.](image)

Thanks to Last.fm, users can get quite a good sense of the attending people and upon this collaboratively build anticipation. The personal layer provided by Last.fm adds to the traditional ticket (and the sales of them) and suggests a closer relationship between members at least before and after the concert.

When a concert is over Last.fm has several opportunities for members to gather their impressions. People who impulsively went to an event still have the chance to add their attendance to the attendance counter. Photos synchronized through the use of Flickr tags can be seen as well as reviews written by Last.fm members. As there is a Shoutbox available for each event, the collective recollection often occurs through short text messages referring to the concert or the posted material.
Since we deal with both recollection and anticipation regarding events, the use qualities brought by Last.fm’s event calendar will be considered and evaluated for our concept. As our concept not entirely focuses on music events, we intend to abstract core ideas from Last.fm trying to apply them to a more generic event.

3.5.4 http://www.charterparty.se/
Charterparty\textsuperscript{37} is a web site aiming to collectively build up members’ expectations when planning a charter trip to a sunny destination. The community is mainly targeting sunny charter-destinations and offers basic features allowing users to interact with each other both for gaining information on the location to which one is heading and for making on-location meetings possible. Charterparty builds upon a traditional structure consisting of members and their representational pages where pictures can be uploaded and shared. Furthermore there are forums where members discuss topics related to upcoming trips as well as past visits. A dedicated voting-area allows users to give feedback to resorts, hotels, excursions and different beaches all giving the users a more colorful (and of course biased) description of a resort.

When trying to find the core essence of the community it all seems to fall in line with the spirit of charter trips. Socializing with new acquaintances (very openly and likely temporarily) is promoted and seen as the very benefit of the trip. In many ways the web site is related to dating-sites, however in a slightly more disguised manner. The user profile is constructed through a list of interests and marital status together with some meta-data explaining a user’s traveling experience.

Although very similar to dating services, the Charterparty web site is constructed around traveling and the charter trip as an event or

\textsuperscript{37} Charterparty, \textit{CHARTERPARTY.SE} - Din guide till fest på; alla populära charterdestinationer i medelhavet. http://www.charterparty.se/
escapade. This makes it relevant to us as it in many ways works well as a forum for socializing around a special event or occasion. Furthermore, the community is not restricted to a forum for written thoughts but also media presented by location officials and club-owners. An example of this is a club-owner uploading tracks frequently played, allowing previous visitors to recollect part of the spirit of the trip and letting first-time travelers get a hint of what is ahead. Yet another interesting part of the community is the fact that it connects online preparation prior to an offline event. A vacation is not yet a subject to full virtualization but rather a time freed from Internet-usage. Nevertheless, the Internet is evidently a great forum for sharing experiences linked to a charter trip.

Fig. 3.4 Screenshot from the Charterparty web community. Once logged in the visitor is welcomed by a plethora of possible ways to get more acquainted with a resort or possible travel companions.

We consider Charterparty to be a highly applicable example of an online environment dealing with anticipation connected to offline experiences. However, there is still a very high focus on individual
representation within the community, an aspect that we intend to focus less on in our design as a way to keep our scope of design narrow enough to be clearly defined.

3.5.5 Scrapbooking as aftermath

The recent revival of analogue scrapbooking and its continuance onto the Internet has evolved from a tradition of keeping pictures in albums to a continuous adding on to the album with a yet wider set of pictures and ornaments. Whereas pictures can help sustaining memories, the actual activity of processing them into a scrapbook adds on to the experience further nursing the notion of an event. Don Norman discusses the emotional value of self-created material as an emotional success factor.

“Perhaps the objects that are the most intimate and direct are those that we construct ourselves, hence the popularity of home-made crafts, furniture and art.”

In many ways we can see the same thing slowly growing on digitally nursed archives such as Flickr or Last.fm where users broadcast collections of either imagery or recently played tracks. Much of this is of course connected to a need of visibility among Internet users, but we believe that other aspects such as personal and collective recollection of occasions and special moments, not solely created as means of displaying an image of one self can be equally important to satisfy. Whereas applications for collecting music and images for display and personal recollection are getting yet further elaborated and developed, few communities supporting a wider range of media sharing exist. Scrapbooks are examples of self-produced memory containers are being translated to digital versions with web interfaces for inserting images and creating layouts. However, the possibilities offered through digital media are not at all fully exploited. Whereas a

38 Norman, 2004, page 48
traditional scrapbook allows the user to attach just about anything he or she fancies, the digital versions are limited to basically text and pictures with some support of sound. We have used Scrapo’s39 online scrapbook as well as Scrapblog’s40 when exploring online scrapbooks. These two both in a way try to capture the creative parts of scrapbooking through allowing users to transform the experience of a set of pictures in various ways. Scrapbooks presented at Scrapblog are in many ways interesting to us as they tend to imply quite a lot of freedom in how they are both laid out and how they handle both still photos and moving images with sound and support transitions in between slides41.

Fig. 3.5 Screenshot from the Scrapblog web community where users can create combinations of media as a way of assembling memories. In this case an “In memory of”-constellation honoring a late author. Both video footage and still images are present, which creates a vivid impression.

40 Scrapblog, Scrapblog // Create a world for your pictures. http://www.scrapblog.com
41 The term slide is in many ways the most accurate when describing how the material produced behaves. Also the term Slide shows is used by the creators, which further implies a connection to digital keynotes.
Regardless of which platform for digitalizing scrapbooks one chooses, the connection to our concept of gathering memories through media is apparent. Thus, several parallels can be drawn between our project and scrapbooking.

3.6 Influences – Approaching users

As part of our goal is to investigate ways of user and contextual representation, projects exemplifying this are equally important as input as projects connected to events.

3.6.1 S.P.E.S.

*Situated and Participative Enactment of Scenarios* (SPES) is an attempt to build a foundation for design by entering the users’ everyday life, letting the suggested users form and enact scenarios with a mockup as a platform for design\(^2\). Through SPES, scenarios are described as a set of subsequent events in a relevant context. Using everyday scenarios, such as waking up and leaving home, SPES is supposed be used for defining requirements or to uncover areas where design can fit in. As authentic scenarios are being played out with real people, SPES automatically offers participants reflection on how they can use mock-up(s). Also, since scenarios are giving participants real contextual constraints that force them to cope with mock-up(s) in practice, SPES can generate feedback not available through traditional brainstorming where the context of use is not available.

With SPES, designers need to physically follow the acting participant with great effort even though this can cause disturbance. Another aspect regarding SPES is to reflect on how the participants experience a mockup in public, all people don’t feel comfortable using a mock-up among unknown people. As the aims of SPES can be many, it always needs to capture participants’ creative contributions in a generative

\(^2\) Iacucci, 2001
way. This suggests that at least more than one designer documents the enacted scenario in order to get direct feedback in multiple formats.

Using potential end-users, SPES is to be seen as a rewarding approach that presents contextual features emerging from the combination of a mock-up and a participant. The combination of using a mock-up and an end-user where activity takes place has to be considered to be an inspiration to our work. However, its efficiency must be questioned regarding time and thereby (from an industrial point of view) also cost.

3.6.2 The Patient Journey Framework by IDEO

The Patient Journey Framework is a way of discovering potential issues concerning a hospital through scenarios, presented by IDEO\textsuperscript{43}. The framework consists of a graphical schematic, illustrating a series of events connected to a hospital visit. Each state contains potential questions asked both by patient and by “the system”. The framework works as a generative tool to identify both problems and possible solutions.

![Patient Journey Framework](image)

**Fig. 3.6 IDEO’s Patient Journey Framework**

We can see a connection to our way of approaching users through the possibility to highlight multiple users’ needs through a scenario.

\textsuperscript{43} Hawthrone, 2002, page 100 pp
Basically the IDEO-solution would allow just about any user’s needs to be fulfilled. However, this is of course a result of the fact that the Journey Framework targets a hospital, with a wide spectrum of visitors, each with a set of needs and goals. As we are designing for mobile applications, our approach to users will be allowed to be a little bit narrower when it comes to possible users, but still a set of users, or characters, rather than a persona will eventually be using the application. This means that a certain amount of effort must be put in finding the dynamics within a certain group, rather than finding all potential problems various users might encounter.
4 Methodology

The dualistic nature of this project means that several different methods will be incorporated throughout the process. In this chapter we will describe the approaches that have been practiced in order to carry out this project.
4.1 Field studies

As a way to approach the world of potential users and contexts we conducted field studies. These field studies were first and foremost aimed to get a contextual understanding to reveal a starting point for our narrative abstraction.

Approaching the real world initially was crucial to our project as means of understanding the diversity of mobile contexts. Parallels can be drawn to Messeter et al (2004), and the COMIT project, where a team investigated how complex mobile contexts could be understood and used to develop messaging applications further. The COMIT project was structured in a way were actual users were engaged and studied. By processing video footage and material collected by the users, the team could, during workshops, create scenarios focusing on a theme; *On the way home*. The scenarios based on field study data were translated into conceptual designs, which were iterated together with the users.

The COMIT project procedure - *field studies, cultural probes, workshops, conceptualization* - shares some aspects with how we have approached the real world. However, as a partial goal has been to actually create a way to make users’ behavior in different contexts comparable, we have been conducting the field studies trying to get an overall understanding of the contexts. Furthermore, the insights from our field studies were processed into scenarios directly using a narrative structure that will be introduced in chapter 5.

