



Westerdals

The Behavioural Platform

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As new and modern means of communication globalizes the world, smaller and isolated communities stands the risk of emigrating generations. Through looking at globalization, experience economy and behavioural economics I will try to present a possible platform that can help influence this trend.

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Introduction

In the subject Gaming & Digital Media myself, alongside Olina Søyland Bru, got the opportunity to create a digital experiential concept for the Vegaøyen Verdensarv foundation.^[1]

Vegaøyen Verdensarv is a foundation working to protect and preserve the traditions and heritage of the, UNESCO-listed, Vegaøyen archipelago outside of Brønnøysund in Northern Norway.^[2] The archipelago is populated by 1225 people, and of these, only 119 are between the age of 13-19 and fall in to our primary target group.^[3]

Our mission was to create a concept that would help the foundation change the adolescents of the archipelago's view on, and attributions towards, the foundation and its message. The client wanted a digital solution that would answer to one or more of the following objectives:^[4]

- The youths should learn about the Vegaøyen cultural heritage in a fun and creative manner
- The solution should promote long term interest and commitment towards nature and cultural heritage
- The solution should provide motivation for the youths to go out in the nature and experience the cultural heritage

1.1 Solution

Our solution to this problem is a game for the iOS smart phone platform^[5] that teaches the adolescents about the cultural heritage of the archipelago through an immersive narrative mobile gaming experience. We named it *Oppdrag Vega* (*The Vega Mission*).

In order to connect this digital experience to the nature, the narrative includes breakpoints in which the user has to search for clues in the sense of a scavenger hunt.^[6] These clues are actual physical hardware in the form of high quality IP 66 rated Bluetooth Low Energy nodes giving us a lot of performance advantages for the archipelago's variable weather conditions.^{[7][8]}

1 See Appendix A

2 Næss, 2008, pp. 6-11

3 See Appendix C

4 See Appendix B

5 Note: An android version is planned for next year with a different contractor

6 See Appendix H

7 Bjordal, 2013, p. 6

8 Appendix D

In technical terms, our application is built to be very flexible and serves as a platform to the client in which they quickly and easily can adjust the narrative, the location and function of the nodes, and the in-game images and text—changing the user's experience. The ecosystem of the application is as a whole easily cloned, making it possible for the client to create new narratives and applications with ease.^[9]

Our solution makes use of behavioural—or habit-forming—theory and game mechanics to heighten both the user's interactive experience and the expected client output. The reasoning for this will become clear as the thesis unfolds.

1.2 Research Question

The Vegaøyan Archipelago is standing tall on traditions and cultural heritage; for over 10 000 years—all the way back to the stone age—humans has fought against the extreme weather conditions in the area in order to live closer to natural resources.^{[10][11]} People living in such an extreme area should be proud of what their ancestors have achieved.

Globalization and urbanization can, to these already desolate and isolated areas, be more destructive than the extremest of weather. These destructive forces breaks down the local sense of attachment and identity and takes the long preserved heritage and traditions with it. Areas such as the Vegaøyan archipelago is left to wither and be destroyed by the weather as the habitants move away in search of the more urban self.

In regards to this, I wanted to take a closer look at how we can use our fields of knowledge and expertise to influence the habitants of the Vegaøyan archipelago. Specifically, the adolescents views towards the foundation protecting their heritage and towards the values within the heritage.

Are they under-stimulated in cultural offerings? Are the adolescents fed up with information about their heritage? What tends to their identity? Can we create a digital concept that promotes the values first and foremost, and on their preferred digital platforms? Can we influence the probability of the adolescents choosing a life in the archipelago?

9 See Appendix D

10 "The World Heritage area"

11 Næss, 2008, pp. 14-15

The research question I set out to answer was as follows:

“ *How can behavioural economics help influence adolescents views on cultural heritage and traditions?* ”

1.3 Definitions & Delimitation

Before we can jump in to this question, it is necessary need to establish a couple of baseline definitions, and to delimit the scope of this thesis:

1.3.1 Behavioural Economics

When we talk of behavioural economics, we refer to the definition made by the Oxford Dictionary; «a method of economic analysis that applies psychological insights into human behaviour to explain economic decision-making.»^[12]

Behavioural economics is a method of practice using audience specific, analytical, psychological insight in order to influence individuals decision-making, and thereby influencing what the audience buys. In other words how they interact, and *behave*.^[13] Jolls et. al(1998) expands on this definition in stating that it differ from normal economics in the sense that it explores the actual and not hypothesized implications of human behaviour in relation to economics.^[14]

Although finer aspects of economics are not a part of the scope of this thesis, the psychological aspect that it entails, *is*. Eyal(2014), Duhigg(2012), Kahneman(2011) and Wendel(2014) all discuss how the mind works in terms of habitual behaviour, and this is where I will focus.

