Insight of Nudging towards in Changing Behaviour



Bachelor's thesis

HAMK Valkeakoski, International Business

Autumn 2018

Mari Rajala



International Business HAMK, Valkeakoski

Author Mari Rajala Year 2018

Title Insight of Nudging towards in Changing Behaviour

Supervisor Annikka Lepola

TIIVISTELMÄ

Tutkimuksen tarkoituksena oli ymmärtää mikä on Nudgen eli tuuppaamisen rooli käyttäytymisen muutoksessa ja miten tuuppaus voi tukea sitä. Jotta tutkimuskysymykseen voitiin vastata, käytettiin menetelmänä kirjallisuuskatsausta ja teemahaastattelua. Tutkielman teoreettinen viitekehys pohjautui käsitteisiin tuuppaaminen, käyttäytymistaloustiede, valinta-arkkitehtuuri ja kaksoisprosessoinnin teoria. Tämän tutkimuksen tavoitteena oli vastata tutkimuskysymyksiin: miten tuuppausta voidaan käyttää prosessina käyttäytymisen muuttamisessa, millaisia vahvuuksia tai mahdollisuuksia tuuppauksella on käyttäytymisen muutoksessa ja mitä kokemuksia tapausorganisaatiolla on tuuppauksesta?

Kirjallisuuskatsauksen lähtökohta oli tutkimuksen keskeiset käsitteet ja niiden mukaisen kirjallisuuden valinta. Ohjaavana tekijänä oli kirjallisuuden laadullinen arviointi, yhteenveto ja tulosten tulkinta. Kirjallisuuskatsaukseen valikoitui yhteensä seitsemän tutkimusartikkelia. Teemahaastatteluun osallistui yksi henkilö. Tämä tutkimus on laadullinen.

Keskeisimmiksi havainnoiksi osoittautui menetelmän edullisuus ja sen tehokkuus käytöksen muutokselle, kun tuuppaus toteutettiin onnistuneesti. Lisäksi tuuppauksen tulisi olla läpinäkyvää heille, joita tuupataan. Tuuppaus voi olla hyvinkin pieni teko, joka muuttaa käytöstä. Se on riskitön kokeilla, ja lopulta käytöksen muutos on aina henkilökohtainen.

Tulosten mukaan tuuppaus on mahdollisuus muuttaa käytöstä. Tuuppaus voi olla myös väline markkinoinnissa ja ympäristön muutosten edistämisessä. Se voi olla mahdollisuus, kun halutaan vähentää jätettä tai opettaa ihmisiä huolehtimaan ympäristöstä. Tuuppaus lisää tietoa asiakkaista, työntekijöistä ja ihmisten tavasta tehdä päätöksiä. Tuuppaus haastaa tekemään yksinkertaisia viestejä, jolloin tavoite on helppo saavuttaa.

Avainsanat Nudge, Tuuppaus, Käyttäytymistaloustiede, Valinta-arkkitehtuuri, Kaksoisprosessoinnin teoria

Sivut 39 s. + liitteet 6 s.



International Business HAMK, Valkeakoski

Author Mari Rajala Year 2018

Subject Insight of Nudging towards in Changing Behaviour

Supervisor Annikka Lepola

ABSTRACT

The purpose of this thesis was to understand, what is the practical role of nudging in changing behaviour and how the nudge as a practical tool could change the behaviour by drawing up analysis of literature review and theme interview. The main concepts of the thesis were nudge, behavioural economics, choice architect and dual process theory. The aim of this thesis was to answer to the research questions: how can nudging be used as a process in changing behaviour, what kind of strengths or possibilities does nudging have in changing behaviour and what kind of experiences does nudging present for the case organization?

The literature review process followed a system, which consisted of framing the main concepts of the thesis, identifying relevant literature, assessing quality of the literature, summarizing the evidence and interpreting the findings. In the end seven research articles were picked up for literature review analysis. A theme interview was conducted by one person. This thesis is a qualitative research.

The central findings were that nudging is a cheap and low cost method. Finding right kind of intervention for nudging was guaranteeing efficient result. It was also said that nudging should be transparent for those being nudged. Nudging can be a very small act, which changes the behaviour. It is a risk-free experiment. Eventually change of the behaviour is personal.

The findings are showing that nudging has strong potential for changing behaviour. Nudging could be useful for marketing and environmental changes. Nudging could be the solution, if you want to reduce waste or teach people to take care of environment. By nudging you will learn more about your customers, employees and in general how people make decisions. Nudging challenges to make the message easy to understand and action easy to achieve.

Keywords Nudge, Behavioural economics, Choice architecture, Dual process theory

Pages 39 p. + appendices 6 p.

CONTENTS

1	INTF	INTRODUCTION					
	1.1	Backgr	round	1			
	1.2	Object	tives and the research questions	2			
	1.3	-	ain concepts of the thesis				
	1.4		rch methods				
2	OVF	RVIFW	OF NUDGE THEORY	5			
2							
	2.1		tion of Nudge				
	2.2		ioural economics				
	2.3	,					
	2.4		e architecture				
	2.5		e and the manipulation of choice				
	2.6		Framing nudging				
	2.6	Most common types of nudging					
	2.7		cal guides of nudging				
		2.7.1	Mindspace framework				
		2.7.2	East framework				
		2.7.3	A practitioner's guide to nudging				
		2.7.4	Conclusion of practical guides of nudging	18			
3	LITERATURE REVIEW						
	3.1		sis of the literature review				
		3.1.1	Changing behaviour	20			
		3.1.2	Using interventions and efficiency of action	21			
4	CURRENT SITUATION						
	4.1	Analys	sis of the focused interview	23			
5	STRENGTHS AND CHALLENGES OF NUDGING						
5.1 Strengths							
			The concept of nudging				
			Decision making				
		5.1.3	Efficient messages				
		5.1.4	Changing environment				
	5.2		nges				
		5.2.1	Influencing behaviour and choice				
		5.2.2	Elaboration	29			
6	RECOMMENDATION						
	6.1	A prod	cess in changing behaviour by nudging	30			
	6.2 Planning interventions						
		•					
7	CON	ICLUSIC	DN	32			
חר	CCDC	NCEC		26			

Appendix 1 Summary of literature review

Appendix 2 Interview questions

Appendix 3 Permission for the research Appendix 4 Information to interviewee

1 INTRODUCTION

This chapter introduces the background, research questions and the objectives of the thesis. In addition, it also justifies the topic definition and the main concepts of the research.

1.1 Background

Kahneman said in his seminar 2008: "It turns out that the environmental effects on behaviour are a lot stronger than most people expect" (Verity 2012, 75).

Behavioural economics leads us to believe that almost all people make choices and act in ways that are in their own best interest or the best interest of the organisation where they work. This is based on how economics effect people to act in a predictable way and direction. It is steering people to make better choices and "push" the unconscious system of brain in a non-intrusive way to change behaviour. This all should happen without taking away the freedom to choose. (Nielsen & Kepinski 2016, 10.)

The question is, how much can a person be indirectly influenced by other people? We might be already aware that peer pressure influences the actions of others, but what about influences that are not so direct? For instance, graphic warnings do not override individual choice, and while they are not neutral and meant to steer, people can ignore them if they want. There are easy to find graphic warnings that are meant to discourage texting while driving, smoking and gambling. (Sunstein 2014, 151.)

People make a lot of decisions in everyday life. Should they make decisions by themselves or should they be forced into making a better decision? In 2008 the book: Nudge: Improving Decisions about Health, Wealth and Happiness by Richard Thaler and Cass Sunstein was published. The book was a big success in the academic and business world. A nudge can be literally translated as a little push or poke. When people follow the gentle push or poke, they will make decisions that match better with their individual long-term goals and which has a better outcome for society as a whole. It is important to remember that a proper nudge does not limit the available options and does not force anyone. Nudges are small changes in the environment of the decision maker, which can cause important changes in behaviour. Nudging is a quite new behavioural concept where people could be gently pushed into making the best decision. (Thaler & Sunstein, 2009, 4.)

Nudging was one of the topics in Responsible in Gaming – a seminar in Helsinki in autumn 2015. The Responsible Gaming -seminar is a part of the European Lotteries operation. The European Lotteries is an umbrella organisation of the national lotteries games of chance for the public benefit. (European Lotteries 2018.) In the seminar was a speaker, who was a BVA Healthcare Director from France. Her presentation of nudge was very interesting. There was an example of nudge, which was decreasing littering in the streets in Copenhagen. Copenhagen officials were frustrated to convince people that it was their duty to stop littering. They decided to place green footprints on the ground, pointing the way to the nearest garbage bin. This study showed a 46 % decrease in littering in the streets where the green footprints were in use. There were also other interesting examples of nudging, but the main thing was that her team was going to start a project, which was an assessment study of the game named live Amigo. The purpose of the project was to ensure that the game was in the line with the responsible gaming policy of the case company. (FDJ-Rapport 2016, 48.) Unfortunately, it was not possible to research more of the company which was giving the presentation in the seminar. After the seminar it was interesting to find out that nudging was a very popular issue abroad, but not in Finland. It was a little bit surprising, because nudge seemed to be an amazingly good concept.

Finding a case organisation, which would have their own experience of nudging was difficult. Eventually it a great possibility to co-operate with the Guarantee Foundation was offered. The Guarantee Foundation offers telephone and chat counselling, guarantees of restructuring loans. It also offers micro-loans, promotes and develops means of assistance in financial management and social security as well as voluntary debt arrangements. The operations are mostly financed by the Veikkaus. (Takuusaatiö 2018.) Nudging is a topical issue for the Guarantee Foundation because they were about to start the project in year 2018. They are trying to find out the various possibilities in their own business by using nudging.

Benefits for companies could be wide. Nudge is a new method to inspire good decision making, it drives people to ask themselves what they are doing and how they are acting rightfully. In all business it is important to understand customers and their needs. The nudge approach is a junction between behavioural sciences and economy.

1.2 Objectives and the research questions

This research aimed to explore if nudging as a tool can be used to change people's behaviour and the case organizations experience of nudging. To find an explanation for the research question the thesis was conducted by literature review and theme interview.

The purpose of this thesis was to understand, what is the practical role of nudging in changing behaviour and how the nudge as a practical tool could change the behaviour.

The research questions were:

- 1) How can nudging be used as a process in changing behaviour?
- 2) What kind of strengths or possibilities does nudging have in changing behaviour?
- 3) What kind of experiences does nudging present for the case organization?

The results of this thesis can be useful to better understand how nudging can be a way to change people's behaviour and what are the benefits for using nudging. Taking care of your environment is an obvious field of which anybody could agree about the use fullness of nudges. But could nudging be the best direction in other areas also?

1.3 The main concepts of the thesis

The theoretical framework of this thesis is shown below. The following key concepts create a picture of the focus areas of the thesis. The empirical part of the thesis is focusing on finding out the practical role of nudge by literature review and interview.