Basically the field studies were conducted by documenting different possible situations or places where people moved. We took pictures of people around bus-stations, shopping-malls, on the town, in cafés etcetera. After each session, or field trip, we analyzed pictures and notes taken as means of framing contexts. This analysis is comparable to how Messeter et al processed the gathered material in workshops.
However, still our focus was on trying to understand general aspects of a context more than defining a specific contextual frame.

4.2 Online questionnaires

When investigating what people actually did surrounding an event we turned to the concert audience present at Last.fm. Even though this forum strongly focuses on music and concerts, we consider it to be valid information to our project’s entire scope.

We created two threads on the General discussions-forum;

1. How do you prepare for a concert?
   - How do you get in the mood for a concert?
   - What do you wanna find out before a concert?
   - How do you prepare for a concert?

2. What do you do after a concert?
   - What do you do after a concert?
   - What do you do to remember a concert?

In order to avoid too long answers, which are common when working with qualitative investigations, we supplied sample answers on both threads. Our aim was not, however, to control posted answers, but more to align the characteristics of the answers and avoid misconceptions.

The outcome of the two threads will be discussed in chapter 5 together with connections to our design.

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45 The outcome of the forum-poll is further presented in chapter 5 – Design process
46 Preece, 2002, p.211
4.3 Brainstorming and options-maps

When having an overall scope determined we needed a clearer way to actually start to make a selection of features, based on a user’s level of experience together with a connection to the value proposition of the mobile phone she is using. By using traditional brainstorming where no ideas were considered bad, we came up with ideas for functionality aligned with the product scopes we investigated. To structure the ideas we developed what we call Options-maps (Fig. 4.1) for getting an overview of possible design-decisions ahead. Basically an options-map can be explained as a list, or a structured outcome of a brainstorming session, clearly visualizing relevant and potential options for the design.

![Fig. 4.1 Options-maps](image)

As shown above, the Options-Maps are structured outcomes from a brainstorming session providing an overview of potential functionality. In chapter 5 we will discuss how options-maps were part of how we developed our generic design.

4.4 Workshop

As part of our aim with this thesis is to explore ways to understand different users’ common needs, we saw great potential in investigating how our ideas of generative persona- and context-representation would

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47 Löwgren and Stolterman, 2004, page 93
be perceived by designers not involved in our design process. We hosted a workshop where we let students\(^{48}\) work with our approach to representing users, which will be presented and explained in chapter 5.

The workshop was held at K3 during one week and was initiated through a lecture, presenting how we perceive user representation as well as various ways of understanding contexts. The lecture was followed by an exercise where the students, divided into small teams, applied our user-context framework to their own design scopes. We reviewed their work and got the chance to gain insight in how the framework would behave in settings out of our project and how other designers could perceive it.

Learnings from the workshop will be discussed in *chapter 5*, together with a description of how we benefited from it.

\(^{48}\) Second year students from the Interaction design undergraduate program at K3, Malmö University
5 Design process

Focusing on the time-span surrounding events, we have gone through a process where a design scope have been initiated and refined. Part of our goal has been to find ways to design for a set of users and their common characteristics, rather than having a specific user in mind throughout the process.
5.1 Design Scope

The design scope for this thesis has been events and especially the time span surrounding events. By not interfering with the actual event time-wise, our design concept tries to increase the experience an event can offer outside of its occurrence. As an event doesn’t necessarily bring all the experience at the exact time when it goes down, we want to spice up the preparations people might have before an event. Also within our design concept, we will deal with past events and how users can relate collaboratively through different types of media.

By approaching our notion of an event through an abstraction, we could see several different user needs as well as contextual possibilities offered during the different stages in the *event lifecycle*. As the schematic states we found more designable elements or actions before and after the event. This set of elements helped us outline our idea of a concept and to start thinking critically of how an actual design could be conducted.

When looking at the elements extracted in the *Before-stage* we started to discuss how emotional factors like expectation or anticipation could be created or elevated. As our scope consisted of a mobile phone application and therefore by default could make use of two-way communication, aspects such as sharing of content or social interaction became important perspectives through which we could investigate
possibilities. The rich media possibilities offered by today’s mobile phones allowed further elaboration on how material produced by the user could be shared between peers in order to further raise expectations regarding an event. However, this lead to questions regarding which user types would prefer solely consuming media, rather than producing it. We could also identify rather clear practical features with our concept and not merely socially beneficial. The preparation, or planning, of an event is an interesting aspect that allows yet another angle from which to view our scope. We have no intentions of creating a planning tool or an event calendar, but nevertheless we could see potential opportunities to design for collaboration with also practical issues surrounding an event. When listing a set of questions that could arise before an event we realized that many of these were of such a subjective nature that they would be better answered by other users rather than posted as information through formal (and imprecise) official channels. To gain insight in what information is requested we posted the question on a forum at Last.fm\(^{49}\).

Q: “What do you wanna find out before a concert?”

A: “What friends of mine are coming and what the pre ban[d]s are”

A: “How to get there, when to get there.”

A: "Where they sell the beer”

Questions like the examples above strengthen our beliefs in the possibilities of user empowerment\(^{50}\). It would be feasible to get information of pre-bands and such through official sources, but finding out which friends who are attending is not.

\(^{49}\) Last.fm How do you prepare for a concert? http://www.Last.fm/forum/5/_/248587/1#3338453

\(^{50}\) By empowerment we refer to allowing users to have greater impact on the content
We also used the same thread to investigate how people get in the mood for a concert\textsuperscript{51}. Again examples of social collaboration where suggested.

Q: How do you get in the mood for a concert?

A: “Listen tracks from the band wear the right band t-shirt meet friends before and drink 1-2 beer with them (or not if i've to drive the car […]"

A: “Listen to the bands constantly and tell everyone who isn't going how much they're missing out :"

The citations above suggest that the respondents point out the importance of socializing in connection to the event.

As stated above we gained useful insights by abstracting the event and our keywords (\textit{expectation, anticipation, preparation} and \textit{collaboration}) filled a purpose of understanding potential needs and offerings connected to the \textit{pre-event time}. As this first stage in the event lifecycle held great potential, we created an illustrative scenario in order to explain to ourselves the core value of our application during the pre-event time. The scenario incorporates a rough description of how we imagine the interface as well. Even though we had several ideas regarding a generic navigational interface platform, we decided to use a revolving interface to work with. The interface consists of a set of revolving circles (\textit{Zeals-revolvers}) each holding a set of small windows (\textit{Zeals}). The content of a Zeal is to be determined mainly by users producing the material. A Zeal-revolver is a container hosting Zeals representing various media produced and attached to an event (Fig. 5.2 and 5.3).

\textsuperscript{51} Last.fm, \textit{How do you prepare for a concert?}
http://www.Last.fm/forum/5/\_\_248587/1\#f3338453
With this description of the interface in our mind we could more easily start to follow a user through a scenario.

Leo is about to attend a ZZ-Top concert. He owns a couple of records and is looking forward to the event with anticipation. A few weeks prior to the concert Leo spots a poster with information about the event. Even though Leo already has tickets he stops to read and instantly notices that there is a Zeals- revolver created regarding it. Leo adds the event to his lists of events and can instantly start to browse media connected to the concert. He finds pictures from previous concerts, obviously posted by the guys behind the concert, but also video footage of a fan in Amsterdam playing air-guitar to the sound of ‘Tube snake boogie’. The span of the material posted overwhelms Leo and as he follows a discussion about what people are going to wear during a concert he actually stops by a record-store and surprises himself by buying a ZZ-top t-shirt. Leo continues his stroll and when home he cannot
help but checking out if somebody has updated the playlist with tracks that people listen to in order to get in the mood for the concert. He has already added a few tracks to that list as well as listened to a few from it. As the concert is getting closer the amount of content is escalating and as Leo’s expectations are elevating, he finds that entirely new items have appeared in the revolving interface. Now the concert is only hours away and on the way to his friends Leo spends a few minutes watching a web-camera’s view of the band’s preparation. At his friend’s place the stereo is playing tracks from the latest ZZ-top album, Leo takes a picture and posts under a *pre-party* header. Through the Zeals-application they can also find out when people are going to arrive to the concert and a rumor of a secret guest artist has started to circulate. The anticipation is at its peak when Leo and his friends leave for the concert.

The scenario exemplifies several ways to interact both with a system and with other users of the system. The initiator may be the promoter of the concert as in the scenario, but it can also be a regular user, a participant or a sponsor. Corporations can edit and post material as well as any user. Basically this is the dynamics of the Zeals application; the freedom and flexibility of the system during the time prior to the event.

Moving towards the experiencing of the actual event, we saw fewer opportunities for design. This may seem a bit contradictory since we earlier in this thesis have claimed to be designing with contexts in
mind and have used various events as examples of contexts. However, even though the experience of the actual event may be a crescendo, this does not mean that it is likely to be a moment for diverting attention away from the event. Several attempts have been made to design for additional experience during the very pinnacle of an event. As an example *The Concert Companion (CoCo)* developed by Opera Glass Networks\(^{52}\) can be mentioned. In short the CoCo is designed to supply the user with real time information connected to the concert the user is attending. Information can consist of explanatory text, program notes and moving images and is to be presented on a hand-held device.