1.3.2 Heritage & Traditions

Heritage and traditions is by its definition something that has been passed down for years, decades and centuries to coming generations. This includes entities like knowledge, cultural traditions and buildings of special architectural, natural or cultural value.^[15]

The community we are serving and observing is the only place in the world that has been inscribed to the UNESCO World Heritage List for the cultural traditions of its inhabitants. Building on the last 1 500 years of inhabitation, the unique traditions of tending eider duck, and the interaction between man and nature has firmly established the archipelago's position

12 Oxford Dictionaries, s. v. "Behavioural Economics"

13 Fox, "From 'Economic Man' to Behavioral Economics"

14 Jolls, "A behavioral approach to law and economics", pp. 1473-1491

15 Oxford Dictionaries, s. v. "Heritage"

as a place of great cultural importance.^[16] These cultural traditions are the base of our client's message and work, and is therefore a central part of this dissertation.

1.3.3 Globalization

Örnek defines globalization as; once it has been accomplished, is the process, whereby the entire world uses a free market system and consequently labour, capital, products and services are traded freely. Globalization is [therefore] a three dimensional term, encompassing *political*, *economical* and *cultural* aspects.^[17] The factors I will discuss will inevitably only paint parts of the picture of globalization. For this thesis I will have to limit my scope to mostly only discuss the *cultural* parts of globalization.

Eriksen(2014) defines a total of nine dimensions of globalizing processes, of which we will try to focus on two:^[18]

- The *speed* of transport and communication has increased greatly through the twentieth century. In shortening distances, globalization has made it easier and, for most, a central part of life to seek identity, communication, inspiration and more outside of our local area.
- Second is *mobility* and entails the fact that we seem to always be on the move. As distances have shortened and transportation services become cheaper, the threshold for expatriation from the domicile gets lower.^[19]

Lastly, Eriksen(2014) argues that globalization is not a new phenomena, but recent advancements in, amongst others, information technology realms(speed), can be argued to have intensified this development.^[20] It is these advancements that will be discussed as globalization throughout this thesis.

16 "Vegaøyane — The Vega Archipelago"

17 Örnek, "Globalization and Cultural Identity"

18 Eriksen, 2014, "Dimensions of Globalization"

19 Tharenou, The psychology of global mobility, 2010

20 Eriksen, 2014, "What Globalization is Not"

1.4 Research Methods

1.4.1 Interviews and data collection

In order to be able to gain the necessary insight in to our target group, we conducted a couple of depth interviews with youths in the Vegaøyen archipelago. Furthermore, I have collected data and information from my study colleague's visit and views from the client in order to get a more nuanced spectrum of perspectives.^[21]

1.4.2 Conduction of depth interviews

The Vegaøyen interviews were conducted by Olina Søyland Bru during her visit to the archipelago in April and consists of five girls and one boy of 13-14 years of age at the Vega skole. We asked the adolescents of the depth interviews questions on, amongst others, the following topics:

- The adolescents smart phone/mobile habits
- Their social media habits; networks, actions, activities
- Their sociocultural habits
- The foundation and the heritage

1.4.3 Findings

Due to the scope and scale of this thesis, project and subset of interview objects, we have no way of reaching an unequivocal answer on any of our hypothesises,^[22] but the findings will suffice in indicating to the adolescents behaviour, habits, attributions and future plans.

Summarized, our interview objects show surprisingly little interest in the aspects of the world heritage status, about what it entails and why. Moreover, they have good associations with the fact that the archipelago is listed with a world heritage status, but no clear relation with the foundation.^[23]

21 See Appendix F

22 See Appendix E

23 See Appendix E

1.4.4 Wendel's Phases for Behaviour Design

Wendel(2013) defines four phases for designing and developing a product that promotes behaviour change; *Understanding*, *Discovering*, *Designing* and *Refining*.^[24] Wendel's model and the phases that it describes is an appropriate way of outlining the respective steps of the established question. Wendel's model neatly aligns with our Agile development process, promoting a early product delivery and iteration.^[25] In brief detail, the phases can be defined as follows:

1.4.4.1 Understand

In order to be able to design and to reach our target groups,^[26] we need to really *understand* our targets. We need to gain insight in to how our targets make decisions and how the cognitive mechanisms can support, or hinder, behaviour change.