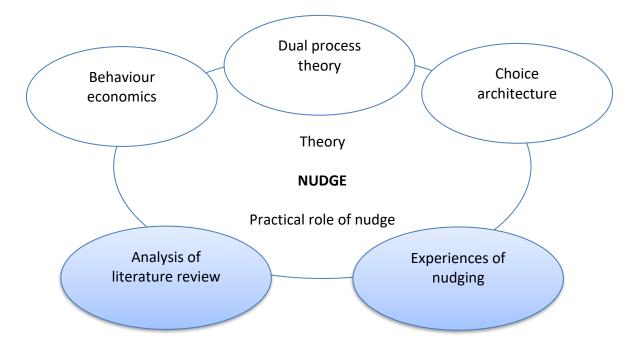


Figure 1. The theoretical and empirical frame of the thesis

Nudge is a low cost tool, which gently push people into certain direction. According Thaler and Sunstein (2009, 6) small and even meaningless details could influence a lot of the peoples behaving. They describe that

nudge is as any aspect of the choice architecture that alters people's behaviour in the certain way without forbidding any options or significantly chancing their economic incentives. (Thaler & Sunstein 2009, 6.) Hausman and Welch (2010, 126) see that nudging is influencing decision making and directing people to the best choice, without using any traditional policy instruments.

Behaviour economics is a science, which uses psychological experimentation to develop theories about the human decision-making. Behaviour economics disclose that most of our choices are not the result of careful thinking. People are influenced by available information in memory, automatically generated affect and salient information in the environment. (Samson 2014, 9.)

Dual process theory suggests that the human brain functions in ways that invites for distinction of two kinds of thinking. One is automatic and intuitive, the other one is reflective and rational. People's behaviour can be a result from the automatic or reflective thinking. (Thaler & Sunstein 2009, 19-22.)

Choice architecture is a way to improve people's decision by carefully structuring how information and options are presented to them. The goal is to present choices in that way, which support to choose the alternative, which is the best choice for example for people's health or wellness. (Beshears & Gino 2015, 6.)

1.4 Research methods

According Tuomi and Sarajärvi (2002, 11) the method discourages the information generated in the study, but the methodology asks whether this is justified and whether the concealed method is sensible. In this study, the significance of methodology is primarily related to the ability to solve the set research problem. The most methods under the qualitative umbrella imply an emphasis on process and meanings that are rigorously examined but not measured in term of quantity, amount or frequency. Qualitative data provide depth and detail through direct quotation. It also provides careful, thick description of persons, events, situation, interactions and observed behaviours. Qualitative researchers seek instead illumination, understanding and meaning making. Analysis of qualitative research seeks to capture the richness of peoples' experience in their own term. It includes the non-numerical organisation of data to discover patterns, themes and qualities found in field notes, transcripts, interviews, diaries and cases. (Eskola & Suoranta 2008, 13-14.)

For this reason, a qualitative study was chosen as a research approach for this thesis, as it was intended to understand the experiences, perceptions and the possibilities of nudge theory. Vilkka (2015, 120) also points out that the qualitative research is not aimed at finding the truth about the

subject, but that it reveals and reveals through the research such things about people's actions that are imminent in immediate observation.

A literature review and focused interview were the two methods used to answer the research questions. The qualitative research operates by specifying individual cases, and in this study, the seven articles that is the subject of data collection is seen as individual cases. Articles were analysing by means of theory-based content analysis. In this study, writers and articles of articles represent their point of view in the matter investigated. The study also looks at the individual aspects of the interviewing perspective and the experience of the subject. According to the principle of qualitative research, the researcher's active contribution to the material is kept to a minimum and the material guides the direction of the research. (Tuomi & Sarajärvi 2002, 116.)

The focus of the literature review was to assist the research questions as well as potentially support with the analysis of problems, strengths and challenges. The approach for research by literature review was not a typical, but it was supporting the current situation and giving aspects from various sources. Using the literature review, it was possible to understand better the current situation of the practical role of nudge and how can nudging be used as a process in changing behaviour. Interview allows to research experiences of the nudge theory. Finding the case organization was a quite difficult because they had to have their own experience of nudging.

2 OVERVIEW OF NUDGE THEORY

This chapter introduces the essential literature of nudging in the theoretical frames of references. Since the term nudging introduced in 2008, a lot has been written about the concept. The term nudging was founded, when Richard Thaler and Cas Sunstein published their book about Nudge. But as with every concept, it has caused some critics as well. This thesis would focus on the nudge and what is the practical role of nudging.

2.1 Definition of Nudge

The concept nudging has been explained different ways in the literature. Thaler and Sunstein (2009, 6) define a nudge as:

"A nudge, as we will use the term, is any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates."

Hausman and Welch (2010, 126) describes nudging as influencing decision-making and directing people to the best choice, without using traditional policy instruments like taxes and law, and without limiting the options or making alternatives more costly in terms of time, trouble, social sanctions and so forth.

Nudging in this definition is gently push people in the right direction with decision-making, while they are still free to choose for an option, which they are not pushed into. Because of that people will most of the time not even notice that they are being nudged. They feel more that they make their own choice, which is not influenced by others.

The basic idea in nudging is that you are influencing in issues, when people are not doing certain choices, which would increase them and society wellness. Nudges can see interventions that guide people in certain directions but also allow them to go their own way. Before nudging you must know which way you would like to guide people's behaving and you have to analyse all the behaving factors carefully. Nudges can work for example by informing people or making certain choices easier. The main principle for nudging is that all the interventions must increase welfare and people have to have freedom of choice. (Sunstein 2014, 1-2.) The results of the previously studies have suggested that thought we like to believe we are rational thinkers, 80 % to 90 % of the time we are actually relying on the automatic, subconscious system of the brain to make decision (Nielsen & Kepinski 2016,12).

Idea of nudging describes well anti-littering campaign in Texas. It was called: "Don't Mess With Texas". First it was analysed who the litterers were, and they noticed that most of the litterers were men between the ages of eighteen and twenty-four. After this they decided that they need a slogan, which is tough-talking and also full of spirit of Texas pride. The slogan; "Don't Mess With Texas" was used in television commercials by popular Dallas Cowboys football players. The players smashed beer cans in their bare hands and growled the slogan. People could also buy different products, which were saying the same slogan. Nowadays about 95 percent knows the slogan and within the first year of the campaign, littering reduced 29 percent and after six years the number was 72 percent. The campaign generated an expectation in Texas and people start to refrain from littering. (Thaler & Sunstein 2009, 64-65.)

Thaler and Sunstein's definition of a nudge indicates that there is a need for changing people's behavioural into making better choices. This follows the ideology that assumes that human behaviour is not always rational and can therefore profit from a paternalistic point of view. Ideology of paternalism is, that it expresses itself as a consideration and care for the

individual. For example, in the context of public health the paternalists assume that some individuals don't have the complete information, cognitive ability or the self-control to do what is the best for themselves. (Vallgårda, 2012, 201.) Different researches have shown that using traditional behaviour economic have not caused desired results in peoples behaving. Because of that traditional behaviour, economic theorizing has later also influenced by psychology and perception about behaving. (Kahneman 2003, 1449.)

Thaler and Sunstein are introducing the movement libertarian paternalism, which is the philosophy for nudging. Designing a choice environment should be done according that. In their approach libertarian paternalism tend to show human cognitive biases by making choice architecture to guide people decision without taking freedom of choice. It is libertarian, because it does not affect people's freedom of choice in any significant way. They also see that libertarian paternalism is a relatively weak, soft and nonintrusive type of paternalism. According that choices are not blocked, fenced off or significantly burdened. The focus is not to set new laws, prohibitions or penalties but guide people to act their own self-interest and make choosers better off as judged themselves. (Thaler & Sunstein, 2003, Thaler & Sunstein 2009, 5-6.)

2.2 Behavioural economics

Thaler and Sunstein discusses in their book of Nudge, how behavioural economics is possible to apply in practise different ways, which consumers can be pushed in the right way towards to the desired behaving. The theories of the behaviour economics are originally based on studies by Daniel Kahneman and Amos Tversky in 1970's. In 1979 they created Prospect theory and they had also published a few papers relating to human decision-making and choices based on real human behaviour. In their work they identified three heuristics of thumb, which were anchoring, availability, representativeness and the biases were associated with each. (Thaler & Sunstein 2009, 25, Wilkinson & Klaes 2012, 14.) In 2002 psychologist Daniel Kahneman got Nobel prize award, because he was able to show how people are thinking and what kind of bias we have when we do decisions. Kahneman's researches were a basement for a change of thinking that people are not so rational on their decisions. Nudging has also that point of vision of behaviour.

The classic economic models assume that the human being is rational, and their decisions are right because they have all the available data. They are characterized by unlimited rationality, self-interest and self-control. Because of that things like emotions or distractions at some certain point do not affect the long-term goal. If people would judge by norms of classical economics, they would misbehave a lot in everyday life. Many studies from behavioural sciences in the past decades have shown that

people do not make their decisions as rational as assumed by economists. (Deloitte 2016.)

Behavioural economics started to become more respectable in 1980. Behavioural economists use a variety of methods. Methods can base on both traditional economics and psychology. Studies are usually both observational and experimental. It could also state that there are several methodological issues related to the behavioural approach. The difference between these two approaches is that in economics a standard model of economic rationality is used, but behavioural economy views on context and see that we are not rational and considerate. (Wilkinson & Klaes 2012, 20.)

Nowadays behavioural economics understands also from the consumer policy point of view and ways to influence the consumer's behaviour began to be reflected because of that. Economic and its theories have long been based on simplifications and mathematical models that can be used to explain numerous economic phenomena. However, we have more and more situations that can't be fully explained by traditional economic theory. Because of that many of the simplification of traditional economic theory did not just work in the real world. Behavioural economics theory was answer for that. According to Camerer, Loewenstein and Rabin (2011, 3) behavioural economics will increase its explanatory power from the economy producing more realistic psychological findings.

According to Johnson (2009) standard economic models of marketing can be created also psychological fidelity and predictive power. It is possible to compare rational and behavioural theories, but it could be even better that psychological researchers use also formal models. The reason for that is a formal model makes clearer and more easily falsified predictions. Simple frameworks are popular with managers, meaning titles such as "The X Secrets of Solving Marketing Problem Y". When this is unified theory as phenomenon, it can have great communication value and behavioural insights are captured also. It is good to remember that meaning of behaviour economics is not to dismiss traditional economic models, it is more like to expand them. (Jonson 2009, 340.)

2.3 **Dual process theory**

Behavioural economics researcher Daniel Kahneman has identified many systematic biases in people's decision-making and judgements. According Kahneman humans have two systems of thinking: system 1 and system 2. The theory is called dual process theory. System 1 corresponds to thinking fast and system 2 to thinking slow. According to Kahneman System 1 is intuitive, automatic, unconscious and effortless. It can answer questions quickly through associations and resemblances, it is non-statistical, heuristic and gullible. Kahneman's examples of the automatic activities that are attributed to System 1 thinking include: adding 2+2, orient to the

source of a sudden sound, drive a car on empty road and detect hostility in a voice. System 2 is conscious, slow, controlled, deliberate, effortful, statistical, suspicious and lazy. Examples of issues, which require attention and System 2 thinking, are searching memory to identify surprising sound, tell someone your phone number and fill out a tax form. System 1 is important when you create different ideas, but only the slower System 2 can construct thoughts in an orderly series of steps. System 1 is more like "normal" decisions making. (Kahneman 2011, 20-22.)