We argue that applications like the Concert Companion might serve a purpose of inviting previously inexperienced concert-visitors (The CoCo is primarily aimed to be used in a symphony orchestra setting, therefore customs and prior knowledge is implied to be important) to the world of classical music. However, the application seems to demand a fairly significant portion of the spectator’s attention, which would imply that rather than enhancing impressions, the device might have a diverting impact on the experience. Rather than enhancing the experience, the application might add on to it and even act conflicting with it.

There are of course also situations and events where *accessibility* might be a reason for adding on to an experience. During large sport-events and concerts huge television screens at the arena often display live footage from the event. This is a way to make the game accessible from every seat, and therefore it is probable to be a kind of enhancer of the experience. However, accessibility is not our focus within this thesis, which further motivates our decision not to target the actual experiencing of the event in our design. Even though there are other forms of events that might be in need of, or would benefit from a

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\(^{52}\) Opera Glass Network, *Concert companion*. http://www.concertcompanion.com
design providing enhancement or additional experience, we consider
the time before and after an event more interesting to design for.

The time following an event can be understood in many ways. In a
sense, the long-term aftermath of an event can be seen as an
anticlimax. The intensity from the event might be lost and replaced
with a slight sense of emptiness. However, there are several activities
connected to the time after an event, post-event time. Depending on the
characteristics of the event, the activities change both regarding their
nature and intensity. After a vacation-trip the gathering of images
taken by all attending can be seen as an archetypal aftermath activity.
Also the previous example with the concert offers activities subsequent
to the actual event. Not only is the obvious possibility of sharing
images and other media captured before and during an event, but also
reviews and following discussions may flourish and generate a
memorable set of information accessible through the very same system
used prior to the event. Furthermore, events like concerts actually offer
two kinds of post-event time; Right after and remotely after. Thus,
when looking at the time right after a concert emptiness might not be a
very descriptive term, instead a need for extending the experience
might occur. As with the pre-event time we used the Last.fm forum as
a way to gain some insight in how others acted right after an event (a
contact)\textsuperscript{53}.

Q: What do you do right after a concert?

A: “if its a weekend then i hit a club, if its a weekday i just head back
home after browsing the merchindise table and prob buying
something”

A: “Look at what merch is available then go to the nearest tube/train
station”

\textsuperscript{53} Last.fm, What do you do right after a concert?
http://www.Last.fm/forum/5/…248592
A: "If I know the artist, I head immediately backstage. If I don't, I stay in my seat to avoid the mad dash to the door (I hate crowds). If it's still up, I might hit the merch table on my way out."

The answers differed but patterns were still extractable. First of all we could see that many of the participants in the study actually did focus on exploring merchandise after the concert, as presented in the extract above. The merchandise can of course fill many purposes, a token of belonging to a group, a piece of memory or even a useful piece of clothing or apparel. As we are exploring the possibilities of enhancing both exaltation before an event as well as cherishing a memory of it, we also were curious about what people did to remember an event. An obvious way is the recording of images and videos but also other types of information could be shared both within a smaller ring of friends as well as within a wider and more anonymous network.

Q: What do you do to remember a concert?

A: "Pictures"
A: “Collecting drumsticks/picks/autographs or just buy something from the merch.”
A: “pictures, lists, merch etc”
A: "i take pictures, keeps gig tickets & sometimes i buy stuff of the merchindise table”
A: "Maybe try and grab a set list”
A: “usually just keep tickets and steal the gigs advertising posters/ set lists etc...rarely have money to afford merch.”
A: “Keep the ticket, look at photos online, listen to CD [...]”
A: “Put ticket stub with the rest of my ticket stubs.”
A: “I keep the ticket”
A: "i have a notebook thingy where i keep track of all the ones I've been to"
A: "I'll upload pictures if I've taken any, and write a blog about it, whether it was good or not."

The majority of answers pointed towards the importance of tokens of memory. Ticket stubs and merchandise dominates the list of memory-items of course following pictures.

These examples of activities were fueling our further discussions as we were exploring possibilities within the post-event time. The time following an occasion or event can, like suggested earlier, be considered to be a time for contemplation and reflection upon an event. Again a scenario was created in order to find openings to design for. We deliberately chose to take a step away from a concert visit in order to understand other aspects of memories following an event besides concert-related activities and objects.

The entire Wilkinson family has been looking forward to the trip to the Rocky Mountains. Each one of the family members has their own view of what to expect from the yearly journey to the slopes. John, the father of the family, booked an apartment a few months in advance, and no further real preparations need to be done. However, the children of the family, Tina and Mike, have been browsing the location’s official website to stay updated regarding snow and weather-conditions. The family members can obviously share this information within the family, but also with the Robertsons who are joining them on the trip.

Once in the slope, the two families enjoy a week of great skiing. A lot of pictures are taken
and also some short video clips of Mike trying to master a half-pipe.

As the week ends the two families leave Colorado to head home. A huge amount of pictures were taken by the both families. Normally they would email each other the pictures, but this year it’s different. As family members co-created and joined a Zeals-revolver it has been created consisting all the material the different family members gathered before, during and after the event. All the pictures, videos and other possible media created or collected are now available to everyone with access to the Wilkinson-Robertson Aspen 2007-revolver.

Back in school Mike and Tina can show their friends everything, both by showing from their own mobile phones and by inviting their peers to join the Wilkinson-Robertson Aspen 2007-revolver. John can retrieve some of the preparation data, booking information and such, both to assist colleagues and as a starting point for next year’s bookings.

This scenario suggests a couple of different possibilities to allow the recollection of an experience to be shared, or even distributed. The main part of the material connected to an event is likely to be produced in advance to or during an event. However, the consumption of collected material can exist both prior to and after the event. As the scenario above explains, the reflective part of the experience is as important as the anticipative part (pre-event time). What we suggest is
a tight connection between how the material is represented at all stages, prior, during and after an event. As discussed earlier we are exploring a revolving interface as a way to browse the content of a Zeals-item. What we mean by connecting the three stages of an event tightly is to keep the sense of an event as not merely a set of files but more of a unified container that is allowed to evolve even after the ending of an event. Thus, the revolver interface can start of small-scaled and end up filled with materials produced and shared by users.

Basically we are investigating what is needed to represent an event or experience through a small screen interface and how different users would approach an application or service like Zeals.

By again looking at the results from our Last.fm survey, we can also confirm a need for recollection through triggering objects not only created by the user himself but rather by a peer or, in the case of the ticket-stubs, by an official source such as a promoter or a company. Again the Zeal-revolver could be seen as either a container of memorable items or an actual memorable item itself. Thus, the notion of an object collected at the event or a digital representation of a ticket-stub of some kind could be one of the crucial factors for creating a vivid recollection of an experience.

5.2 Defining target users and use-contexts

As stated throughout this thesis, we work with dual scopes. While researching events we also studied aspects relevant for articulating a user-representation. By creating an understanding of value propositions and sub-branding as discussed in chapter 3, we started focusing on use-contexts and how these could work as tools for comparing and collecting different characters with various characteristics. Since use-contexts were dynamically offered and not constant, an issue occurred pointing towards the personas. A certain setting could imply a certain usage but in the end it would depend on
the persona’s interpretation. As we wanted to target a set of users, very much like the industry is forced to, rather than the more comfortable approach of defining a target persona, we were in need of a tool uniting users and allowing them to be compared regarding their possible behavior. As we had decided to work with value propositions as our main separator (music and imaging), we started off by searching for possible usage situations in order to see the dynamics of a use-context and how people were acting in them. In order to keep our eyes open to contextual dynamics, value propositions were taken into consideration for upcoming designs.

The quest for reality’s input took us on a series of field-studies where we aimed to see actors in contexts as well as actual mobile phone usage. At the shopping mall the physical relationship between objects such as passages and places to sit down offered various possibilities of interaction depending on the perceiver’s eyes.

![Fig. 5.4 & 5.5 Shopping mall field study. People performing the same activity, yet they have different reasons.](image)

There were people who used the shopping mall’s benches to rest their feet, to enjoy a cup of coffee, to look at people, etcetera (Fig. 5.4 – 5.5). Even though these activities differed somewhat they were what we consider generic in a sense. The personal circumstances and critical elements that played an important role in the performed activity were
based on what the people had done before (the mall) and what they were supposed to do afterwards \(^{54}\). Thus, our focal point was on finding a narrative structure to describe a context, rather than on describing the inhabitants’ rationale and behavior. The value propositions our design process were aligned with led us into focusing on our already specified target users since our main goal was to get a generative description of the use-context rather than a snapshot of reality.

5.3 Towards a context based framework

The target group our design scope suggested was based on two value propositions; imaging and music. In order to continue to work parallel with the value propositions we created a set of personas with characteristics either facing towards imaging or music. By giving the personas names that explained their personal relationship to a value proposition, we suggested a certain lifestyle to fit within different contexts. For example; characters addressed to the value proposition imaging were; Semi Pro Pete, Snapshot Sue, Cross Media Mike and Broadcasting Ben. In Pattern-based Support for Interactive Design in Domestic Settings \(^{55}\) Crabtree describes a similar approach of constructing users. Through typification, which according to Crabtree is a way of constructing and categorizing a particular user through activity and social type, a commonsense category of social types can be employed as designer’s or developer’s objects for getting shared insight in contexts. Describing a waiter through typification, Crabtree suggests that a waiter should be defined by what he or she does; take orders for food and serve at your table. The method of typification allows, according to Crabtree, developers to identify generic needs of particular users not isolated to an individual.