1.4.4.2 Discover

With the above knowledge in hand, we can further sharpen our target group funnel. We can *discover* the *actor*^[27] and the *action* of our product on which to build the habit loop.

1.4.4.3 Design

Designing for behaviour change involves two major subtasks: the *conceptual design* and the *interface design*. The conceptual design will have to be incrementally built up to ensure success, and the interface design will incorporate the findings from the previous phases.

1.4.4.4 Refine

As soon as a working version is up and running, field testing should be done. The team gathers quantitative and qualitative data about the user behaviour in order to form an initial assessment of how the product is doing. The insight from these data will be used to *refine* the product.

I will use these phases as the stepping stones of my thesis, starting with the already discussed research or *understanding*, moving on to *discovering* when looking at the findings and then over to *designing* in the sense of application structure. Lastly I will make a point for how to *refine*

24 Wendel, 2013, pp. xiii-xix

25 Cohn, 2006, pp. 21-32

26 See Appendix A

27 Note: For our application, the actor is the adolescents contained in our target audience

and iterate the product. Specifically, I will discuss the following aspects of how to structure and influence through the lens of behavioural economics and anthropological theory:

- ① The individual's identity and globalization
- ② The new media, culture and cultural identity
- ③ The archipelago's emigration and expatriation
- ④ The habit loop
- ⑤ Cognitive decisions and game mechanics
- ⑥ The application model and the behavioural platform

2 *Results*

2.1 **One place**

One striking aspect of our project is its very small expected initial reach. The primary target group consists of no more than 119 persons^[28] distributed over a total area of 165km². Only accessed by once-every-hour boat, and 15-20 kilometres from the nearest town, the habitants of the archipelago's largest island are very isolated.^[29]

Yet, through a rapidly globalized world, the adolescents of the archipelago are able to both give and get impressions and influences from different geographic and cultural regions of the world.^[30]

In a world that, as Anthony Giddens [puts] it; *is becoming one place*,^{[31][32]} most of us are being united in a global system although we are geographically widely dispersed.^[33] Through systems like the internet, social media, and global markets, habitants of the Vegaøyen archipelago—as well as most other communities—are able to engage, exchange and communicate globally all alongside their more localised processes.^[34]

28 See Appendix C

29 Store Norske Leksikon, s. v. "Vega"

30 Eriksen, 2014, "Connections"

31 Giddens, 1990, "Introduction"

32 Giddens, 1990, "Riding the Juggernaut"

33 Eriksen, "Engaging with the world"

34 Eriksen, 2014, "Disembedding"

The identity of this connected being is therefore no longer bound to the local environment and surroundings when creating and managing its identity.^[35] What is then to say that the adolescents of the Vegaøyen archipelago will not favour a more urban identity and rather than that of their ancestors and family?

The culture, the heritage and traditions of the archipelago would be left to the current generations as the youths emigrated. The values of the archipelago would die out with the aging of the late generations, and it is safe to say that it would stand the chance of going extinct. The population figures of the Vega municipality has seen a steady decline from 1661 inhabitants during the first recordings in 1986 to 1225 in 2014. Most prominently is the decline in the 0-24 and 25-34 age groups.

Overall the grade of decline almost directly correlates with age group, making 0-24 the most prominent and 80+ the least, with only the 45-69 age group indicating a ever so slightly positive linear trend.^[36] This stands to indicate that the decline is most likely due to the younger generations expatriating.

During our last visit to the Vega island, we conducted a focus group interview with adolescents between the age of 12-15 in order to try to explain some of these indications and their relation to the heritage of the archipelago. The findings from this interview indicate that the aforementioned effects are starting to get in to motion:^[37]

- The youths are heavy users of smart phones, but mostly use them for pastime applications.
- The youths know their own local nature environment, but don't explore much.
- There is great distance between the youths knowledge of the heritage, and what they perceive as their own heritage.
- The youths have no plans for moving back to the archipelago after finishing upper secondary school