Kahneman does not say that people are incapable of System 2 thought and always follow their intuition. One of the functions of System 2 is to monitor and control thoughts and actions suggested by System 1. For example, if you have a puzzle, which says: A bat and ball costs 1,10 dollars. The bat costs one dollar more than the ball. What might be your answer for question: How much does the ball costs? The number, which comes quickly in your mind, is 10 cents, but the correct answer is 5 cents. It could be that even you first had intuitive answer in your mind, you somehow managed to resist it and got the right answer. System 2 engages when circumstances requires. This example was not easy, because many thousands of university students have answered in this question and the results have been amazing. More than 50 % students at Harward and Princeton said the incorrect intuitive answer. And when the sample was at less selective universities, the number was 80 %. System 1 gives us great ideas, but also to systematic errors. Another example, which also challenges System 2, is that one group of respondents was asked to estimate the total number of murders in Detroit in a year. Another group was asked to estimate Michigan's similar number. The first group on average estimates a higher number of murders than the second. System 1 thinking led people wrong. Detroit associates a violent city and Michigan more farmland. Without System 2 thinking, the knowledge that Detroit is in Michigan does not come to mind for the second group. People should have remembered that high-crime city Detroit is in Michigan. Both 1 and 2 Systems seems to be in action, memory function is an attribute of System 1. The problem required a substantial mental effort and students can solve the problems when they are giving more effort to solve them and be more rational. (Kahneman 2011, 44-46.)

Thaler and Sunstein (2009, 21-22) introduced the dual process theory in nudge. The approach involves a distinction between two kinds of thinking. The other one is intuitive and automatic and another reflective and rational. They call the first Automatic system and the second Reflective system.

Reflective thinking can be seen as the controlled, deductive, rational thinking, how economics assumes people to think. Most decisions are made with the automatic thinking system. That system is uncontrolled. People seem to be counting more automatic thinking. The idea of dual process theory is that a given behaviour can result from either mode of

thinking. Good example is breathing, which is usually maintained automatically. You can control it by reflective thinking if you decide to hold your breath when passing a bad smell. The key features of both systems are shown in Table 1.

Table 1. Two cognitive modes of thinking

Automatic thinking	Reflective thinking
Uncontrolled	Controlled
Effortless	Effortful
Associative	Deductive
Fast	Slow
Unconscious	Self-aware
Skilled	Rule following

When you are relying on the automatic system that might cause some consequences. Even the automatic system offers you a quick and good decision, it as well cause errors like anchoring, availability, representativeness, overconfidence, loss aversion, status quo bias and framing. (Thaler & Sunstein 2009, 23-37.)

2.4 Choice architecture

A choice architect is someone who is responsible for organizing the context in which people make decisions in theory of nudge. (Thaler & Sunstein, 2009, 3.) This could be a real architect or just a person who organizes the food in the canteen. Choice architects have significant influence, much like the architect of a building who affects the behaviours of the building's inhabitants through the placement of doors, hallways, staircases, and bathrooms. Similarly, choice architects can influence choice in many ways: by varying the presentation order of choice alternatives, the order attributes and their ease of use, and the selection of defaults, to name just a few of the design options available. (Johnson et al. 2012.)

Thaler and Sunstein (2009, 1) introduces an example of choice architect. They have a friend Carolyn, who is the director of food services for a large city school system. She oversees hundreds of schools and many kids eat in her cafeterias every day. One day she decided to arrange food. In some school's desserts were placed first, in others last, in still others in a separate line. Carolyn noticed that it is possible to increase or decrease the consumption of many food items just by rearranging the cafeteria as much as 25 percentage.

After this test, Carolyn believes that she has considerable power to influence what children eat. She got some suggestions how to continue. In the first option she could arrange the food to make the students best off, all things considered. In the second option the food order could be chosen at random. In the third option she could try to arrange the food to get the

children to pick the same foods they would choose their own. In the fourth option she could maximize the sales of the items from the suppliers that are willing to offer the largest bribes. And in the final option the alternative was maximize profits, period. What should Carolyn do next? She is a choice architect and has the responsibility for organizing the context in which people make decisions. Carolyn must choose an arrangement of the food options at lunch. By doing so, she can influence what people eat. She can nudge. (Thaler & Sunstein 2009, 3-5.) The main idea in the choice architecture is that we can nudge people into taking better decisions simply by changing the way options are presented. This all should happen without removing any options from the choice set or, at least, without drastically changing the incentive structure.

If Carolyn takes option one, which is the opportunity to nudge the kids toward healthy food that is better for them. This would be a choice that Thaler and Sunstein present a concept named libertarian paternalism. (Thaler & Sunstein, 2009, 5.)

2.5 Nudge and the manipulation of choice

Hansen and Jespersen (2013, 15) have research nudge and the manipulation of choice. They founded that Thaler and Sunstein suggested that public policymakers arrange decision-making contexts in ways to promote behaviour change in the interest of individual citizens as well as that of society. They also mention, that Thaler and Sunstein's own position is that the anti-nudge position is a literal nonstarter because citizens are always influenced by the decision-making context anyway, and nudging is liberty preserving and acceptable if guided by Libertarian Paternalism and Rawls' publicity principle. Hansen and Jespersen show that nudging is not essentially liberty preserving and is not necessarily about manipulation or influencing choice. They claim also that nudging is not always a way of influencing choice. The reason for that claim is that while always affects automatic thinking, it does not necessarily involve reflective thinking. They created two types of nudges, type 1 nudges and type 2 nudges. They are saying that both types of nudging aim at influencing automatic modes of thinking. When type 2 nudges are aimed at influencing the attention and premises of reflective thinking via influencing the automatic system, type 1 nudges are aimed at influencing the behaviour maintained by automatic thinking.

Hansen and Jespersen have an example of a type 2 nudge (Hansen & Jespersen, 2013, 15). This example is "fly-in-the-urinal", which has used at Schiphol Airport in Amsterdam. There the authorities have put the image of a black housefly into each urinal. This "fly-in-urinal" trials and found that etching reduce spillage by 80 percentage. (Thaler & Sunstein 2009, 4.)

Hansen and Jespersen (2013, 15) state that this example of nudge aims at capturing, the visual search processes continuously performed by

automatic thinking. When this all happens, the nudge works by attracting reflective attention. A direct effect of reflective attention is that this either way in-creases the likelihood of the agent to focus on the current act of urinating.

2.5.1 Framing nudging

Hansen and Jespersen have evaluated the original definition of nudge and proposed a framework consisting different types of nudges (table 2). In this model each nudge is categorized based on whether it be suited for from automatic (type 1) or reflective (type 2) thinking and based on whether the intentions and meanings are exposed to the subject (transparent) or (non-transparent). (Hansen & Jespersen 2013, 14-18.)

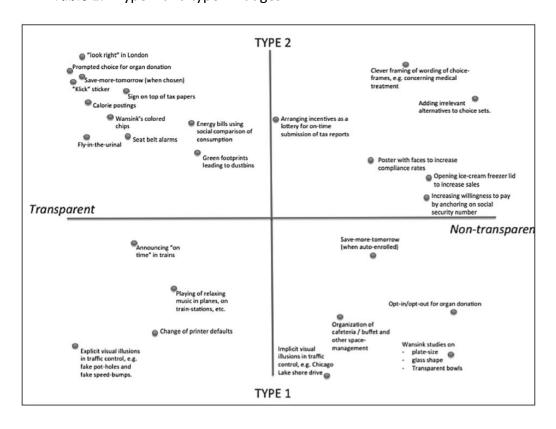


Table 2. Type 1 and type 2 nudges

In top left corner of the matrix are epistemic transparent type 2 nudges. This type of nudge intervention engages the reflective system in a way that makes it easy for the people to reconstruct the intentions and means by which behaviour change is pursued. Type 2 transparent nudges that try to influence such behaviours that result from people's reflective thinking. These "empowering" nudges are seen to include the freedom of choice and can be regarded as libertarian due to the subjects' possibility to choose otherwise. (Hansen and Jespersen, 2013, 20-27.)

Epistemic transparent type 1 nudges are in the bottom left corner. Reflective thinking is not engaged for this type of nudges in what causes the behaviour change in question. Rather, reflective thinking occurs as a by product in a way that allows for the reconstruction of means and ends. Type 1 transparent nudges are seen to influence people's automatic behaviour, but as the subjects cannot fully avoid the effect, these are not regarded as truly libertarian. (Hansen and Jespersen, 2013, 20-27.)

In the top right corner are the non-transparent type 2 nudges. For this type of nudges to be successful, the reflective system has to be engaged, but it doesn't happen in a way that by itself gives citizens epistemic access to the intentions and means by which influence is pursued. Type 2 non-transparent nudges are regarded as invasive manipulations of choice without exposing the end to the subject, while at the same time imposing the responsibility of the choice to the subject. (Hansen and Jespersen, 2013, 20-27.)

The last in the bottom right corner of the matrix are non-transparent type 1 nudges. This type of nudges causes behaviour change without engaging the reflective system in a way that does not make it likely to be transparent and recognized. Type 1 non-transparent nudges are seen to manipulate behaviour and are regarded as paternalistic interventions. (Hansen and Jespersen, 2013, 20-27.)

Hansen and Jespersen (2013) explain the psychological foundation for each of the type of nudges using the dual process theory by Kahneman. Based on the research the writers suggest that part of the influence from type 1 nudges looks manipulating the habits of the people. In the end writers introduce the conceptual framework (table 3), which describes four broad types of nudging. The framework is a tool to clear up confusion of the nudge approach to behavioural change.

Table 3. Suitable labels of intervention types

	Transparent	Non-transparent
System 2 thinking	Transparent facilitation of consistent choice	Manipulation of choice
System 1 thinking	Transparent influence (technical manipulation) of behavior	Non-transparent manipulation of behavior

2.6 Most common types of nudging

According Sunstein (2014) number and variety of nudges are growing. Here is a list of ten important nudges, which he mentions in his article.

- Default rules: Setting people in a specific program. The area could be education, health or saving. This might be very effective nudge.
 Savings can increase significantly, if people are automatically enrolled in retirement plans.
- Simplification: Existing programs are easy to use by simplifying information. The program will not success if it is too complicated to navigate. Simplification should be in high priority of forms and regulations. If the program is too complicated to use, even the important programs which are involving education, finance, poverty or employment could fail.
- Uses of social norms: This nudge emphasizes what most people do. It is very effective nudge to inform people for example that most of your neighbours are engaged in certain behaviour. The information is better to be local and specific as possible. Using social norms can even reduce criminal behaviour. Interesting way is to say what people think that they should do even they do not act like that. You can say for example that in Ireland 90 percent of people believe that they should pay their taxes on time.
- Increases in ease and convenience: The purpose of this type of nudge is to make things easy. It can be to make low-cost options or healthy foods visible. Even better if the easy choice is also fun, people are more likely to make it.
- Disclosure: Making information accessible. Try to demonstrate large amount of data in the cases or the environmental costs associated with energy use.
- Warnings, graphic or otherwise: Cigarettes are having in their packaging public warnings. There are used large fonts or bright colours in triggering people's attention. People might respond warnings by discounting them and for this reason is better that experiment would be more positive message. This positive feedback might be in apps that offer simple counts and congratulations.
- Pre-commitment strategies: Encouraging people to a certain course of action in order to reach their goals. The goal could be to stop drinking or smoking.
- Reminders: To avoid forgetfulness, procrastination or competing obligations, people can send email, text message as for overdue bills and coming obligations or appointments. The timing in reminders is important and it is important that people can act immediately on the information, especially when the reason is forgetfulness.
- Eliciting implementation intentions: When someone elicits their implementation intentions, people are more likely to engage in activity. This could happen asking: Do you plan to vaccinate your kid?
- Informing people of the nature and consequences of their own past choices: When people are giving information their own past choices, for example electric bills, the problem is that people often lack that information. If nudge success, people behaviour can shift, and the

markets works better, and the people save money. (Sunstein 2014, 3-4.)