As we wanted to discover comparable patterns regarding our sets of personas, we had to create a generic scenario structure that could fit

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\(^{54}\) This will be further exemplified in chapter 5

\(^{55}\) Crabtree, 2002. Page 3
with several different use-contexts. By letting the scenario follow a strict chronological order our intentions were to enable a comparison between users in different contexts. We focused on abstracting a probable narrative that could become generative when combined with a targeted user. As found during our field studies, many usage situations were depending on previous and subsequent actions and experiences. Basically the experience of a bus-ride was formed by the reasons for traveling. Likewise the actual arrival was affected by the means of travel. Thus, a context, seen as a setting or a situation could be viewed upon as part of a chronological series of actions or situations. Furthermore, when observing passengers, we realized that some were on their way to something, others were more or less leaving something.

Fig. 5.6 Even though people perform the same activity within a context they are likely to have different rationales for it. This speculation regarding activity before and after a bus ride shows how three different people may have different preceding and subsequent actions. We argue that both the experience of history and the notion of future form the presence.

The picture illustrates how we worked with understanding how various users share physical space with different probable destinations and goals in mind. The images may be perceived as speculative and in order to gain a foundation for understanding and actual examples we asked passengers about their previous and following steps.
Passenger A: Had been to sister’s home. Were going to watch a children’s choir.
Passenger B: Had been to a party. Where going home to correct student work.
Passenger C: Have had a quick breakfast. Where going to a last class before an exam.

Thinking in terms of a re-usable tool, we needed to understand and somewhat predict how users’ various reasons for being in a context as well as their experience of it could be structured in a way making the users more aligned context wise. This made it important for us to frame the user’s goals and define a context accordingly making contexts comparable. In comparison to Jonas Löwgren’s I-Patterns\(^{56}\) that abstracts the core essence of a design, our abstraction concerned contextual narrative.

Before setting up the contextual narrative we wanted to ask our target group Why they were supposed to use a value proposition-related application in the defined setting. As the personas had names that defined their characteristics this simple question added to the definition of them. For example in one context Conditional Listening Lisa’s reason for using the music player was to “kill time” no matter if she was listening to radio or stored music.

We wanted to further explore the possibilities for understanding a context or situation as a narrative. Thus, in order to make it more descriptive and in our eyes generative, we started defining more detailed temporal sections.

Giving the persona a relationship to the context and the investigated application and through elaborating field-study findings the

\(^{56}\) Löwgren, 2005.
chronological order for the generic scenario was given the following structure;

1. Planning
2. On the way there
3. Arriving
4. Experiencing
5. Leaving/exiting

No matter which use-context the intended target groups were placed in, they could be compared through this generic scenario. Since our intentions were to provide a generative description of reality with connections to our value propositions, this fictive scenario could be more efficient than reality itself. Rather than describing the activity as it occurred in reality we needed to describe the fictive scenario with the personal characteristics of our intended target group in order to reveal behavioral patterns.

5.3.1 Presenting the Persona Activity Framework

With the target users mentioned above, suggested by our value propositions we began to apply the contextual dynamics we saw during our field study to the fictive scenarios. Since the value propositions brought up target groups, they also pointed towards certain use-contexts where we could start off.

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Fig. 5.7 Persona Activity Framework covering the product scope Music within the context of short-time commuting.
The *Persona Activity Framework* (Fig. 5.7) (from now on referred to as *PAF*) consists of a set of target users suggested by the value proposition *music*. This example describes short-time commuting which offers several opportunities of *activity* depending on the character. By highlighting the characters’ activities throughout the scenario we can notice similarities as well as differences, which either unite or separate them. In *The inmates are running the asylum*57, Alan Cooper describes how personas can offer more valuable information than a real person. Considering the dynamics of a mobile phone use-context and what Cooper describes, a fictive use-context could in some cases actually be as generative as studying them in real life if presented properly. Since interaction design is a multidisciplinary field often tied to other departments within a company, a foundation of use-contexts can also be powerful for people with different backgrounds trying to articulate accurate contextual experience. However, the PAF’s main objective is to bring out a foundation for identifying a group of users’ needs that then can be transformed into requirements. The level of information extracted from the PAF, and *how* it is extracted, might vary depending on the nature of the application the tool is used for. If engaging in designing a scheduling tool the planning stage is likely to be the focal point when extracting information. In other cases other stages will be more interesting than preceding and subsequent stages. This rather open view of a user group is necessary in order to keep the tool generative and flexible. No matter which stage we would focus on, the preceding and sub-sequent stages will have had an impact directly or in-directly.

### 5.3.2 A test of the Persona Activity Framework

As a way to examine PAF’s role in a mobile phone application design process, a second year interaction design class was involved. Through

57 Cooper, 2004
an assignment in which PAF was used, we wanted to gain insight in how PAF could be perceived and practiced by others. For the assignment, students had to come up with a concept-scope for a mobile application, a suitable target group and a probable use-context, all in order to be able to work with PAF.

Nine groups presented a concept per group, each having a PAF connected to it. By supervising the groups in their process we were able to identify elements in PAF that had to be adjusted or communicated differently in order to be useful. The main difficulty students experienced with PAF was that their concepts were easier to use as common ground rather than using an activity/context. Basically some groups did not actually compare the users’ behavior through the same scenario, instead they used the characters’ actions in different sections, which were not enough aligned to be comparable. What they presented in the end was four different scenarios with only the application in common. We regarded this problem as an outcome caused by the chronological structure that either had to be altered or less ambiguous. Some groups had very well articulated PAFs illustrating differences and similarities within the target group. For example, some students expressed benefits of re-using the same personas for different contexts since this provided additional characteristics as well as interpretation of the context.

Dealing with the issue caused by PAF’s narrative structure we decided to describe each section (column) less ambiguous still trying to keep it open and dynamic. This resulted in the following;

1. **Why**

This initial column targets the very reason or rationale for a user to start interacting with the application or device in the specified context.
2. Planning

This section refers to how the user plans to use the application within the context and which preparations are made.

3. On the way there/waiting

This section refers to how the user uses the application on the way to an experience. If a physical move doesn’t take place in this section it should be considered as waiting and the upcoming section should be skipped.

4. Arriving

This section regards a physical arrival and how the user uses the application within the time-span from arriving to actually experiencing.

5. Experiencing

This section refers to the context title and how the user uses the application during the crescendo of the context. By context title we mean the scope of the scenarios as in previous example Short-time commuting where the actual travel would be the experience.

6. Leaving/exiting

This section refers to when the user physically leaves or exits the context and how application usage is affected.

This narrative structure provided PAF with a more apparent relationship to a context as well as making it easier to understand how to use it. As we wanted a consequent and comparable narrative the iteration was necessary to avoid misconceptions regarding concept-scope and context. The narrative is however open to changes as section 3 and 4 (On the way there/waiting and arriving) implies.
5.3.3 Applying the PAF to Zeals

Connecting the PAF to our design scope makes an emphasis on the road to and the exit from an event more adequate than focusing on the overall topic of the PAF. Using the PAF in practice lets us discuss users’ needs that we formulate according to our design scope.

Looking at the Concert and Imaging PAF there are several requirements presented before the event goes down. Semi Pro Pete and Social Snapshot Sue are both concerned about having enough space on their memory available. Whereas Pete is extremely aware of his camera’s current memory capacity, Sue can minutes before the initial steps of an event realize that she needs to save away her old photos. This suggests a need regarding Sue where old photos could be uploaded to past Zeals in order to free memory. Broadcasting Ben needs space as well but prioritizes getting a good photo from the event. Ben would, according to the PAF, benefit from some type of personal rating when it comes to his own photos.

The PAF’s main objective, though, is to bring out a foundation for identifying a group of users’ needs, which then can be transformed into requirements.

- Some users want to know that they have taken good photos.
- They want to make sure they have available memory.
- Motives for taking pictures changes, Semi Pro Pete together with Broadcasting Ben share a wish for getting that certain picture, whereas Social Snapshot Sue and Cross Media Mike are less focused on the material produced.

Findings like these generated a need for more PAF’s as means for exploring the Zeals application in particular rather than focusing on the user’s behavior in general. This was a second lesson learned with our

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58 Appendix 1 – Concert and imaging PAF
development and usage of this tool. The level of detail has a great impact on the outcome and what the PAF would render when it comes to user needs. Basically we felt that we needed to take the more general findings and insights gained during our early usage of PAF and form a more detailed conception of a design as a way for us to gain more information from the PAF. The design conceptualization would still be rather generic with neither imaging nor music usage in particular in focus.

5.4 A conceptualization of Zeals

Through structuring brainstorming results through our options-maps and by assembling different PAFs, we narrowed the concept down and started to work on a graphical user interface and a flowchart to be able to get a more detailed, but yet highly generic, design. As we want to differentiate the design through characteristics of products (music or imaging) this design will be iterated and skewed towards either imaging or music functionality. We have created the following screenshots as a means to understand how the fundamentals of the application would be and as a way to locate possible alterations in the design. The first screen displays a list of existing Zeals (or events) and the opportunity to add a new Zeal.

![Screeshots of Zeals](image)

Fig 5.8 - 5.9 Initially a Zeal revolver is highlighted in order to make it more accessible. In the second screenshot, Add new event is highlighted.