35 Eriksen, "Engaging with the world"

36 See Appendix C

37 See Appendix G

2.1.1 Smart phones

The adolescents aforementioned smart phone habits are not surprising; it correlates with Statistics Norway's (Statistisk Sentralbyrå) national trends on mobile internet usage, and with that of the anthropologists' globalized world.^[38] Statistics Norway's data^[39] show dramatic increase in internet use on mobile phones from 9% of youths between 13-15 of age using internet on their mobiles in 2009, and to about 80% of the youths in 2013.^[40] Access to smart phones for adolescents between 9-15 years increased by approximately 20% from 2012 to 2014.^{[41][42]}

During the same approximate period Apple has released five generations of their iPhone, developers have released 1,25 million applications to the App Store, and users have downloaded over 85 billion applications for their phones and tablets.^{[43][44][45]}

The adolescents of the focus group interviews and of our depth interviews are heavy users of *Snapchat*; a social platform for sharing on-the-spot images and videos to friends and other followers,^[46] and also of *Facebook*; the worlds largest social network.^[47] Our depth interviews also reveals the social image platform *Instagram*^[48] to be popular.^[49]

Looking back at Eriksen(2014), it is safe to say that social platforms like *Facebook*, video services like *YouTube*, streaming services like *Spotify* and *Netflix* are all driving forces in enabling individuals to make their own identity based on cultures that reach far beyond their immediate geographical reach.^{[50][51][52]}

38 Eriksen, 2014, "Communication Networks"

39 Note: Statistical data gathered by Statistics Norway, referenced by Medienorge

40 "Bruk Av Internett På Mobiltelefon En Gjennomsnittsdag"

41 "Norsk Mediebarometer 2012"

42 "Norsk Mediebarometer 2014"

43 "Apple - Press Info - Product Images & Info - iPhone"

44 "Apple App Store: number of available apps 2008-2014 | Statistic"

45 "Apple App Store: number of downloads 2008-2014 | Statistic"

46 Bilton, "Disruptions: Indiscreet Photos, Glimpsed Then Gone"

47 "Social Networks: Global Sites Ranked by Users 2015 | Statistic"

48 "FAQ"

49 See Appendix E

50 Giddens, 1990, p. 20

51 Eriksen, 2014, "Speed"

52 Eriksen, 2014, "Connections"

2.1.2 The definition of culture

Initially I asked the question of whether the youths are under stimulated in cultural offerings, and if this can explain their expatriative behaviour. It might be that the definition of what culture and cultural traditions is, has become outdated.

Culture in its old definition stands as; a society's shared way of life, language, religion, customs and so on. The major issue with this definition is that the boundaries drawn between *cultures* are always more or less arbitrary; it is rarely accurate to claim that members of any society share a way of life.^[53]

In the instance of the Vegaøyen archipelago, the older generations then does not necessarily share "the way of life" with any member of the more younger generations.

Then in the age of global communications and postmodern fragmentation of society, culture is that which makes communication possible, and it is also the generated result of ongoing processes of communication. It is then not a fixed entity, nor can it be delimited to a community of individuals.^[54] Tomlinson(2000) argue that what we call *identity* may not be universal, but just a modern way of organizing *cultural experiences*.^[55] These *experiences* has a part in establishing their attachment to the local culture.

When we then look back at the individuals inhabiting the archipelago, the *cultural identity* they address to their own self is crucial to influencing their apparent trending behaviour.^[56] And their cultural offerings as we set out to find during our interviews becomes a completely different story. The adolescents are receiving (and sending) cultural input far beyond the reach of the old definition of culture.

The social-psychology of attachment to locality is a powerful phenomenon, and as Eriksen(2014) argue, globalization leads to both homogenization and heterogenization of cultures, individuals and societies and their attachments to each other.^[57]

When looking at Norway as a whole, it has an interesting constellation and combination of both being a modern, western and rich country, but at the same time large distances and a diverse topographic profile isolates and fragments it into places such as the Vegaøyen archipelago and its surroundings. This can arguably lead to homogenization of the adolescents in regards to the

53 Eriksen, "Engaging with the world"

54 Eriksen, "Engaging with the world"

55 Tomlinson, 2000, "Globalization and Cultural Identity"

56 Eriksen, 2014, "A Grammar of Identity Politics"

57 Eriksen, 2014, "Seven Key Debates About Globalization"

country, globe and culture, and at the same time heterogenization of the Vegaøyian society.