2.7 Practical guides of nudging

A selection of nudge guides has been written last years. Three practical guides for nudge are presented below.

2.7.1 Mindspace framework

Behavioural Insights Team was developed a guide named MINDSPACE. It offers to policymakers a checklist of things to consider when making policy to increase behaviour change. The checklist comprises of nine robust and non-coercive influences on human behaviour. The checklist is shown on the table 4. (Dolan et al. 2010, 8.)

Table 4. MINDSPACE: a quick checklist when making policy

Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we 'go with the flow' of pre-set options
Salience	our attention is drawn to what is novel and seems relevant to us
Priming	our acts are often influenced by sub-conscious cues
Affect	our emotional associations can powerfully shape our actions
Commitments	we seek to be consistent with our public promises, and reciprocate acts
Ego	we act in ways that make us feel better about ourselves

MINDSPACE offers also a policy design framework that draws from the 4E's, originally developed by DEFRA. The 4Es are four actions that should attempt to change behaviour: Enable, Encourage, Engage and Exemplify. When is using MINDSPACE it requires two supporting actions: Explore, which takes place before policies are implemented, and Evaluate, which judges the success of the policy. (Dolan et al. 2010, 9.)

2.7.2 East framework

Based on the MINDSPACE framework a simpler and more practical framework has been developed, called EAST. There are four principles to encourage behaviour that are Easy, Attractive, Social and Timely (EAST). The EAST framework is based on wide academic literature and empirical tests. (Service et al. 2012, 3-4.)

1. Make it Easy

- Utilize the power of defaults. People have a strong tendency to accept a present default option because doing that is so easy.
- Reduce the trouble of using the service. If the effort requires too much action people often give up their intentions.
- Simplify messages. The message should be as clear as possible. The
 result increase significantly when the goals can be broken down into
 simpler and easier actions.
- Example of Easy is auto-enrolment into pension schemes. When this implemented in large firms, participation rates increase from 61 to 83 %. (Service et al. 2012, 4.)

2. Make it Attractive

- Attract attention. Attention can increase if you make your message more interesting. Ways how you can do it are for example images, colours or personalisation.
- Designing rewards and sanctions for maximum effect. Financial incentives and sanctions are an effective way to increase the choice of the desired option.
- Example of Attractive is drawing the attention of those who fail to pay road tax. Sending a letter for non-payers of car with a picture of the offending vehicle, payment rates increase from 40 to 49 %. (Service et al. 2012, 5.)

3. Make it Social

- Show that most act in the desired way. Communication should emphasize that a most people act a desirable way and not emphasize the behaviour of a minority if it not desirable.
- Use the opportunities of networks. Social networks and human contacts are very important for us. Behaviours are spreading effectively in peer-to-peer networks, even if we do not know it.
- Encourage people to make promises to others. Commitment to other people change the individual's consistency between their intentions and their true activities.
- Example of Social is using social norms to increase tax payments.
 When people were told in letters that most people pay their tax on time, the most efficient message led to a five-percentage point increase in payments. (Service et al. 2012, 5.)

4. Make it Timely

- Invite people when they are most receptive. People are more receptive in certain situations, for example with major life changes.
- Emphasize the immediate costs and benefits. The immediate costs or benefits affect behaviour much more than later realized.
- Help people find to plan their activities. People need support and help in that intentions lead to real behaviour. Identifying obstacles and making a concrete action plan is often a great help.

 Example of Timing is increasing payment rates through text messages. Sending a text message 10 day earlier before the bailiffs are to be sent to a person's home doubles the payments. (Service et al. 2012, 6.)

Using EAST-framework is a four steps process. The first step is to define the targeted behaviour, which is wanted to achieve. If it is possible, it should be quantifiable change in behaviour. The second step is to understand the system from the user's and provider's perspective. It is important to understand how the service in question is used. Too often decisions are made without a good understanding. The third step is building and creating the intervention or policy. This stage it is possible to use both EAST and MINDSPACE. Finally, in the fourth step intervention will use a randomised controlled trial (RCT) to test how the intervention has affected. During that step is also important to estimate wider impacts and cost effectiveness. It is also important to test acceptability and adapt future interventions. In the final phase, intervention is tested in practice so that its effects can be measured reliably. Whenever possible it should use randomized test settings to test the intervention details and choose the methods that are most effective when tested. (Service et al. 2012, 45-48.)

2.7.3 A practitioner's guide to nudging

Ly, Mazar, Zhao and Soman (2013, 7) have been classified to nudges four different dimensions.

- 1. Boosting self-control vs. Activating a desired behaviour
- 2. Externally-Imposed vs. Self-imposed
- 3. Mindful vs. Mindless
- 4. Encourage vs. Discourage

The first dimension is designed to boost self-control and help individuals to hold on decisions, which they have made earlier. These dimensions can be for example a retirement plan or exercising. People would like to behave a certain way, but there is a discrepancy between what people would like to do and what people end up doing. For that discrepancy nudges help by boost self-control. Alternatively, nudges can be designed to activate a desired behaviour or norm. This dimension looks at how well the transaction is activated for the desired behaviour, for example, to reduce waste. The second dimension looks where a nudge will be voluntary adopted. The question of this dimension is whether the pressure in the transaction is externally and it is comparing with other behaviour, or internally and then it is the people's own will to act. (Ly et al. 2013, 7.)

The third dimension looks nudging to influence more cognitive activity. Nudging can also affect unconscious behavioural, such as whether the action involves emotional or some kind of thinking that is intended to

influence action. Mindful nudges guide people towards more controlled state, this can be for example the intention to eat healthier or stop smoking. In decision making mindless nudges include the use of emotions, framing or anchoring. The fourth dimension looks does the nudging encourage or discourage behaviour. Encouraging nudges support a particular behaviour and discouraging nudges prevent behaviour that is believed to be not desirable. (Ly et al. 2013, 7-8.)

The process of nudging should start to audit the decision-making process of the end user. The figure 2 identifies the whole process to the design of nudge. First you have to collect information that creates an understanding of the decision-making process that is to be influenced and aimed at detecting heuristics affecting decision-making. After auditing the decision and taking care of different aspects of decision-making process, it is time to select suitable nudge. When you are selecting the suitable nudge, you have to consider the conditions for success. For example, bottlenecks are good starting place to implement a nudge. Choice architect would be the suitable way to check the factors of bottlenecks. The third stage identifies, which nudging can be leveraged. Finally, is time for test and iterate. That means testing the power, improving the operation and testing again. (Ly et al. 2013, 15-20.)

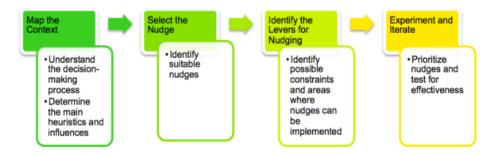


Figure 2 The nudge development process

2.7.4 Conclusion of practical guides of nudging

Above presented three practical guides were checked in terms with the behavioural aspects of nudge theory. In all guides nudging process included following steps (table 5).

Table 5. Nudge-process from the guides

Data collection and analysis
 Understand the factors that influence decision-making and behaviour
 Define targeted behaviour
 Select intervention / Nudge
 Pilot
 Evaluate and get feedback

3 LITERATURE REVIEW

To understand better the nudge theory and its potential, it was justified to write a literature review. This literature review was also important for doing the empirical part of the research. Using the literature review to understand better the theory of nudge is conceived so that it is possible to find the answer to the question how nudging has been used as a process in changing behaviour. In addition, in this study, the material collection makes it possible to find an answer to the question of what kind of strengths or opportunities nudging has in changing behaviour.

Fink (2005, 3-5) presents a model of how to make a literature review. The model has seven steps. First, a research question is defined. This is followed by the choice of literature and databases. In the third step, the search terms are selected. They can be words or phrases. The next steps are for screening. At the fourth stage, search results are reduced through practice, for example, defining which languages and years are qualified as limiting criteria. After that, search results are screened in a methodological sense while evaluating the scientific quality of articles and studies. The sixth step is to make an overview. A reliable and valid review requires a standardized form that collects information from articles. Finally, the results of the literature review are presented.

The search for data was done in February and March 2018, and the searches for the data were done independently with Google Scholar, Science Direct and Publication Search databases. The following terms were used as search terms: nudge / implementation / behavioural economics or nudge / choice architect / dual process theory. There were four criteria for material searching. First, the studies had to be in the form of an article. Secondly, the search required that the articles cover the research results. The third criterion concerned language and article publishing year. The language of the articles was to be English and the year of publication came after 2008. Fourthly, the review was implemented in a concept-oriented way since author-centric would not have given a complete picture of the use of nudge theory. In addition, the choice of articles utilized Google Scholar's way of organizing articles by relevance.

In the case of English language material, the reliability of a publisher was used as one of the selection criteria. The publisher of the article had to have impact factor rating. The criterion was drawn up, as it was desired to ensure the reliability of the material. In addition, the reliability of publisher and content of foreign-language material is difficult to estimate due to incomplete knowledge. Helping to evaluate a reliable source of data was the platform for the Publish Forum. The Quality Score estimates the quality of the scientific publication on a scale of 1-3. The highest possible level is 3. A publication that complies with the publication platform's platform meets the criteria of the scientific publishing channel. (Publish Forum) The

standard rating for a publisher of an English-language article selected based on each title and summary was revised from the pages of the Release Forum prior to obtaining full text. If the publishers lacked the rating, the article was not selected for the literature review.

When the final material was selected, several times passed and the whole set of material was perceived, the material was analysed. Finally, seven articles were selected for the final analysis of the literature review; the material used is presented in Appendix 1.

3.1 Analysis of the literature review

According to Tuomi and Sarajärvi (2002, 116) theory-based content analysis theory serves as an aid in the progress of analysis. From the point of view of this research, it is essential that theoretical concepts for theory-based analysis are selected from the material, but the earlier knowledge of nudge theory guides the choice based on prior knowledge. The theory-based analysis was also the best alternative because the main focus of this research is the nudge theory and its use. Theory guides through the material, and it is natural to analyse the material theoretically.

The collected material is intended to describe the nudge theory and the analysis is supposed to understand the phenomenon by creating a verbal and clear description of the phenomenon in a tight and clear format as described by Tuomi and Sarajärvi (2002, 110). The aim of the analysis is to create a clear and uniform fragmented material. In practice, theoretically-based content analysis is started by initial definition, which is interesting in the material, and then reading the material so that the relevant themes emerge from the research. The articles are read one by one and the remarks are recorded by themes and the results are arranged provisionally with the underlying problems of the research. In the results, the theory-based content analysis process continues, as the analysis and the organization of the results are continued until the results are analyzed in the form that it is possible to move from an analysis of the interpretation of the results that emerged from the material.