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59 See appendix 2
When adding a new Zeal, suggestions of matching events appear allowing the users to add already existing Zeals rather than solely create new ones.

By clicking *add* (or *create* if the suggestions are discarded) the user is presented to the revolver as in fig. 5.8, the initial view. If the user has chosen to create a new Zeal, the revolver will be clearly waiting for an input. Otherwise, if the user has joined an existing Zeal-revolver, the revolver will be displaying the categories of uploaded content attached to the event.

At this stage one can start sensing the need for further delimitations of our design in order to be able to grasp the concept. By narrowing down possible interactions and use-goals before and after an event we came
to a point where we were facing a very important question regarding our focal point in the concept. Basically we had two options; either we design for practical use-goals with a focus on how subjective information can be shared and transferred through Zeals, or we design for non-practical goals, more or less focusing on how anticipation and recollection can be elevated and enhanced.

After looking at the options over some time, we chose to focus on the more or less non-practical goals. The decision would of course alter the design scope somewhat, but as implied in section 3.5 Social actability, we intended to keep a structure that would allow a certain level of social hacking. Thus, the final decision on what purposes the community should serve would be in the hands of the users. The slightly ambiguous definition of what a Zeal could contain calls for user-defined content. However, an entirely open structure without any boundaries might not be easy enough to communicate and cumbersome for the user to grasp. In this particular case, familiar content such as audio, pictures and videos filling the Zeals could be enough to exemplify usage and initiate new user-defined ways to interact with and through the system.

In order to get an overview of how multiple users could use Zeals and as a way of understanding the network maintained by the application we created yet another scenario. The scenario focuses on how a group of people interact with the application, but also how the usage has an impact on how users interact with peers in networks outside the Zeals application.

*John, Tim, Tina and Jane* are all going to a Springsteen concert. They can barely wait and with each day they all build their expectations.

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60 We have earlier referred to *media-files* when discussing Zeal content. There are also other things, not solely traditional media, that may fit within a Zeal.
yet higher. John has created a Zeals-revolver, called Springsteen 12/4, only open for the four of them. Tim is the main contributor, which is caused by the fact that his cousin, Lucas, and his buddies also are going and therefore Tim gets a lot of input from them. As an example Lucas stumbled on a debate-article discussing Springsteen’s last album’s implications on world peace, which he discusses with Tim. Tim forwards a really cool picture of The Boss in front of a fountain included in the article to the Springsteen 12/4 Zeal. The update renders an indication on the other member’s devices and Tina instantly checks out what Tim has added. She thinks the picture is really nice and shows it to her other friends. Tina’s friends do not share her exaltation but can appreciate the nice picture. John receives the same update and recalls seeing a similar picture somewhere else. After discussing with his dad he actually finds an old photograph of Springsteen next to the Mississippi river smiling at the photographer. John uses his mobile phone’s camera and takes a snapshot of the photo and uploads it to the Zeal with some comments.

John’s upload triggers Jane in taking actions. She has been constantly listening to Springsteen for days now and simultaneously rendered a play list to the Zeal. Now, she sees a connection between her favorite track, *The River*, and John’s latest upload. She plays the
track again for her and her boyfriend Stan and
dreams away.

Although the short scenario does not cover all possible interactions it
highlights an important aspect of the concept – each user’s relationship
to the application. In the scenario above the presented characters all
have a slightly different relationship to the Zeal.

*John* is the *creator and initiator* of the *Springsteen 12/4 Zeal-revolver*,
which does not affect his usage in the scenario, but it still important to
bear in mind when discussing maintenance and continuance of a Zeal-
revolver.

*Tim* is, as stated clearly in the scenario, more of a *contributor*, based
on the input he receives from his cousin, which in this case gives Tim
a head-start.

*Tina* receives an update and likes what she sees. However, she will not
necessarily take any actions contributing to the Zeal. Instead her role is
clearly more oriented towards being a *Consumer* within the Zeal-
network, but actually somewhat of a producer or contributor among
her peers in her other networks since she brings content from a Zeal to
them.

*Jane* is more or less a mix of her peers. She contributes through
sharing her music play list, but she consumes and shares ‘externally’ at
the same time. This implies that Jane is *cross-user*.

*Lucas’* relationship to the Zeal-revolver is not as direct as the other. He
is not a member or subscriber, but he is still connected to it through his
cousin, indirectly contributing. This would make him a *Peripheral
user*, or even a *Peripheral contributor* as opposed to Jane’s boyfriend
who in the scenario acts as a *Peripheral consumer*. 
The identified roles, creator and initiator, contributor, consumer, cross-user, peripheral contributor and peripheral consumer are each holding a set of demands and requirements relevant to them specifically and again we need to gain a clearer articulation in how these user-roles can be targeted through variations of the same application.

The Soccer-game PAF, consisting of imaging-skewed users, was a first step of finding both expressions of different interaction styles as well as other behavioral patterns that could render alterations in the design.

The combination of the users Semi Pro Pete, Social Snapshot Sue, Cross Media Mike and Broadcasting Ben offered several new findings and suggested ways of tuning both the generic design as well as adding features more suited for imaging-skewed handsets. When having the entire user-group represented together, both common and unique needs could be seen. We listed the needs we could find, sorted user by user and continued by identifying similarities.

Semi Pro Pete

- Semi Pro Pete is in many ways a clear contributor, although also consuming in order to be able to fine-tune and adjust his contribution in relation to other users’ material.
- Pete, again, would strive for a narrative end-result. His wishes for visibility render a need of being able to make measurements, comparing his footage with others.
- Another need visible through the PAF is to be able to upload after the event, gathering and sorting material before submitting.

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61 Appendix 3
62 By interaction styles we refer to the roles presented earlier: The initiator, the contributor, the consumer, the cross-user and the peripheral consumer and producer.
Social Snapshot Sue

• Sue is in many ways a contributor and a consumer, thus a cross user.
• Sue’s needs are first of all concerning real-life and not the application. She uses it mostly together with her friends since they often socialize together.
• Sue does not feel a need for documenting the game in order to share with others, but is instead willing to download other contributors’ material.
• As Sue actually considers taking pictures without uploading them, an alternative way of creating memories, outside of the revolver, is suggested.

Cross Media Mike

• Mike is skewed towards being a consumer. However, it would be equally accurate to perceive him as a cross user.
• Mike brings his networks together in many ways – Digital peers connected to real life friends. This implies a need for offline sharing as well as online.
• Quick updates are favorable, meaning a wish for easy access to update notification.
• The seamless usage of technology allows a dialogue to take place. This suggests a possibility to work with the relationship between contributions, depending on time of collecting, uploading or proximity.

Broadcasting Ben

• As Broadcasting Ben acts as an obvious Initiator / creator, a need for an overview of the Zeal is implied.
• Ben’s constant wishes for sharing his ideas and thoughts also on forums outside of Zeals would benefit from a possibility to create linkage between his blogs etcetera and different Zeals.
• The wishes for visibility and sharing of ideas in combination with Ben’s urge for creating something of his own also suggests a need for being able to link between different Zeal revolvers, allowing Ben to get “visitors” from other revolvers.

• The variations in usage-intensity imply a need for an easy pause and resume-functionality.

The different needs can in many ways be targeted through similar designs and be fitted within the same application without necessarily conflicting with ease of use.

First of all, parallels can be drawn between Broadcasting Ben and Semi Pro Pete. Both share a caring interest for the material itself, in this case the pictures. They both have an overall goal with their participation and visibility is important to both of them. Their needs to be able to work with the material before submitting can be looked upon as needs of a drafts-feature where the application must allow the user to pause and resume the submitting. Furthermore, a need for being able to work with multiple Zeal-revolvers is implied not only by Semi Pro Pete and Broadcasting Ben, but also by Cross Media Mike. Social Snapshot Sue however, does not demonstrate any need of multiple revolvers, but neither does she repel such a feature.

To satisfy the above explained need, offline editing can be used as a starting point. In many cases the need for easy access to drafts is evident, still not interfering with the experience of users who are not in need of such a feature. Thus, a natural step to proceed would be to keep the same interface for both drafts and online material, allowing the producer to control what is displayed to other subscribers of the revolver. This solution would imply the creation of two spheres, a public with all the online material and a personal with the public online material together with material the user himself has collected and only added locally.
If connecting to our PAF again we could see that a feature dealing with both offline and online content, also could satisfy other users’ needs. Social Snapshot Sue clearly demonstrates a need for a more personal revolver similar to the “ticket-stubs”\(^\text{63}\) when she takes a picture before the event without the intention of uploading it. Basically the idea of mixing public online content with personal offline content would be our first step towards altering the concept.

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Cross Media Mike represents a user group whose interaction style is interesting as it naturally bridges different media types as well as different forums and social networks. As is implied in the PAF, Mike and his peers often talk about their online presence in real life an important aspect of the design would in his case be how well material can be displayed to others through the interface.

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\(^{63}\) As referred to in our Last.fm survey
Interfaces like these have been utilized several times before on mobile devices in camera-applications.\textsuperscript{64}

When again highlighting the visibility-needs of Semi Pro Pete and Broadcasting Ben, allowing linkage between both other Zeal-revolvers and blogs or portfolios could enhance their online presence. Basically this already is allowed through the interface shown in Fig. 5.8 but deserves being pointed out.