2.1.3 Emigration

The aforementioned effects of globalization can potentially explain our findings from the focus group with the adolescents of Vega. As mentioned earlier, the indicated municipal expatriation and emigration—possibly due to lack of local attachment—weakens the sustainability of the Vegaøyian archipelago's rich cultural heritage. Tharenou (2010) argue that people with strong cultural identity have positive feelings about being a citizen of their home country, frequently think about how central their nationality is to their identity, and have strong ties and bonds to their compatriots. Our indicated situation is of the opposite sign.^[58]

Bjordal(2013) wrote her master thesis on the effects of the Vegaøyian archipelago's world heritage status, and indicates that one of the municipality's core issues is its *lack* of people. The archipelago needs to attract people to live there, but this conflicts with some of the adolescents aspirations.^{[59][60]} She indicates further that the marketing of the archipelago creates a paradoxical situation because marketing would attest to being both the problem and the solution to the problem.^[61] Marketing will possibly attract tourists to visit and others to live there, but Bjordal's expatriated informants^[62] lists the new-found tourism industry in the archipelago as part of the problem.^[63] Our research indicate that the current generation of 13-14 year olds does not explicitly share views with the findings of Bjordal(2013).^[64]

Nonetheless, if the adolescents feel the need to leave their home in order to ascertain their hopes, dreams and aspirations, who are we to tell them otherwise? I will come back to answer this.

2.1.4 Inherently Boring

Several sources, including our contact person with the client, Lena Fagerwing, attests to the fact that life in the Vegaøyian archipelago is inherently less interesting than life in urban environments.^[65] And if the recent findings regarding the modern cultural identity, and which kind of felt belonging the adolescents might have are any indicator, the adolescents can arguably be feeling the same way.

58 Tharenou, The psychology of global mobility, 2010

59 Bjordal, 2013, pp. 1-8

60 See Appendix E

61 Bjordal, 2013, pp. 70-71

62 Bjordal, 2013, p. 1

63 Bjordal, 2013, pp. 47-51

64 See Appendix E

65 See Appendix F

In order to change or influence this trend we are dependent on changing the adolescents *cultural identity*.^[66]

2.2 Tapping in to traditions

I have already emphasized the richness of the archipelago's cultural traditions, and not the least, the uniqueness of it. As has also been made clear, it is not that the adolescents doesn't necessarily understand this uniqueness, they might even understand the uniqueness more thanks to globalization.^{[67][68]} But their individual priorities may lay elsewhere due to the shift in their *cultural identity*.

Going back to the previous raised question on who we are to tell the adolescents to not follow their aspirations, I will say this: A product or initiative that enforces any set behaviour, on anyone, is likely to miss its target.^[69] Rather, we should focus on creating a product for the adolescents of the Vegaøyen archipelago that will enable them to experience their own cultural heritage and traditions in a new way.^[70]

2.2.1 Experience Economy

Pine et. al(2011) argue for the importance of experiences, and for it to be the next logical step in economical offerings.^[71] They argue that these experiential offerings are not about entertainment but about *audience engagement*.^{[72][73]}

In engaging the audience we can create experiences that have a higher level of personal *meaningfulness*. By specifically focusing on how—and why—the audience spend, and should spend, their time with our product we can ensure meaningfulness as well as *enjoyment*. Pine et. al(2011), as well as Black(2005) argue that any dimension of enjoyment usually translates into the experience being more memorable and immersive.^{[74][75]}

Are we going to change our individuals' cultural identity, we inherently need every experience and interaction with our product to be memorable and to have and imply meaning. We need to

66 Eriksen, 2014, "A Grammar of Identity Politics"

67 Eriksen, 2014, "What Globalization Is Not"

68 Eriksen, 2014, "A Grammar of Identity Politics"

69 Watkinson, 2013, pp. 127-137

70 Watkinson, 2013, pp. 113-123

71 Pine, 2011, "Welcome To The Experience Economy"

72 Pine, 2011, pp. 27-42

73 Pine, 2011, "A New Source of Value"

74 Pine, 2011, "Issues Surrounding the Experience Economy"

75 Black, 2005, pp. 158-177

let the adolescents *experience* take center stage, and convey our message through its subtext.^{[76][77]}

In this scenario, behavioural and habit-forming analysis, targeting and economics become the means. We need to make the audience feel *enjoyment* with our product,^[78] we need to engage their senses and their minds, and we need to ensure prolonged exposure and interaction with our product in order to change and influence their views and attributions.^[79] And all this, in order to influence their cultural identity and felt local attachment.^[80]

2.3 Building the habit loop

Before we can jump further in to the field of behavioural economics, we need to establish the grounds for the psychological aspects of the field, and to make the point for its importance. And the first step in this, is understanding how the brain handles habits.