Seven studies that were analysed for this literature review seemed to include two main categories. All the researches studied the effect of nudging by using positive reinforcement and indirect suggestions to influence behaviour. Nudging was also based on behavioural economics.

3.1.1 Changing behaviour

Moseley and Stoker (2012) pointing out in their article that nudge is very different from old models, which were considering that decision making is based on rational thinking. This new approach integrates irrational influences such as psychology, emotions and feelings.

When you try to change behaviour, a very important part of it is encouraging. When people were encouraged to make a plan to accomplish a desired outcome can significantly increase their likelihood of success. (Milkman et al. 2011). Shearer et al. (2017) investigated the effectiveness of using stickers as a visual prompt. The idea was also encouraging the separate collection of household's food waste for recycling.

Momsen and Stoerk (2014) says that the gap between intention and action has only recently been recognised in research on energy behaviour and nudging would be an attractive policy tool.

Positive results were observed in changing behaviour when it has tried choice architecture. Kallbekken and Saelen (2012) showed that two simple and nonintrusive nudges reduce the amount of food waste in hotel restaurants. Nudging towards healthier food in two researches (Hanks et al. 2012 & Olstad et al. 2014) showed also that it is a way to have chances in behaviour. Hanks et al (2012) used also choice architecture to arrange lunch lines different. The other one offered only healthier foods and flavoured milk. Olstad et al. (2014) tried by nudging environmental change, which alters social and physical environments to sift behaviour positive. They had found that eating is a lot automatic behaviour by environmental cues.

3.1.2 Using interventions and efficiency of action

All studies mentioned that nudging is cheap and a low cost method. It was also said that individuals retain the freedom to pick from the original choice set. Milkman et al. (2011) used behavioural intervention, which was planning prompts. The method was three different kinds of mailings. The result among control group was 33,1%. People who received the prompt to write down date and a time, was the most effective way to remember vaccination. Momsen and Stoerk (2014) were investigating how nudges affect an individual's decision to choose between renewable energy and conventional energy. After an analysing context and real behaviours of the target public, the empirical results showed that a default nudge had a significant effect. When you are using default nudge, you should yield positive benefits for the decision makers. The main idea in the message was that they could actively choose, but if they did not make an active choice, they would keep the default contract and use renewable energy.

Shearer et al. (2017) used stickers as a visual prompt for encouraging household food waste recycling behaviour. The action was inexpensive, it cost only 0,35 dollars per household. In stickers said: No food waste please. Remember to use your food recycling caddy. There were several reasons for significant increase (20,74%) for recycling in the experimental group. Bin stickers were simple, semi-permanent and practically feasible. The timing was right. Food waste recycling was a quite new service and people

just to have habit to put all waste in the same bin. Ambitious stickers caused action, which was socially approved behaviour.

Nudging hotel guests to reduce food waste was a success. The main idea was to use choice architecture and they had two treatments: reducing plate size and a message: "Welcome back! Again! And again! Visit our buffet many times. That's better than taking a lot once". The hypothesis was that the sign will encourage guests to load less food on their plates each time they serve themselves. The result to reduce food waste was around 20%. The findings showed that the hypothesis was correct and there is a potential for schools, hospitals, workplace etc. (Momsen and Stoerk, 2014.)

Nudging seemed to have effect on successful healthier eating. Olstad et al. (2014) and Hanks et al. (2012) studies showed that nudging towards of healthier choices is possible. Hanks et al. (2012) research discloses that people tend to choose the default choice and they over eat to get their money's worth. They started to think what would happen if quick and easy food would be for example fruits, vegetables and lower calories entrées. The experiment lasted 16 weeks. First eight weeks were control period and the second eight weeks were intervention periods. The change was that one of two lunch lines in cafeteria was arranged so as it displays healthier foods and flavoured milk. The result was that the number of healthier foods students increased 18,8%. Olstad et al. (2014) tried to nudge healthier dietary behaviours. They used two kinds of nudges and economic incentive. Nudges were signage with descriptive menu labels and taste testing and economic incentive was 30% price reductions. The length for each period was eight days. After this research healthy items represented 41% of sales. There was a one important notion, where said that: "Food choices can ever be free and independent is illusory at best, as the environment must always be arranged so as to influence choice in some manner."

4 CURRENT SITUATION

The focused interview was used to map the experts' understanding, opinions and views of nudge theory. The selection of interviewees was affected by the research problem and the information needed to solve it. (Kananen 2011, 52.) In this study one person was interviewed. Finding interviewees were challenging, so the interview was conducted as a deep interview. The interviewee's response was anonymous to respect the privacy. The interview questions are attached appendix 2. The questionnaire was used as a manuscript to ensure the quality and the right questions.

Preparing for an interview took place by defining the themes that to be surveyed and writing the questions that are being used in the interview under these thematic areas. The thematic areas were based on the nudge theory and its practical role. Although the questions drawn up are not part of the traditional theme interview, according to Hirsjärvi and Hurme (2010, 102-105), the interview is ultimately about asking questions and getting answers. Thus, at the planning stage of the interview, it was ended up writing a fairly precise question tree so that the collected material would be as comprehensive and high-class as possible.

Interview questions were sent by e-mail to the interviewee so that they would have the opportunity to get familiar with them in advance. The research permission and the objectives and content of the research were also briefly presented when agreeing on the interview time. The interviews agreed to be held at the interviewed workplace in April 2018.

The interview had chosen to be recorded and it took about an hour. In this thesis, the material collected from the interviews is littered in a thematic, which is one of the methods of analysis of the theme interview. (Kananen 2011, 56-57.)

4.1 Analysis of the focused interview

The next step is to describe how the focused interview material was analysed. After material collection, the material was analysed by qualitative analysis. First has to decide which material was interesting and then the material was passed through. In this study, the subject matter of the material was determined by the research question and supporting questions. After that, the content was organized either by themes or by classifying it for the purpose. The way to sort the material was selected only after the results of the analysis are clear and after that was possible to organize the material. In practice, in this study, the reading of material and the analysis were overlapping processes and the summary was written open in the results. (Tuomi & Sarajärvi 2002, 94-95.)

The first theme of the interview concerned insights of nudge-theory. The interviewee experienced his role as a learner in the experiment of the Nudge method. He had been working in the Guarantee Foundation for a long time and felt that Nudge had the opportunity to try something new. For about a year, the Guarantee Foundation had already clarified the possibilities of Nudge in the "Rahat riittää" -project. This was applied for funding and the project was granted in spring 2018.

"Nyt alkaa tämmönen Rahat riittää –hanke, jossa vahvistetaan kotitalouksien talousosaamista ja nimenomaan ennaltaehkäistään talousongelmia. Siinä on nyt tämä tuuppaus ja käyttäytymistaloustiede, joita sovelletaan."

When being asked, how he sees nudging, the following issues were mentioned. First it would be important to understand how people make financial decisions. More customer understanding is needed. For example, when there is more customer understanding, it is possible to develop interventions to guide customers to make more informed and better choices. Thus, nudge can be seen as quite concrete, which can help people make better financial decisions.

The same happened when asked how familiar interviewee was with nudging. In the answer emphasized that behaviour should be understood, you must support choices. You can not tell people what to do but you can help them to make better decisions. It also emerged that enlightenment and knowledge sharing are not necessarily the best means of doing things when people want to change behaviour. You need to find the right kind of intervention. In addition, the answer also highlights the fact that human behaviour should be seen widely. You need to look at factors that affect and the environment in which decisions are made.

It was speculated that the nudging might be a way to prevent financial problems. They have found that traditional education and increasing knowledge are not necessarily the most effective way to act. They wanted to try innovative ways, such as the image marketing and offer new options for acting differently.

When asked what kind of things they want to influence by nudging, their goal is to achieve people before their problems arise. At this point people are too indebted when they get in touch with them

"Ajatus on, että me pyrittäisiin puhuttelemaan vähemmän ongelmakeskeisesti, vaan ehkä tavoitekeskeisesti. Luotais pieniä tavoitteita ja sit tavallaan ku niissä onnistuu, niin saa onnistumisen kokemuksia... sit ku se interventio tulee oikeeseen kohtaan, et missä vaiheessa ihmiset saa tukea arjen valintoihin. Jotenkin tosi mielenkiintoista et ne ei oo isoja asioita, mikä helpottaa siinä arjessa tekemään parempia valintoja."

The interviewee thinks that it would be better for financial management to make the payment transaction more visible. When asked about the benefits and the kind of goals they have for nudge experimentation, it was re-emerged that the Guarantee Foundation wants to be a more proactive provider for debtors.

"Me niinku organisaationa haluttais olla enemmän etukenossa niin meillä se hyöty varmasti olisi jos me saatais asiakkaita vähän aikaisemmassa vaiheessa niin ikään kuin kiinni vaikka muotoilemalla meidän palveluita esimerkiksi tän käyttäytymistaloustieteen näkökulmista, niin se olis meille hyöty sillä tavalla et meidän olis helpompi auttaa ihmisiä."

"Tällä hetkellä näyttää siltä, et meidän asiakkaat on koko ajan pahemmassa ja pahemmassa tilanteessa. Et tää strateginen muutos, oltais vähän enemmän tämmönen arjen rahankäytön organisaatio ja ennaltaehkäisevä, ei niin vahvasti kuin tänään korjaava."

In the interview, it was strongly emphasized that an experiment with nudge is an opportunity. However, nudging must be done so that man is aware of the method. People should be aware of what is being done, otherwise they may not be affected by the behaviour. If nudging would be made without awareness, then it would also be ethically questionable. The key is also the intention of changing the manner or the environment. Ease of making decision also arose and therefore nudging must be transparent. Similarly, consider the intervention as to whether the chosen direction is correct.

"Mitä ite kritisoin, niin se miten tuuppausta käytetään väärin. Saadaan ihmiset ikään kuin niin kuin höynäytettyä ja tekemään jotain mitä he eivät edes tiedosta."

"Haluan korostaa, että meidän ajattelussa se nimenomaan lähtee siitä, et me halutaan tukea ihmisten tietoisia valintoja oli ne sitten mitä tahansa."

The objectives of the interview were also raised the financial strength of the households and to find the right intervention for two target groups. Another target group is young people who move away from home and those who retire. It has been seen in these two folds of life that nudging interventions could give new support. In addition to nudging there were risen a service which also starts with customer understanding. When a man is in a debt quest, behaviour is driven by fear. Similarly, the fundamental reason of the problem should be investigated. For example, loneliness can be a basis cause.

The second theme was process of using nudging. When asked about the nudge as a process, it emerged that the whole process is just about to begin with Guarantee Foundation. Currently, the nudging process was seen as follows. First of all, they wonder how information of the target groups can be obtained. Secondly, the intention is to plan interventions for behaviour. The first step involves strongly understanding people's behaviour in what situations and circumstances decisions are made. To get information, have to understand where people can be found and to get them involved. The risk is that the background work is badly done in the project and thus the starting point is more what the people think they want. It would be important to involve them and get people to tell what

would help them. The customer must not only be in the imagination. When you want to develop an activity, you need to find customer and work with them.