![Fig. 5.20 Zeal in Zeal linkage, a feature suggesting that a vast network of Zeal-revolvers can be created and where relevance is entirely determined and argued by the users.](image)

As the vast amount of input generated by the PAF was mainly highlighting imaging users, the results must be compared to a PAF targeting music phone users as a way to understand where to separate the two scopes. Thus, a new PAF was created focusing on the same event but with music-skewed users\textsuperscript{65}.

The Soccer game PAF with music skewed users \textit{Hyper music Michelle}, \textit{Conditional listening Lisa} and again \textit{Cross-Media Mike}, acts as way of understanding needs more suited for music-skewed users. Besides this, the second PAF helped us understanding what features, may they concern images or music, should be considered generic and therefore not be solely included in neither imaging-skewed devices nor music-skewed ones. Basically we could compare the music Soccer

\textsuperscript{64} This is natural due to the physical shape of most mobile phone screens. In most cases the screen ratio is 3:4 whereas most visual medias are presented in 4:3. Thus, a 90-degree rotation for extended views offers more space for each image.

\textsuperscript{65} See appendix 4
game PAF to the Imaging one and see where users share needs, in order to extract alterations.

First of all we extracted the needs connected to music-usage of Zeals.

**Hyper Music Michelle**

- As Hyper Music Michelle took information from Zeals and acted upon it with her friends, she was regarded as a *consumer* with instincts of analog sharing.
- The music from Zeal made Michelle and her friends sing songs accompanied by the mobile phone’s speaker. As they were acting as a group spreading songs to others this suggested a need for offline sharing of sounds.
- When arriving, Michelle gets an impression she wants to keep.
- Not caring about the event itself, Michelle might still want to keep certain memories alive, discarding the rest that she considers to be totally pointless.

**Conditional Listening Lisa**

- Lisa is the type of user who is being drawn into using Zeals because the rest of her friends are contributing to it. Due to this she is regarded as a *consumer* just as Michelle.
- As a consumer who wants to be updated with information in Zeals and who also wants to know who the originator might be, Lisa is in need of a direct notification as a contribution has been made.
- Attending an event Lisa’s character implies that she will search for Zeals where she is featured.
- Being part of a Zeal and also figuring in it, Lisa does not care about privacy as long as only her friends can watch pictures and other related media figuring her.
Cross Media Mike

- Mike remains as a *cross user* and even though the media changes he is still in need of being able to present what is on his display.

Again we could extract fairly clear requirements and needs through our way of structuring our thoughts by utilizing the PAF. The needs formulated above highlighted other aspects of the same design. Whereas the imaging users as a group in many ways suggested needs related to producing material, users with connection to music tended to spotlight issues and possibilities concerning consumption. This is in many ways a natural conception as imaging is tightly connected to an actual camera that holds obvious connections to producing material rather than consuming. Likewise, the music approach traditionally means a device optimized for consuming (playing) music as opposed to creating it.

When looking at the extracted needs, a thing that actually seems to be a commonly occurring is the need for ‘physical’ sharing. This is likely to be partially related to the context we have used as an example – the soccer game. Nevertheless, we see opportunities to take advantage of existing physical and social contexts, regardless of whether the event is a soccer game, a concert or another event where physical socializing can precede the actual event. One way to start supporting an enhanced sharing of audio in a physical space would be to start benefiting from the possible nearby networks available. By creating a system allowing the creating of ad hoc networks supporting synchronous playback of audio on multiple devices, we see a way to allow analog and contemporary sharing of music. This feature alone is suggesting interesting social implications. In a sense we think of the synchronous playback as a simple way of multiplying the amount of speakers active. Very much like what can be done with multiple radios tuned in to the same frequency, this application would allow a host to start
playing, being accompanied by other devices, creating a choir of various small speakers adding up to a vivid symphony.

![Fig. 5.21](image1)

This model describes users synchronizing playback of audio files within Zeals through ad-hoc networking.

This feature would allow both Michelle and Lisa to share a Zeal revolver’s content among a larger crowd. Likewise, Mike can distribute tracks from different Zeals to his peers.

Michelle exemplifies an articulated need of collecting that first impression of an event. In the PAF this occurs as she and her friends arrive to the soccer game. The term *impression* calls for a broader understanding than merely collecting still- or video footage or audio, but more a notion of being able to mix several different media types. It could be connecting a certain song to a picture to complete the scene, or a piece of text, adding a description of any kind. This discussion points towards thinking in terms of cross-referring between different Zeals within a PAF and also between content inside a given Zeal.

![Fig. 5.22 – 5.24](image2)

These screenshots demonstrates how content within a Zeal can be combined. Through the *more menu* in Fig. 5.22 the user can combine existing content or select new
content to attach to an existing Zeal. Picking a Zeal to combine the previously selected Zeal results in what’s shown in Fig. 5.24, where the outcome of two combined Zeals is visualized.

An interesting aspect with this entire scope, and mobile applications in general, is how users’ attention is regarded. This entered our spotlight as Conditional listening Lisa’s suggested behavior in many ways implies a need for quick and easy access and most importantly, a need for a notification of updates in a Zeal-revolver. One can of course see openings for adding alerts through audio-visual output, or using the messaging-application in the phone as medium for communicating updates. However, the adding of alerts can be seen as a way of making the application more intrusive. A way to start elaborating on potential notification settings, allowing each user to determine to what extent he or she wants to be prompted by the system. Another approach would be to start benefiting from users’ behavior when it comes to handling the phone. A quick field-study searching for patterns among users when it comes to being alerted, we could see some users taking their mobile phones out of their pocket just for a brief check-up, making sure nothing has happened since the last use-session. The series of actions pick it up – unlock – lock – put in pocket made us think of approaches targeting these user-initiated interactions. Basically this would not revolutionize how alerts are processed, but instead silent alerts can simply be interpreted as enough in many cases. Thus, a need for the more intrusive approach of using sounds and lighting-effects may be used solely for more urgent matters, letting less critical features be alerting through users updating themselves. Whether Lisa is a user updating herself or is more keen on alerts, the need of actually being notified remains. As a means of satisfying her but not annoying less accepting (and probably more self-updating) users, all alerts should stay within the application unless a user specifically enables it through settings. However, we see a silent notification, may it be an icon on the desktop or a notice inside the application, as an important part of showing the user that a Zeal is alive and also may act as a
Teaser heaving expectations of what the update might consist of in detail.

Lisa’s need for privacy within a Zeal proposes certain limitations regarding the openness of the Zeals application. As she only wants people she knows (her friends) to see pictures featuring her, traces or access limitations would be one solution. Benefiting from a privacy filter that leaves traces of some kind, a user like Lisa could get additional digital access to her social network if traces were to be individual. However, as we don’t intend to investigate functionality like this within this scope, it will be discussed in Chapter 5.5.

5.4.1 Diverting the design through product scopes

By running through PAFs as exemplified above, we could outline several points that in many ways could work as separators when trying to adjust the application for a certain set of users. As discussed in chapter 3 separations are made in several ways and we have chosen value propositions as separator in our design. Several features in the design can be seen as “belongings” of either an imaging or a music product scope. An easy way to perform a separation would of course be to direct imaging features to imaging products and music or audio-related features to a music product. However, when looking at how products are separated, one can see that mp3-player phones tend to
have cameras and vice versa. Thus, separations are made on a higher level, still “borrowing” functionality supposedly typical for another value proposition.

From previous section we could extract some features that were possible separators:

**Imaging**
- Physical sharing of images and slideshows.
- Drafts or offline functionality allowing contributors to pause and resume a session.
- Direct connection to the camera application.

**Music**
- Sharing of music related to the event
- Synchronous playback of music
- Connect and listen to playlists from peers or promoters
- Connections between the on-device media player and Zeals

However, to allow the complexity of representing anticipation or recollection and leaving room for actability, too much separation would conflict with what users are accustomed to. Many handsets have both music and imaging capabilities and actual separation is made not on basic functionality but rather on special features.

As an example in our design this would mean that users buying an imaging-skewed device are likely to expect both functionality supporting browsing and submitting camera footage, as well as the most essential musical features such as sharing playlists. Likewise, music phones should be able to browse and upload pictures as a complement to the music functionality. We argue that these features

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66 As opposed to letting the Zeals application solely handle all content, a more decentralized approach would allow benefiting from other applications on the device.
form the foundation for the experience of Zeals. However, features like the synchronous playback of music between peers may be a subject of separation as it in many ways is optimized for socializing around music to such an extent that it would seem to be a rather big feature in the design, thus partly conflicting with an imaging scope. In the same way, too advanced imaging-skewed features such as the slide-show mode would mean too much of an alteration for music-skewed users. Thus, the horizontal user interface in Fig. 5.19 could be considered as the imaging opposite of the synchronous playback. Both features suggest a kind of a non-digital actability where the user’s approach to real-life peers in relation to their interests form the separation.

![Fig. 5.28 – Fig. 5.29. Separating through non-digital behavior.](image)

The features above exemplified as possible separators may not necessarily be the most cutting edge features within each scope but rather features highly focused around the scope. When looking at examples of existing solutions for slideshows as an example, Nokia’s *N73 music edition*[^67] can be mentioned as a music-skewed product that seems to incorporate much functionality from imaging value-propositions by implementing both a high-resolution camera and rather

elaborated functionality for viewing slideshows.\textsuperscript{68} When comparing this to the original N73 that solely is communicated as an imaging device the marketing aspects of the device become evident. Besides increased memory capabilities and differently labeled shortcut keys the N73 music edition is very much the same handset communicated in a different way for a different audience.