The brain is constructed in to two separate modes of action; the intuitive, emotional, blazingly fast and automatic mode, known as System 1, and the deliberative and conscious mode, known as System 2.^[81] Our brains can rationally analyse our way through simulations and complex problems with System 2. Unfortunately System 2 is woefully limited in how much information it can handle at a time, and thus relies on System 1 for much of the real work of thinking.^[82]

System 1 works by learning patterns, that it can automate; creating *habits*.^[83]

These habits, wired in to our brains have by researchers at MIT been identified to consist of three components;^[84]

- ① **Cue:** *Something; time, place, senses, triggers a cue in an individual's brain*
- ② **Action:** *The content of the habit unfolds and gets executed, for most actions, completely automatic*
- ③ **Reward:** *The brain learns to expect some sort of reward for the executed action*

76 Pine, 2011, "Setting the Stage"

77 Watkinson, 2013, pp. 66-67

78 Pine, 2011, "Enriching the Experience"

79 Watkinson, 2013, p. 99

80 Eriksen, 2014, "Identity Politics as a Response to Globalization"

81 Kahneman, 2011, pp. 20-29

82 Wendel, 2013, p. 3

83 Wendel, 2013, p. 3-22

84 Duhigg, 2012, "The Habit Loop"

In the words of Duhigg(2012): Habits aren't destiny. Habits can be ignored, changed or replaced. But the reason the discovery of the habit loop is so important is that it reveals a basic truth: when a habit emerges, the brain stops fully participating in decision making. It stops working so hard, or diverts focus to other tasks. So unless you deliberately fight a habit—unless you find new routines—the pattern will unfold automatically.^[85]

This will then work in two ways; if we want to create a completely different habit and behaviour than what we believe the users to already have, we will have to design a pattern, including all the three components, that can be inserted in to a individual's life and routine.^[86] If we on the other hand want to change a current behaviour, we need to identify the routine; the components of the loop, and swap out the content of the step we want to change.^[87]

It is fair to say that focusing on habits can greatly improve engagement and retention levels of products and applications,^[88] but it is though important that they stay on the right side of *exploitation*. The ethical issues with behavioural products can be many, for example as in Duhigg(2012) on the gambling industry that heightens the number of almost wins to promote continued, addictive playing.^[89]

2.3.1 Oppdrag Vega for iOS

As we are only going to use behavioural theory as one of the tools and means in creating a product that is engaging, the ethical and exploitative issues arguably does not apply. We are not in the business of taking advantage of users but that of enhancing the user's and individual's *experience*.

In our application we have taken behavioural theory in to use in order to better promote a clear and felt *enjoyment* of engagement with the application and implementing positive reinforcement to a correctly executed action. The implementation of our habit loop encompasses the following aspects:

- First of all, following Wendel(2013), we need to implement a *trigger* for our *action*. The *action* in our case being opening and interacting with the application. We have implemented the *trigger* in two senses; push notifications when the adolescents are within the range of the hardware,^[90] and timed local notifications

85 Duhigg, 2012, "The Habit Loop"

86 Duhigg, 2012, "Appendix A: A Reader's Guide to Using These Ideas"

87 Duhigg, 2012, "Step Two: Experiment with Rewards"

88 Eyal, 2014, pp. 72-100

89 Duhigg, 2012, "The Neurology of Free Will"

90 See Appendix D

to remind them of their task at hand^[91]

- Second, and to round the loop, we need to induce the brain the *reward*. In our application this comes in the form of badges and currency when an action is completed and the game progresses

2.4 What the mind does next

When we talk about how the brain works, it is worth noting that our conscious selves usually does not *choose* what to do next. Most of our daily behaviour is governed by our intuitive System 1 mode. We're acting on habit, on gut instinct or on simple rules of thumb. The cognitive system System 2 only become engaged when we are in a novel situation, or when we intentionally direct our attention to a task.^[92]

Even though we're not necessarily deciding what we do, we're always *thinking*. For example; the System 1 handles the act of walking, ensuring that the crossing of a road is safe, and avoiding crashing in to someone. At the same time, we might be *thinking* of something completely different; maybe what to do when we get to our destination.^{[93][94]}

In our smart phone world, people have grown accustomed to endless habits for procrastinative and pastime actions, such as scanning social media channels, playing mindless games or taking posing pictures of them self.^{[95][96][97]}

If we create a product that more or less creates and automates the act of learning about the cultural heritage of the Vegaøyan archipelago, we need to make sure that the user performs some form of cognitive decision making as well.^[98] If not, we might end up in an application that falls under the same pastime regime as mindless games.