When asked about success stories of the nudging concept, a toolbox attempted in Britain emerged. This toolbox was made for economic advice. It was worked out in cooperation with housing consultants and financial advisers. The package was easy to use, and the counsellors of different levels managed to work well with it. This showed that when someone is well-packed and has clear instructions, it's easy to use and anyone can succeed. Crucial is also right timing with intervention. The interviewee pointed out example from Stockholm, where people started to use more stairs than escalator. The main thing was that they changed the visual of stairs to remain piano and they added there a piano voice. Nudging was success, people started to use more stairs than escalator. It looks that the project StopDia might be a success story of nudging. In Finland has started a StopDia-research, which is focusing to develop and test approaches to empower individuals to adopt and maintain healthy lifestyle to reduce the risk of type 2 diabetes. They are using small nudges for health.

The third theme was experiences and possibilities of nudging. As one possibility, better understanding of the environment and consequently support the problems emerged as well. The interview showed that the toolbox presented in Britain had been felt as a good and concrete tool in counselling. One good experience of the nudging method had been the eviction experiment of the City of Helsinki. Nudging can be in simplicity, open me up sticker in envelope, friendly tone in the text, or some other similar measure to get people to do unpleasant things. Therefore, one important thing is communicating, as well as empathy and setting up another person's position. Through these interviews, it emerged, that new thinking, service design and new perspectives appear to be better customer services. In addition, was raised also the possibility of legislation on how nudging could affect legislation. For example, in consumer credit it could be a preventive viewpoint that would regulate marketing or credit terms.

Nudging experience brings new perspectives and also has the strength of both the professionalism and the awareness that you do not always know. It is important to be able to reflect on oneself and the same goes for a client who should also aim to reflect on himself and thereby make more sensible choices. The motivation is also raised, which is a step to seek out the services.

"Tää meidän hanke mikä on lähdössä liikkeelle, et ehkä enemmän se itellä ajatus siitä, et me ollaan jonkun oppimisprosessin alussa ja me opitaan, opitaan koko ajan myös meidän kohderyhmiltä. Löydetään yhdessä ja myös kehitetään."

"Tässä ehkä huomaakin että me ollaan enemmän sellaisella ajatuksen tasolla ja alku, niin ku tän tutkimusmatkan alussa. Et jos kuviteltaisiin kolmen vuoden päähän, niin ehkä oltaisiin vähän fiksumpia... Et nämä ovat enemmän tällasii niin ku hajatelmia ja ehkä tän vuoden niin ku sellasen seuraamisen tulos."

5 STRENGTHS AND CHALLENGES OF NUDGING

5.1 Strengths

Analysis of the literature review and focused interview proved that nudging has different kind of strengths.

5.1.1 The concept of nudging

One of the strength of nudging is the concept. Thaler and Sunstein (2009) point out the intervention must be easy and cheap to avoid. They also say that all the interventions have to increase welfare and people have to have freedom of choice. This is also present in all literature review researches and interview. The interview was emphasized that you can not tell people what to do but you can help them to make better decisions. It also emerged that enlightenment and knowledge sharing are not necessarily the best means of doing things when people want to change behaviour. You need to find the right kind of intervention. Nudging experience brings new perspectives and also has the strength of both the professionalism and the awareness that you do not always know. It is important to be able to reflect on oneself and the same goes for a client who should also aim to reflect on himself and thereby make more sensible choices.

Alongside with the literature review and the interview was also insight that nudging is inexpensive method. In theoretical part was an example about Texas. The main idea was to find out a good and effective slogan, which was "Don't mess with Texas". They got excellent results to decrease littering by creative nudge and the action was inexpensive.

5.1.2 Decision making

Behavioural economics analyses emotion influences and personal factors specific to every person in their decision making. Deloitte (2016) says that the classic economic models assume that human being rational and their decision are right because they have all the available data. Many studies from behavioural sciences in the past decades have shown that people do not make their decisions as rational as assumed by economist. In the

interview was said that decisions are influenced also by context, our automatism and our unconsciousness. Nielsen and Kepinski (2016) say that thought we like to believe we are rational thinkers, 80 % to 90 % of the time we are actually relying on the automatic, subconscious system of the brain to make decision. All this is worth to notice when you are planning interventions and behaviour economics has brought this perspective of decision making.

Nudge is a quite new method to inspire good decision making. The method consists of putting people in front of a choice that encourages them to improve their behaviour. Nudge drives people to ask themselves about what they are doing. By literature review it was showed that when you try to change behaviour, a very important part of it is encouraging. When people were encouraging to make a plan to accomplish a desired outcome can significantly increase their likelihood of success. (Milkman et al. 2011). Shearer et al. (2017) investigated the effectiveness of using stickers as a visual prompt. The idea was also encouraging the separate collection of household food waste for recycling.

Nudging has realised to ask whether people's decisions are based on rationality or mainly from intuition. Nudge is using positive reinforcement and indirect suggestions to influence behaviour. It has developed with real understanding of how people make real decisions in the real world. Thaler and Sunstein (2009) presents two cognitive modes of thinking. The other one is intuitive and automatic and another reflective and rational.

5.1.3 Efficient messages

According the literature review messages should be simple and practically feasible. When it was researching how people would remember to vaccinate themselves better. The most efficient way was to use note, which included place to write down date and time. If people write down just a date the result was not as good. It really seems that simple solutions are practical. The same thing happened also when it was testing how it would be possible to reduce household food waste. The practical way was of use stickers as a visual prompt. The message was again simple, easy, effortless and repetitive to perform. According Kahneman (2011) humans have two systems of thinking: system 1 and system 2. This theory is called dual process theory. When system 1 corresponds to think fast and system 2 slow, these effective messages are read more by system 1. This is the reason why the messages should be simple. It seems that it is strength when you Increase attractiveness of messages and give visibility for them.

5.1.4 Changing environment

According Thaler and Sunstein (2009) people could be helped by a nudge to make optimal decisions by planning the environment based on so-called

"choice architects" in order to make people change behaviour to make decision makers better off as judged by themselves.

When choice architect was used in researches, which included in literature review, it showed that this easy way can be a great possibility to change people's habits. For example, reducing plate size and using social cue by sign, helped the restaurants reduce food waste around 20%.

In addition, the interviewee also highlights the fact that human behaviour should be seen widely. You need to look at factors that affect and the environment in which decisions are made.

5.2 Challenges

Nudging has succeeded in many ways, but some things came out, which could have more attention.

5.2.1 Influencing behaviour and choice

According the interviewee it was strongly emphasized that an experiment with nudge is an opportunity. However, nudging must be done so that man is aware of the method. People should be aware of what is being done, otherwise they may not be affected by the behaviour. If nudging would be made without awareness, then it would also be ethically questionable. The key is also the intention of changing the manner or the environment. Ease of making decision also arose and therefore nudging must be transparent. Similarly, consider the intervention as to whether the chosen direction is correct.

In addition, on influencing choice Hansen and Jespersen (2013) are claiming that nudging is not always a way for it. The reason for that claim is that while always affects automatic thinking, it does not necessarily involve reflective thinking. They created two types of nudges, type 1 nudges and type 2 nudges. They are saying that both types of nudging aim at influencing automatic modes of thinking. When type 2 nudges are aimed at influencing the attention and premises of reflective thinking via influencing the automatic system, type 1 nudges are aimed at influencing the behaviour maintained by automatic thinking.

5.2.2 Elaboration

According interviewee you need to find the right kind of intervention. In addition, the answer also highlights the fact that human behaviour should be seen widely. You need to look at factors that affect and the environment in which decisions are made.

Which nudge to use and how you process to define right nudge? Sunstein (2014) presents most common types of nudging. On the list were default nudges, which seems to be very effective nudges. When it was using default nudges in Momsen et al. research (2014), they found that only default nudge had a significant effect. Other nudges were ineffective.

There are different kinds of practical guides for nudging. Any of them were not mentioned in literature review, but those principles seemed to be in the literature review researches. For example, if you follow the EAST-framework, first step is to define the targeted behaviour. You can do ethno observation and then decide the nudges. After that you should test that in the real life. Olstad et al. (2014) point out that you have to concern also observer errors. They might have bias for interventions. Findings might be individual and may not generalizable to other population.

6 RECOMMENDATION

As the main problem of the research was, what the practical role of nudge is, important supporting question was, how can nudging be used as a process in changing behaviour. This question can be used to find out the relationship between theory and used implementations. Here is presented the results that arose from the point of view of there a fore mentioned sub-issue and interpreted them through the previously discussed theory. The second supporting question was what kind of strengths or possibilities does nudging have in changing behaviour? This question can be used to find out best practices of nudging. The final question is to find out what kind of experiences does nudging present for the case organization. Recommendations for using nudging are based on survey findings and theoretical framework

6.1 A process in changing behaviour by nudging

Based on the findings of this research, it is indeed recommendable to consider using process of nudge development. The interview in Guarantee Foundation showed that customer understanding is important. For example, when there are more customers understanding, it is possible to develop interventions to guide customers to make more informed and better financial choices. It looks that a practitioner's guide to nudging would be suitable way to think the process of nudging. As already mentioned earlier in this report, the process starts mapping the context. Nudge is based on an in-depth understanding of the factors that influence behaviour to identify levers of change. It is also recommendable to do observing, which includes environment, social and individual levers. (Ly et al. 2013.)

After understanding the decision-making process, it is time to select the nudge. The literature review showed that interventions can be several. It is recommendable to select suitable nudges and do the identification of the drivers of influence. (Ly et al. 2013.) The drivers could be checked from the Mindspace checklist. (Dolan et al. 2010.) It is also good to update the levers of change that are to be activated.

Another recommendation for using nudging, is to define what to expect with the nudge. In the Guarantee Foundation interview came out that it would be important to develop more interest in organization prevention messages and improve efficiency of prevention action. These preventions should be also visible. The nudge process from the guides follows six steps to identify and define the nudge. When you follow the concept, it is possible to succeed.

The last recommendation for using nudging, could be that if the driver to change behaviour is the messenger, you could utilize two cognitive models of thinking, which was introduced by Thaler and Sunstein (2009, 22). Using that idea, the messengers can be two kinds of. The other one could be more rational and the other one more instinctive. The symbol of messenger could be for example an animal. There are many kind of drivers, which can influence behaviour change. (Dolan et al. 2010, 8.)

6.2 **Planning interventions**

It is recommended that background work be done carefully. Good background work allows you to find the right intervention. In literature review, achievement of interventions was efficient and inexpensive to create. A very good example of inexpensive behavioural intervention was Milkman et al. (2011) research. In that research a prompt to form an implementation intention was a nudge. Nudging was a way to help in the direction of desired behaviour. It was applied at minimal expense and it did not restrict individual autonomy. According the literature review, all researches succeed to be inexpensive.

Nudge is possible to perform in a real-world setting. All researches in literature review were implement like that and some of them experienced this as a significant strength. A recommendation to the Guarantee Foundation is to get a survey done in the real world by observing.

In an interview with the Guarantee Foundation it was stated that the use of nudge is still in the beginning. Therefore, ready-made practical guides for nudge theory should be utilized. There are many types of guides and in this study three of them have been dealt with.

It is also a recommendation to find the strengths of the customers of the Guarantee Foundation and to strengthen them with the help of nudge. For example, it may be that many customers have clear strategies to limit their

expenses and save their earnings. For that mental accounting might be solution.

6.3 Experiences of nudging

Nudge's potential is identified in the research material. The subject is interesting, and the Guarantee Foundation wants to try it. In the Guarantee Foundation it was seen that in a couple of years they would have practical experience of telling nudge.