In many ways this shows the complexity inherited when designing for personal technologies. Small possible variations will have to be clearly communicated in order to help users to grasp and understand the product. As designers we prefer to see a device that is more custom-made for its user, but the Nokia example above illustrates how niche-users could be attracted by small differences rather than an entirely generic product.

No matter which strategies used for deciding where to separate two product scopes when vending a product, we see a need for designers to find ways of discovering needs and suggest features grouped with connections to product scopes. Our attempt to put users in a matrix, grouped by their supposed product scope belonging is one way to do this.

5.5 Aspects and further development

We see many possibilities for how Zeals can be continued and further industrialized. The open structure of the platform calls for user engagement in order to be successful. Thus, a need for keeping it simple and clear in its definition is implied. As described throughout chapter 5, the Zeal-revolver in the user interface is not to be seen merely as a gallery for media but as an item symbolizing an event in its entirety. However, when looking at designs in general allowing users to form the content, alternative use-scenarios and goals are likely

\textsuperscript{68} By \textit{elaborated} we refer to slideshow-features implemented by Nokia such as ability to add music and zoom and panning movements (Ken Burns-effects).
to occur. As we have not explicitly stated the role and the representation of the user in the interface, we suggest that this will grow with the users. One way to see more of a social platform, with higher focus on the communication abilities inherited from the phone, would be to suggest that users could create personal revolvers. A personal revolver could be very much like the event-skewed originals, but consisting of Zeals presenting the user and pushing promotion of self. If interpreting this to our design it would mean that a need for dealing with access to Zeals occurs. If a user “hacks” the system by creating a Zeal-revolver solely presenting himself, he is likely to want to have control over who may or may not add content.

However, in many ways we see our design as an attempt to suggest a variation of a social community built less on users’ wishes for visibility and more on the co-experience of events. We believe that a need for visibility would be expressed eventually through *social hacking*, when users take matters of representation and communication in their own hands and find ways to optimize their own experience. Dan Hill, head of interactive technology and design at BBC, claims that “If we are to invite the user in, we need to leave some of the seams and traces open for others to explore, some sense of what the process of design, or un-design, might entail.” When applied to our design, this suggests that *hackability* would be made possible through a certain level of ambiguity in the design and a little bit more rough finish when it comes to definition of content.

A natural next step for bringing this design to a yet more defined level would be to conduct tests for making sure that our concept’s scope would be on target. As our process in many ways has meant a somewhat small portion of user involvement, we see a potential future need for getting the concept more or less *validated* among actual users. One way to actually test the core essence of the design-scope would be

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69 Hill IN Saffer, 2007, page 167
to engage a focus group and give them access to an e-mailbox with the ability to receive multimedia messages from cellular phones. The focus group would have to be collated with a common event in mind and the participants would be asked to post or read messages and document their usage.

Feedback from such a test would help us gain both understanding of temporally dependent actions as well as a deeper insight in how different interaction styles may vary. Interaction styles discovered other than the ones mentioned previously in this chapter\textsuperscript{70} could in such a test show how entirely new interpretations of our design can occur. Whereas we have viewed the Zeals-application as means of working with the creation and keeping of memories connected to events, less predictable real-life users may interpret such a platform somewhat differently. As previously discussed also practical goals can in some ways be achieved if the users would find this relevant. We can imagine a group of users utilizing the platform for sharing documents relevant for a joint project. In this case focusing on a different set of needs would be implied, such as dates modified or support for other file-formats and more.

These examples work as reminders of what could happen when releasing a design into \textit{the wild}. The actual usage of a design may differ to a wide extent once actual users become involved.

\textsuperscript{70} Initiator, Contributor, consumer, cross-user and peripheral user
6 End discussion

Providing a platform for anticipation and recollection means allowing users to experience an event to a larger extent and more intensely. We believe that this is partially achieved through empowering users to form the content of the platform. However, when challenging participatory design with applying genius design through our suggested tool, PAF, predicting anticipation and recollection means risky business. If not thoroughly involving user throughout the design process, we mean that chances are that the end-result would be slightly off target.
6.1 Concluding Zeals

As our application Zeals have provided a platform for anticipation and recollection regarding events, several user types will have the possibility that to a larger extent experience what they consider to be an event. The empowerment users are provided with allows anticipation to take many forms as people digitally, and also physically in some situations, gather before an event. Zeals can become a base for forming a relationship to an upcoming event by bringing unexpected as well as expected anticipation. Also, it can provide visual representations of anticipation that from the very beginning have been created by someone who relates to the event regardless of geographical location. Forming an overall individual experience of anticipation is done based on the content created by peers. This means that Zeals reveals a spot where socialization can take place before an event.

Anticipation can take many shapes. Practical preparation is only part of the process. Many have probably experienced the exaltation just before something big, may it be the day before Christmas, the week before a long distance journey or an important soccer game. In many ways we also tend to lean on different types of consumption as means of satisfying this urge. Examples of event-triggered consumption can be listening to the band whose concert you are about to visit or browsing every web site showing you information on your travel destination. Furthermore, our last.fm surveys suggested that not only the band playing is relevant, but also what people referred to as similar artists could be used for getting in the mood.71

“I listen to music, not necessarily of the artist I'm going to see”
“I don't listen to the bands I'm going to see that night while I'm getting ready but I'll listen to music that's along the same lines”

71 Last.fm How do you prepare for a concert?
The wishes for similar artists and bands “along the same lines” highlight challenges with recommendations. The Zeals-application deals with recommendations on a human-to-human basis rather than relying on digital algorithms. This makes it vulnerably depending on the users’ commitment, but also extremely powerful as it can transfer even the most ambiguous connections and recommendations constructed by a user.

As Zeals can offer a visualization of anticipation, anticipation needs to be regarded as a contemporary portion that eventually will mature. The effort put into anticipation contributions to an event will affect recollection with a potential to make it either stronger or weaker. Hence, an intense or strong experience of recollection through Zeals doesn’t necessarily need to emerge from contributions regarding anticipation. Zeals contributions regarding the actual experience of an event, for example pictures taken during a soccer game, is necessary if the Zeal aims to focus on the event and not solely on the anticipation period. As the anticipation period as well as the actual event inevitably will become part of past time, they will eventually be targeted for recollection.

Keeping the openness of the system and by letting users’ form the content, recollection can be experienced both individually as well as collaboratively. The way Zeals can be considered hackable should be regarded as a use-quality⁷² that enables the application to evolve from user contributions. Predicting the evolution of Zeals is in many ways a cumbersome problem inherited from our way of proceeding.

Even though Zeals first and foremost aims to provide digital recollection, it has yet another use-quality inherited by the mobile phone; It enables users to physically show what’s on their screen. Being able to show a digital representation of an object on screen in

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⁷² As suggested in Chapter 5.5
just about any situation, parallels to Zeals can be drawn to an answer from the Last.fm questionnaire; “I have a notebook thingy where I keep track of all the ones I’ve been to”. However, this suggests that the main quality behind such activity as "keeping track” is to have a common place where stored memorabilia becomes organized and more accessible. Yet another answer from the Last.fm questionnaire implies that grouping items for recollection actually achieves something; “[I] put ticket stub with the rest of my ticket stubs”. As Donald Norman puts it; “Perhaps the objects that are the most intimate and direct are those that we construct ourselves, hence the popularity of home-made crafts, furniture and art.”\(^{73}\). Collecting digital representations through a mobile phone, a platform for recollection could provide additional emotional aspects of memorabilia. By incorporating a common ground that refers to an event, Zeals can be considered similar to an interactive scrapbook where users contribute with anticipation and experience recollection. With the quotation of Donald Norman and the example of the notebook thingy mentioned earlier, Zeals usage actually make an event within Zeals a spot to build and store anticipation and memorabilia in order to maintain it as a memory.

### 6.2 Concluding PAF

We argue that an important aspect of the PAF, is that we see openings for using it also in settings where a more customized ethnographical study is preceding it. This would suggest that, for instance actual users rather than personas or characters could be followed through such a narrative structure. This process would then be very similar to how Messeter et al worked with, target users in the COMIT-project.\(^{74}\)

We consider PAF to be a powerful tool for structuring ideas of a surrounding landscape regardless of whether fictive or real users are involved. By explicitly juxtaposing different users’ actions in a

\(^{73}\) Norman, D.A. 2004, page 48

\(^{74}\) Messeter et al. 2004
situation we suggest that additional insights regarding users’ different contextual behavior are provided to the designer.

When summarizing thePersona Activity Framework, we see the main strength in how the framework is constructed. Through our process in this project we have benefited from PAFs in different ways. We argue that rather specific use-goals can be extracted from the scenario structure. As with other scenario-based methods, PAF forces a designer to think in terms of use-sequences that furthermore helps to identify problem areas. By juxtaposing multiple users’ through the same scenario, we argue that more aspects of a design will be highlighted.

The narrative structure of the PAF, Why, Planning, On the way there, Arriving, Experiencing and Leaving exiting, is an elaborated interpretation of how time surrounding an event can be perceived. By keeping a formalized, and rather detailed, structure we believe that comparability is promoted. Speaking in terms of our design, Zeals, the PAF’s narrative structure has helped us finding where needs for rethinking and designing exist.