91 See Appendix D

92 Wendel, 2013, pp. 6-14

93 Kahneman, 2011, pp. 3-4

94 Watkinson, 2013, p. 99

95 Honeiah, "Are Apps Here to Stay?"

96 Campbell, "The danger of too many selfies"

97 Cook, "Brain Games are Bogus - The New Yorker"

98 Jolls, "A behavioral approach to law and economics", pp. 1477-1480

2.5 Deploying game mechanics

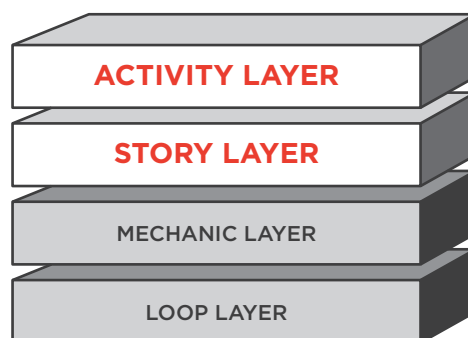
One way of doing this is to deploy certain game mechanics that enforces the user to perform a cognitive decision. When talking about game mechanics, Adams et. al(2012) argue for internal economies as essential parts of a broad range of games. The notion of internal game economy includes both standard currency and everything from weaponry and resources to chess pieces.^[99]

When inserting a game currency, in our case by making some in-game tasks cost fictitious money the user has to decide on whether or not to commit to the use of the currency, performing a cognitive decision in the user's head. As mentioned above, we can thereby better ensure that we have the attention of the user and that he or she is not running on a complete autopilot. Every user's experience, attributions and inherent relation with the foundation's message and the cultural heritage is subjective^[100] and the best way to ensure a functioning product is to field test and iterate over the findings.^[101]

2.6 Application Model

Following the aforementioned models and concepts, it is possible to stack the aspects of our application in to one all-encompassing model of layers. From the most internal, both at application and human level, at the bottom, and the most external at the top.

At the bottom-most layer is the *loop layer*, ensuring user retention by promoting habitual change. Above is the *mechanic layer*. This layer handles the application's aforementioned game mechanics, adding incentives like game currency and push/local reminders. Next is the *story layer*. This layer includes all the interface elements, the application narrative, and is the first physical and visual layer. On the top is the *activity layer* which includes the project's physical bluetooth hardware that the users interact with out in the open nature:^[102]



99 Adams, 2012, pp. 59-78

100 Castells, 2013, pp. 137-164

101 Cohn, 2006, pp. 24-32

102 See Appendix A

2.6.1.1 Loop Layer

When building products that's intention it is to alter or create behaviour, designing towards the intended action and loop, is essential, as we have seen through Wendel(2013), Duhigg(2012) and Eyal(2014). This layer contains mainly the trigger aspect of the loop.

2.6.1.2 Mechanic Layer

On top of creating a loop we will add the game mechanic of in-game currency, in it's lightest form. We need the currency to make the users feel a sense of used *effort*, and inducing a System 2 decision. The currency is fictional and will only be in place to achieve this decision making effect.

The active System 2 decision contributes to the previous layer by making sure that the user makes *active* decisions. It makes the user an *active part* of bringing the narrative and story forward; the user becomes responsible for progression.^[103]