Another important part of what PAF does is the grouping of users. As argued throughout the thesis a set of users are likely to “share” the application, meaning that all are potential users. Whereas traditional personas serve a purpose of thinking in terms of users, we see PAF as an extension more focused on behavior than emotions. The group of users can in a sense be seen as a set of personas very much like Cooper argues “a cast of characters”\(^{75}\) being important for a design. However, the group of users might as well be actual users from a focus group stating their actions and emotions connected to a series of events. Regardless of which approach one chooses, more user involvement or less, we suggest that PAF can render an extended view

\(^{75}\) Cooper, 2004.
of users behavior over time and make it comparable. If the user group is fictive, a series of PAFs render a deeper knowledge in how the user would act in various situations, creating a more vivid character description. If instead involving a focus group, the PAFs rather serve a purpose of in the end clarifying patterns otherwise harder to identify.

6.3 Final thoughts

As our approach in this thesis has meant less actual user involvement, we have learned valuable lessons regarding the validation of a design. Since our process basically has consisted of being inspired by people on the street and creating a design built upon needs extracted from personas, we also eventually find ourselves in a position where we, to some extent, feel a need of gaining user feedback. This might be a fairly obvious drawback with limited user involvement in general, the lack of validation through the process. If we instead had worked with a focus group continuously throughout the design process, we would probably have benefited regarding the actual design, but also concerning how we communicate it. Whereas we perfectly understand our design, real users are likely to want explanation and articulation of the design scope as it develops during the process. Thus, we would have been forced to articulate the design and actually clarifying it both to ourselves and to a focus group.

Furthermore, the lower amount of user involvement would eventually increase the demands for testing. If involving user throughout the process, the conceptual scope of the design is likely to have been more or less proven (and approved), as opposed to a situation where the design is defined to such an extent that too big alterations would not be feasible to make.

As we finalize our design, we see testing as a natural continuance in many ways. As described in chapter 5.5 we suggest ways of validating our design. This need would not necessarily be as significant if users
would have been involved to a greater extent. As a mean of basing design decisions, we have described how PAF work as a foundation when generating concepts regarding mobile applications. The way we have involved real people have been modest. Still, as PAF has been the foundation where our thoughts and gatherings have been structured, it has provided a link between our fictive users and real people. Through this we argue that means for designing a platform like Zeals are available within a foundation like PAF if designers are able to reformulate a generative and linked description of reality.
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Online material


Picture sources

[3.1] Screenshot from http://www.vega.dk/
[3.2] Screenshot from http://www.svenskfotboll.se/
[3.3] Screenshot from http://www.last.fm/
[3.6] Picture of IDEO’s Patient Journey framework presented in Metropolis october 2002 pp. 100-108

[4.1] Picture by the authors

[5.1] Event lifecycle illustration by the authors
[5.2-5.3] Sketches by the authors
[5.4-5.6] Fieldstudy footage by the authors
[5.7] PAF-illustration by the authors
[5.8-5.20] Interface screenshots by the authors
[5.21] Sketch by the authors
[5.22-5.27] Interface screenshots by the authors
[5.28-5.29] Illustration by the authors
Appendix

Appendix 1 PAF – Imaging – concert
Appendix 2 Basic functionality abstraction and flowcharts
Appendix 3 PAF – Soccer game – imaging – Zeals
Appendix 4 PAF – Soccer game – music – Zeals
## Persona Activity Framework

**Imaging - Concert**

<table>
<thead>
<tr>
<th>WHY?</th>
<th>PLANNING</th>
<th>ON THE WAY THERE</th>
<th>ARRIVING</th>
<th>EXPERIENCING</th>
<th>LEAVING/EXITING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEMI PRO PETE</strong></td>
<td>To get that awesome picture of the band’s essence.</td>
<td>I would bring my EOS with a wide lens, an extra flash and of course an entirely empty memory.</td>
<td>I won’t take any photos before the event since I want to save memory for the actual event.</td>
<td>I try to find a better angle than the other photographers. Maybe I’ll look at the press photographers and see how they do.</td>
<td>I try to take as many pictures as possible, not reviewing them until I get home.</td>
</tr>
<tr>
<td><strong>SOCIAL SNAPSHOT SUE</strong></td>
<td>I’m with my friends so I want to remember this.</td>
<td>I make sure I bring the camera. I’d probably have to empty my memory stick from previous sessions.</td>
<td>I make sure I get a photo of me and the girls before the event starts.</td>
<td>Me and my friends order from the bar and look for a place to stand during the concert.</td>
<td>For every two photos I take of the band I take one of my friends.</td>
</tr>
<tr>
<td><strong>CROSS MEDIA MIKE</strong></td>
<td>I probably take pictures of my friends and maybe of the band as well.</td>
<td>I wouldn’t really prepare imaging-wise.</td>
<td>I won’t use the camera since I’m talking with my friends.</td>
<td>Me and my friends order from the bar and look for a place to stand during the concert.</td>
<td>As long as I get a picture or two I’m happy and can continue to listen to the concert.</td>
</tr>
<tr>
<td><strong>BROADCASTER BEN</strong></td>
<td>I use the camera to be able to re-cap the concert. I’m gonna blog about this, so I need to be able to communicate the essence.</td>
<td>My goal is to have at least one photo that will fit with my blog post. I will probably take quite a lot of photos for this.</td>
<td>I take a few photos on my way to the event so I know how to start my blog post later on.</td>
<td>I make sure I’m in the front row so I’m able to tell others what I’ve experienced.</td>
<td>I try to get one of my friends to take a picture of me with the surroundings.</td>
</tr>
</tbody>
</table>
A user creates a Zeal-revolver connected to an event

She adds a file which automatically is uploaded to the Zeal server

The material is now available in for everyone subscribing to the specific Zeal-revolver

Everyone subscribing can be a contributor, allowing the revolver to grow in density
Zeals

Material attached to the revolver can be anything, audio, pictures, video or text.

If a new file-type is attached, a new Zeal is added to the revolver.

A Zeal holding pictures related to the event.
A Zeal holding videos related to the event.
A Zeal holding songs and audio related to the event.
Adding Zeals

1. Add new event
2. String input
3. If similar event-name exists
   - If suggestions are discarded
   - If a suggestion is accepted
4. Create new Zeal
5. Add Zeal to List

- Select
- Select
Browsing Zeals

- **Eventlist**
  - Select
  - More

- **Folder overview**
  - More
  - Back

- **Detailed view**
  - More
  - Back

- **Add stuff, save stuff etc.**
  - More
  - Back
## Persona Activity Framework
### Soccer game - Imaging - Zeals

### Why?
- Would the character use Zeals together with a soccer game?
- To like the game and feel the excitement.
- To get a new set of goals.
- To feel part of the team.

### Planning
- How would the character plan using Zeals?
- To get ready for the game.
- To get supplies for the game.
- To organize the team.

### On the Way to the Game
- How would the character use Zeals on the way to the soccer game?
- To keep up with the news.
- To share the excitement with friends.
- To stay connected with the team.

### Arriving
- How would the character use Zeals when arriving to the soccer game?
- To get ready for the game.
- To get supplies for the game.
- To organize the team.

### Experiencing
- How would the character use Zeals during the soccer game?
- To keep up with the news.
- To share the excitement with friends.
- To stay connected with the team.

### Leaving/Exiting
- How is the application usage affected as the character leaves the context?
- To avoid getting lost.
- To stay connected with the team.
- To keep up with the news.
# Persona Activity Framework

**Soccer game - Music - Zeals**

<table>
<thead>
<tr>
<th>WHY?</th>
<th>PLANNING?</th>
<th>ON THE WAY THERE?</th>
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<th>EXPERIENCING</th>
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<tr>
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<td><strong>How would the character plan using Zeals?</strong></td>
<td><strong>How would the character use Zeals on the way to the soccer game?</strong></td>
<td><strong>How would the character use Zeals when arriving to the soccer game?</strong></td>
<td><strong>How is the application usage affected as the character leaves the context?</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Hyper Music | Michelle | I want to learn and remember some fun soccer chants to sing and laugh while the game is on. | I have joined a soccer Zeal to grasp Hodgerson to accept for a afternoon. | We and my friends sing along to some of the chants I've gotten from the Zeal. | I might take a photo or shoot some video to match the song my friends just sang. | I probably get bored of the game. Checking out Zeal it will perfectly show how childish the hardcore fans act. |

| Conditional Listening | Lisa | Because my friends and soccer fans forced me to play the Zeal weeks before the game. | I check the Zeal occasionally to see what my friends are up to. | While hanging out with my friends before the game I meet some friends or friends of friends and make contributions I've seen in Zeals. | One of my friends asks me to post with a bunch of people and take a photo for Zeals as I use it indirectly. | Since I'm not a big soccer fan, I might take a look at Zeals to see if it has been updated due to the start of the game. |

| Cross Media | Mike | I like to see the quick updates about the game provided by my friends. | I've added most Zeals connected to the game but I primarily use them. One where my buddies are active and another where interesting people contribute. | Hooking up with my friends we share each other material from Zeals. Since my friends don't use all the Zeals I use, I have much to show. | Standing in line I show one of my buddies a customized video clip from Zeals. | My friend next to me get to see my display if the Zeal is updated with something. |

Together with my friends I head downtown to a café to kick, show and discuss material in the Zeals.