2.6.1.3 Story Layer

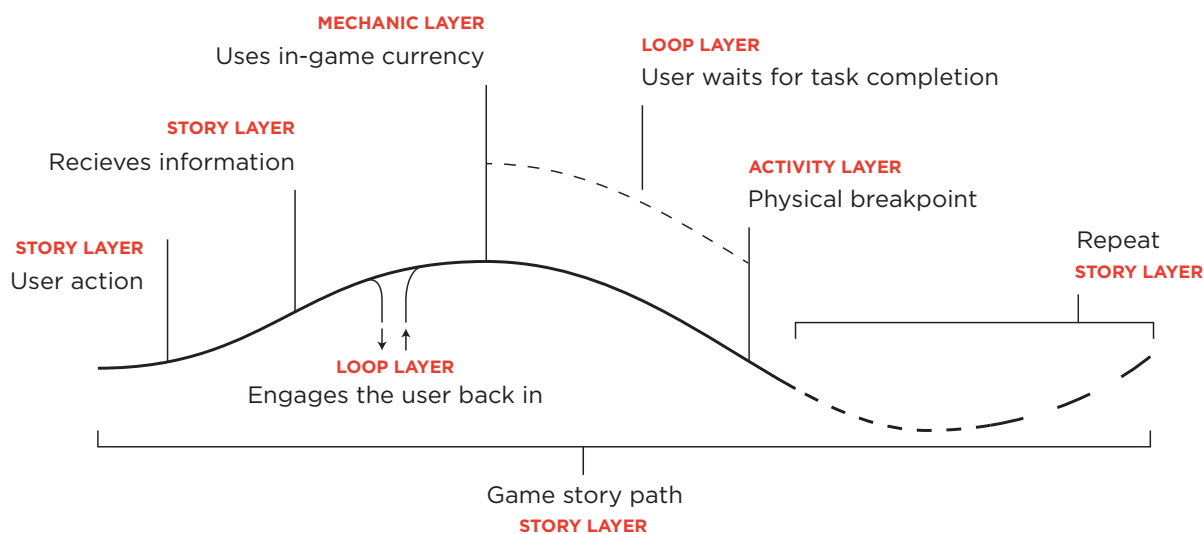
Following the last, this is where the user interacts with the product, interacts with and is told the story. Gradually, the narrative unfolds, the user takes actions, and uses in-game currency.

Building on a narrative that incorporates the heritage and the traditions of the Vegaøyen archipelago in its dramaturgical curve, the story layer is where the product changes the adolescents attributions and views.

2.6.1.4 Activity Layer

Lastly we need to engage the users *in* the nature, as it *is* the heritage and the traditions. And unlike our product, the traditions of the archipelago are not digital. To activate the adolescents, the story layer will provide breakpoints in which the user has to actively go out in to the nature and the surroundings. The breakpoints acts as part of a scavenger hunt, for *clues* to the story.

In illustrating the content of these layer we can create a new model and more visual representation of how they relate and combine the concept as a whole:



2.7 Concept as a platform

As a final note, when building our product and iterating our concept, it becomes clear that it's biggest strength is as a platform. As long as content is provided for the story and activity layers through interacting with the product's back-end system, the product can engage its users in different kinds of narratives and activities.^[104] This also becomes the quickest way of iterating on the content of our layers and to the audience's experience with our behavioural product.

3 Conclusion

“ *How can behavioural economics help influence adolescents views on cultural heritage and traditions?* ”

As we have seen culture, in its definition as the collective result of a society's way of life, is becoming outdated due to the way new and faster means of communication has globalized the world. Culture and the individual's cultural identity is no longer bound by geography.^[105]

The adolescents then diverse selection of cultural input reasonably enough influences their identity away from the local culture. Combined with the lowered threshold for mobility, emigration and expatriation is also reasonable. In order to influence this behaviour, we need the *experience* to come from within. And in order for this to happen, our job is to provide

104 See Appendix D

105 Eriksen, 2014, "Disembedding"

engagement and enjoyment.^{[106][107][108]}

In conclusion behavioural economics and habit-forming theory from the definitions made by Kahneman(2011), Wendel(2013), Duhigg(2012) and Eyal(2014) serves as our means in creating an engaging personal experience for the adolescents of the Vegaøyen archipelago. Alongside the habit loop, we need an engaging narrative. By using these two main elements we will be able to influence the adolescents thoughts and attributions towards the foundation, its message and the heritage.

For my oral clarification I will focus on these two last discussed findings; the application model and the platform that it creates. I will further discuss the implications this has for the client's work and objectives.

4 *Appendices*

Ⓐ Client Contract	APPENDICES/CLIENT CONTRACT.PDF
Ⓑ WEE2DM Paper	APPENDICES/WEE2DM 100402.PDF
Ⓒ Population Trend	APPENDICES/POPULATION TREND.PDF
Ⓓ System Specification	APPENDICES/SYSTEM SPECIFICATION.PDF
Ⓔ Depth Interviews	APPENDICES/DEPTH INTERVIEWS.PDF
Ⓕ Research Data	APPENDICES/RESEARCH DATA.PDF
Ⓖ Focus Groups	APPENDICES/FOCUS GROUPS.MP3

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106 Eriksen, 2014, "Mixing"

107 Pine, 2011, "Setting the Stage"

108 Tomlinson, 2000, "Globalization and Cultural Identity"

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*I guess this is my dissertation
Homie, this shit is basic
Welcome to graduation*