All in all, each study in the literature review showed that nudge can make significant results. The experiences in these points of view were positive. Studies identify a person's way of thinking and making decisions. This consideration in the experiment of interventions was strongly emphasized.

The Guarantee Foundation's experience of some nudge-like experiments has not only been a positive one. In the interview, the emphasis was on raising people's awareness through nudge. Nudge experiments must be transparent, and people should be aware of the experiment. This became very strong in the interview, so taking this into account in the future is certainly important when the project is progressing.

7 CONCLUSION

The nudging is a quite new term, although the concept of pushing someone to the right direction has been used different ways in many years. This method consists of putting people in front of a choice that encourages them to improve their behaviour. (Hausman & Welch, 2010, 126.) The Guarantee Foundation is just going to start their research, but they had already positive experiences of nudging and its possibilities to change people's behaviour. When comparing the results of interview to the main principle of nudging, there can be find out similarities. In the interview was pointed out that when you have an understanding of the customer, it is possible to develop interventions to guide customers to make more informed and better choices. Sunstein (2015, 1-2) points out the main principle for nudging is that all interventions must increase welfare and people must have freedom of choice.

According the interview there is a need to understand how people make economic decisions. The aim was to get as much customer understanding as possible and understand the choices which are guiding people in economic decisions. The aim was also help people to make better choices in the financial matters by nudging. It was also said that it would be important to find such an intervention that would help people make more informed and sustainable choices. Deloitte (2016) points out that many

studies from the behavioural sciences in the past decades have shown that people do not make their decisions as rational as assumed by economists. Jonson (2009, 340) says that it is good to remember that meaning of the behavioural economist is not to dismiss traditional economic models, it is more like to expand them.

We have two systems of thinking. We have a lot of daily routines, which we solve by automatic thinking. Automatic system is rapid, and it does not involve what we usually understand with the word of thinking. We use reflective thinking if, for example, we need to solve a mathematical question. Because we have two cognitive systems of thinking and when we find something interesting and there is a nice way how to guide people to do it, there is nothing to harm us. The basic idea of nudging is that people's decision-making and behaviour are systematically influenced subtle and almost meaningless changes in decision-making. This differs from the rational and established models of economics. We can always ask; how small changes can make a difference and is it possible to say that it does not remove anyone's ability to make decisions autonomously. (Thaler & Sunstein, 2009, 22.) In the interview, it was argued that many things relate to share information when you should be thinking more about interventions that would direct people to change behaviour. Also, in the literature review, changing behaviour came with a successful intervention, for example, reducing catering waste at the hotel is a good implementation. They could add information to the distribution of food waste. By choosing nudge and choice of architecture, they managed to reduce catering waste by 20%.

Nudging is positive approach for peoples' decision making. According Thaler and Sunstein (2009, 12) people could be helped by a nudge to make optimal decision. The environment is possible to plan using choice architects. Using choice architect is possible to make people change behaviour to way, which is better off as judged by themselves. In the interview was also pointed out that you must take care of the environment where people are doing the decisions. Choice architect can be used to alter people's behaviour and you also must release that there is no such thing as "neutral" design (Thaler & Sunstein, 2009, 3). It was also said in the interview that you can develop the service as you take your customers into planning. It seems that through experiments we can find the best and most effective changes to the environment. In daily life our behaviour and choices are influenced for context and choice architect.

When doing business, it is important to find out new ways to understand customer better. Nudging is something that gives benefits for example hotels, human resource, waste management, energy policy and encouraging healthy habits. Nudging is a concept, which is low cost method. You must follow the process step by step, but you can choose framework which is most suitable for your business. Sunstein (2014, 3-4) has listed ten important nudges, so it is possible to start process reading

that list. The list is introduced in theoretical part of this thesis. People are highly influenced by who communicates information based on their level of authority, likeability or how much they are like themselves. The messengers might be rational and instinctive. The rational messenger can say yes, but also knows when to say stop. The instinctive messenger falls into all the traps and he remind us of our weaknesses and all the traps. Behaviour is complex, and we know that context matters greatly. Therefore, we can never be entirely certain that a particular intervention is going to work, even if there are good reasons to believe so. For that reason, is also important to follow the process of nudging and define the nudge carefully.

This research has been set up to find an answer to the question, what the practical role of nudging in changing behaviour is and how the nudge as a practical tool could change the behaviour. Literature review showed that it is possible to get good results and change behaviour by nudging. Nudging is a way to change behaviour. There are also a few nudges which showed highest response. Those nudges were messenger, default and norms. The comparable studies of Sunstein (2014, 3-4) show similar results as this study. It seems that nudging has potential to change behaviour as the intervention has designed well.

Some of us might think that nudging is about manipulation. We can ask, is nudging a way of influencing choice or even manipulation. Hansen and Jespersen (2013) state against this claim they argued that Thaler and Sunstein appeal to Rawls' Publicity Principle insufficient as a safeguard against non-legit state manipulation of people's choices. Instead they introduced as epistemic distinction between transparent and non-transparent nudges. In the end the result is a conceptual framework for describing the character of four types of nudges that may provide a central component for more nuanced ethical considerations and a basis for various policy recommendations. (Hansen and Jespersen, 2013, 28.)

When the interviewee was asked about what weaknesses or threats you see in the method, the transparency of the method and the awareness of people became a key issue. As a critic, it also emerged that it is not so obvious that the direction of nudging is always acceptable. For man himself, there will always be a choice for what he wants to do. The most important thing was that nudging has to be transparent.

In this research has been used the secondary and primary data. As mentioned in the literature review analysis the data was collected from an established academic international journal. Therefor it is reasonable to believe that the data gathered is reliable. It was also used in the platform for the Publish Forum and all the selected articles had the Quality Score on scale of 1-3. It is also seeing that the major part of secondary data is not valid for the research question, even the data which has used directly in the thesis is valid and assists the research questions. Primary data has

collected by the author. In this research the interview is valid as well as reliable.

It can be said that small changes can make a big difference in our life. Nudging is very interesting way to help us to make better choices in our daily life. This study identified a common way to create nudges by the guides, literature review and interview. People who are thinking to explore nudging more might benefit from this thesis. Nudge theory is still relatively new in the business world. The Guarantee Foundation has taken a great step to try the concept. The interview also pointed out that nudging could be the method to find out the right kind of tool box for counselling. When you have a good toolbox, everyone can succeed using it. One powerful tool could be also to change

According the interview and the literature review, ease is one important factor in the success of nudge. In the interview was mentioned one example from Stockholm, where have been tested how people would use more stairs instead of escalator. They painted stairs to remain piano keyboard with voice. The result was that people changed their behaviour, most of the people decided to use stairs instead of escalator. You can change people behaviour by making it fun and nudge might be one way to do so. With this research the nudging is a good way to guide people to have better decisions about health, wealth and happiness. The interviewee was mentioned StopDia-research, which results will be available in late 2019 The main idea in the research is to use nudging to reduce the risk of type 2 diabetes. The aim is to find out whether working-day eating habits and habits can be changed in a healthier way by investing in small, healthpromoting choices encouraging and easily perceived items in a daily work environment. The central idea of the research is to support health promoting behaviour at three levels of action. Levels are individual, living environment and society. (StopDia 2018).

In this research was found that there were many ways to make policy to increase behaviour change. Nudging and choice architecture seems to be growing, so this research could be a guide for practitioners. Nudging is not a way to create more prohibitions or force you to do something. It is a concept which tries to change the environment for supporting people to behave targeted behaviour. One possible topic for further research could be understanding how people could be nudged to create better and safer personal passwords. It looks that people are aware of threats, but still they are using and creating passwords like they used to have. It would be interesting to find out right kind of drivers of influencing behaviour. Of course, you should proceed step by step by using nudge process. Using nudging should always have also ethical aspect.

REFERENCES

Alakoski, L. & Hytönen, K. toim. (2016). *Päätöksenteon ilmiöt johtamisessa*. Laurea Publications 67. Online. Retrieved 12 March 2018 from https://www.theseus.fi/bitstream/handle/10024/115857/67.%20Alakoskim/20Hytonen%20Paatoksenteon%20ilmiot%20johtamisessa.pdf?sequence=1

Beshears, J. & Gino, F. (2015). *Leaders as Decision Architects*. Harvard Business Review. Issue May 2015.

Deloitte. (2016). Jim Guszcza. *The importance of Misbehaving: A conversation with Richard Thaler*. Online. Retrieved 10 February 2018 from https://www2.deloitte.com/insights/us/en/deloitte-review/issue-18/behavioral-economics-richard-thaler-interview.html

Dolan, P., Hallsworth, M., Halpern, D., King, D., Metcalfe, R. & Vlaev, I. (2010). *Mindspace: Influencing Behaviour Through Public Policy*. London: Institute for Government.

Eskola, J. & Suoranta, J. (2008). *Johdatus laadulliseen tutkimukseen*. 8. painos. Jyväskylä: Gummerus.

European Lotteries. (2018). Online. Retrieved 26 January 2018. https://www.european-lotteries.org/

FDJ-Rapport. (2016). Online. Retrieved 26 January 2018. https://www.economie.gouv.fr/files/files/directions services/observatoir e-des-jeux/FDJ_rapport_dactivite_2016.pdf

Fink, A. (2005). Conducting Research Literature Reviews: From the Internet to the Paper. Thousand Oaks: Sage Publications, Inc.

Hanks, A., Just, D., Smith, L., E. & Wansink, B. (2012). *Healthy convenience: nudging students toward healthier choices in the lunchroom*. Journal of Public Health. Volume 34, Issue 3, August 2012: 370-376.

Hansen, P. & Jespersen A. (2013). *Nudge and the Manipulation of Choice*. A Framework for the Responsible Use of Nudge Approach to Behaviour Change in Public Policy. Online. Retrieved 15 March 2018. http://www.lexxion.de/pdf/ejrr/02%20Nudge%20and%20the%20Manipulation%20of%20Choice.pdf

Hansen, P. (2015). *The Definition of Nudge and Libertarian Paternalism - Does the Hand Fit the Glove?* The European Journal of Risk Regulation. Online. Retrieved 17 March 2018.

http://www.lexxion.de/pdf/ejrr/Pelle 2016 01.pdf

Hausmann, D. & Welch, B. (2010). *Debate To Nudge or Not to Nudge*. The Journal of Political Philosophy. Volume 18, Number 1: 123–136.

Hirsjärvi, S. & Hurme, H. (2010). *Tutkimushaastattelu. Teemahaastattelun teoria ja käytäntö*. Helsinki: Yliopistopaino.

Johnson, E.J., Shu, S.B., Dellaert, B.G.C., Fox, C., Goldstein, D.G., Häubl, G. & Weber, E.U. (2012). *Beyond nudges: Tools of a choice architecture*. Marketing Letters: a journal of research in marketing, 23(2), 487–504.

Johnson, E. J. (2009). Things That Go Bump in the Mind: How Behavioral Economics Could Invigorate Marketing. Journal of Marketing Research, Vol. 43, No. 3, 337-340

Kahneman, D. (2011). *Thinking, Fast and Slow*. United States of America: Farrar, Straus and Giroux.

Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics, The American economic review 93(5): 1449–1475. Online. Retrieved 10 February 2018 from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.460.1998&rep=rep1&type=pdf

Kallbekken, S. & Sælen, H. (2013). Nudging hotel guests to reduce food waste as a win-win environmental measure. Economics Letters 119, 2013: 325–327.

Kananen, J. (2011). Rafting Through the Thesis Process. Step by step Guide to Thesis Research. Jyväskylä: Jyväskylän ammattikorkeakoulu.

Ly, K., Mazar, N., Zhao, M. & Soman, D. (2013). *A Practioner's guide to nudging*. Rotman School of Management: University of Toronto. Online. Retrieved 20 March 2018 from

https://www.tsv.fi/julkaisufoorumi/haku.php?lang=en

Milkman, K., L., Beshears, J., Choi, J., Laibson, D. & Madrian, B., C. (2011). *Using implementation intentions prompts to enhance influenza vaccination rates*. Proceedings of the National Academy of Sciences of the United States of America, 108(26), 10415-10420. Online. Retrieved 15 April 2018 from

http://doi.org/10.1073/pnas.1103170108

Momsen, K. & Stoerk, T. (2014). From intention to action: Can nudges help consumers to choose renewable energy? Energy Policy 74: 376–382. Online. Retrieved 20 April 2018 from

http://duwtje.com/wp-content/uploads/2015/06/Can-nudges-help-consumers-to-choose-renewable-energy.pdf

Moseley, A. & Stoker, G. (2013). *Nudging citizens? Prospects and pitfalls confronting a new heuristic*. Conservation and Recycling 79 2013: 4–10.

Olstad, D, L., Goonewardene, L., A., McCargar, L. & Raine, K., D. (2014). Choosing healthier foods in recreational sports settings: a mixed methods investigation of the impact of nudging and an economic incentive. International Journal of Behavioral Nutrition and Physical Activity 2014, 11:6. Online. Retrieved 15 April 2018 from

https://ijbnpa.biomedcentral.com/track/pdf/10.1186/1479-5868-11-6

Samson (editor). (2014). *The behavioural economics guide.* Online. Retrieved 20 March 2018 from

https://www.behavioraleconomics.com/the-behavioral-economics-guide/be-guide-2014-download/

Service, O., Hallsworth, M., Halpern, D., Algate, F., Gallagher, R., Nguyen, S., Ruda, S., Sanders, M., Pelenur, M., Gyani, A., Harper, H., Reinhard, J. & Kirkman, E. (2012). *EAST: Four simple ways to apply Behavioural Sights*. Online. Retrieved 25 March 2018 from

http://38r8om2xjhhl25mw24492dir.wpengine.netdna-cdn.com/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf

Shearer, L., Gatersleben, B., Morse, S., Smyth, M. & Hunt, S. (2017). A problem unstuck? Evaluating the effectiveness of sticker prompts for encouraging household food waste recycling behaviour. Waste Management. Volume 60. Feb 2017: 164-172.

STOPDIA. (2018). *Pysäytetään diabetes. Pieniä tuuppauksia terveyden hyväksi*. Online. Retrieved 15 August 2018 from https://www.uef.fi/web/stopdia/ajankohtaista

Sunstein, C. R. (2014). *Nudging: A Very Short Guide*, 37 J Consumer Pol'y 583. Online. Retrieved 24 February 2018 from https://dash.harvard.edu/bitstream/handle/1/16205305/shortguide9-22. pdf?sequence=4

Thaler, R. H. & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth and happiness*. Yale University Press, UK: Penguin Books.

Thaler, R-H. & Sunstein, C-R. (2003). *Libertarian paternalism*. The American Economic Review, 93(2). 175-179.

Tuomi, J. & Sarajärvi, A. (2002). *Laadullinen tutkimus ja sisällönanalyysi*. Jyväskylä: Tammi.

Nielsen, T. & Kepinski, L. (2016). *Inclusion Nudges Guidebook*. Edition 2. Great Britain: Amazon.

Vallgårda, S., (2012). *Nudge - a new and better way to improve health?* Health policy, 104. 200-203.

Verity, J. (2012). The New Strategic Landscape: Innovative Perspectives on Strategy. United Kingdom. Palgrave MacMillan.

Vilkka, H. (2015). *Tutki ja kehitä*. Jyväskylä: PS-kustannus.

Wilkinson, N. & Klaes, M. (2012). *An introduction to Behavioral Economics*. 2nd Edition. Houndmills, Basingstoke; NY: Palgrave Macmillan.

SUMMARY OF LITERATUE REVIEW

Authors, year, name of the article, country	Aims and purpose	The material and collecting material	Results
Milkman, K., L., Beshears, J., Choi, J., Laibson, D., & Madrian, B., C. 2011. Using implementation intentions prompts to enhance influenza vaccination rates, US.	Research evaluates another behavioural intervention, which is planning prompts in a field setting. A prompt to form an implementation intention is a "nudge" in the direction of desired behaviour that can be applied at minimal expense and does not restrict individual autonomy. An employer modified the normal informational mailings regarding free flu-shot clinics to prompt employees to write down details about when they planned to obtain vaccinations.	N=3272. Individuals 50 y of age or older and those with chronic health conditions that increase the risk of influenza- related complications. All 3,272 employees meeting these criteria were included in the study and received a mailing about the firm's influenza vaccination clinics. In research was used statistical analysis.	- Increase of 1.5 percentage points in employees obtaining a flu shot when they received the prompt to write down just a day '- increase of 4.2 percentage points in employees obtaining a flu shot when they received the prompt to write down both a date and a time
Momsen, K. & Stoerk, T. 2014. From intention to action: Can nudges help consumers to choose renewable energy? Germany	In energy consumption individual is noticed a gap between intention and action, less than 3% buy renewable energy. Survey experiment on which nudges affect the choice whether to contract renewable energy or conventional energy	The online survey was sent to German and international students in June 2011. N=475. The result from the no-nudge comparison group is the benchmark against of each compared nudge.	It was found that only a default nudge has a significant effect and all other nudges prove ineffective. A default nudge increases the share of individuals who choose renewable energy by 44,6%.

Shearer, L., Gatersleben, Randomised Control Trial It was two - In the control B., Morse, S., Smyth, M. (RCT) investigated the groups. The group, there was no and Hunt, S. 2017. A effectiveness of using other group was change in the problem unstuck? stickers as a visual prompt 29 areas and the average weight of to encourage the separate Evaluating the other group was food waste effectiveness of sticker collection of household 26 areas. Food captured for food waste for recycling in recycling between prompts for waste was encouraging household two local authorities. the baseline and measured in food waste recycling both groups and experimental behaviour. England. the experimental period. period was 16 - In the treatment weeks. group was a significant increase (20.74%) and this change in behaviour persisted in the longer term. Sticker prompts therefore appear to have a significant and sustained impact on food waste recycling rates. Hanks, A., Just, D., The research examines The data was Sales of healthier Smith, L., E., Wansink, the application of this collected by foods increased by B., 2012. Healthy principle in a school observation. The 18% and grams of convenience: nudging lunchroom where experiment less healthy foods students toward healthier foods were lasted 8 weeks consumed healthier choices in the decreased by nearly made more convenient (control period) lunchroom.US. relative to less healthy and 8 weeks 28%. Also, healthier foods. (intervention foods' share of total period). consumption increased from 33 to 36%. Lastly, we find that students increased their consumption of flavoured milk, but flavoured milk's share of total consumption did not increase.

Olstad, .D, L., Goonewardene, L., A., McCargar, L. and Raine, K., D. 2014. Choosing healthier foods in recreational sports settings: a mixed methods investigation of the impact of nudging and an economic incentive. Canada.	The research evaluated the comparative and efficacy of two nudges and an economic incentive in supporting healthy food purchases by patrons at swimming pool.	The study used mixed methods. Interventions were: signage with descriptive menu labels, addition of taste testing intervention, addition of price reduction intervention.	In the end there were 6175 items sold in the target concession, of which 40,8% were healthy. Healthy items were sold less than the number of sold unhealthy items.
Kallbekken, S. & Sælen,H. 2013. Nudging hotel guests to reduce food waste as a win-win environmental measure. Netherlands.	The research showed how two simple and nonintrusive nudges can reduce the amount of food waste.	There were two choice architecture treatments: Plate size and providing a more direct social cue by displaying a sign. The study was implemented between June 1 st and August 15 th 2012. There were 52 hotels.	The study was shown that reducing the plate size reduces food waste by 19,5%. The message: "Welcome back! Again! Again! Again! Visit our buffet many times. That's better than taking a lot one" worked well and it reduces food waste 20,5%.
Moseley, A. & Stoker, G. 2013. Nudging citizens? Prospects and pitfalls confronting a new heuristic. UK.	The study present aspects of social science literature on how citizens make decisions and how nudging influence human making decisions.	Literature of nudging and behavioural economics and behavioural change	The study presents that some interventions have worked of our decision making, but still there is a still long way from knowing how to best to translate our understanding of people's decision processes.

INTERVIEW QUESTIONS

Tutkimukseni tavoitteena on selvittää, miten Nudge-teoria on sovellettavissa käytäntöön ja millaisia mahdollisuuksia sen hyödyntämisestä nähdään.

TAUSTAKYSYMYKSET

- 1. Kuka olet?
- 2. Asemasi organisaatiossa?
- 3. Miten näet roolisi tuuppaus-menetelmän kokeilussa/aiotussa kokeilussa säätiössänne?

TEEMA 1: NUDGE=TUUPPAUS MENETELMÄNÄ

1. Miten omin sanoin kuvailisit tuuppausta menetelmänä?

TEEMA 2: KOKEMUKSIA TAI NÄKEMYKSIÄ TUUPPAUS-MENETELMÄSTÄ

- 1. Miten olet tutustunut tuuppaus-menetelmään?
- 2. Miksi päädyitte kokeilemaan tuuppaus menetelmää?
 - a. Mihin asiaan uskotte vaikuttavan tuuppauksen avulla?
 - b. Mitä hyötyä uskotte teoriasta olevan valitussa asiassa?
- 3. Mitä tavoittelette kyseisellä menetelmällä?
- 4. Kokemuksia tai näkemyksiä tuuppaus-prosessista
 - a. Miten kuvailisit prosessia yleisesti?
 - b. Miten tuuppaus esiintyy teidän suunnitellussa prosessissa?
 - c. Mitä toimivaa/ei toimivaa olette löytäneet teoriasta?
 - d. Millaisia tarinoita teillä on kertoa tuuppauksesta onnistumisien tai epäonnistumisien suhteen?

TEEMA 3: TUUPPAUS-MENETELMÄN MAHDOLLISUUDET

- 1. Mitä mahdollisuuksia näet tuuppauksella alallasi?
- 2. Mikä sinussa herätti kiinnostuksen selvittää enemmän tuuppaus-menetelmän toimintaperiaatetta?
- 3. Mitä vahvuuksia tai mahdollisuuksia näet menetelmässä?
- 4. Mitä heikkouksia tai uhkia näet menetelmässä?
- 5. Onko jotain muuta, mitä haluaisit lisätä tuuppaus-menetelmästä?

Appendix 3

PERMISSON FOR THE RESEARCH

Mari Rajala xxx

xxx Xxx Xxx

TUTKIMUSLUPAHAKEMUS

Opiskelen työni ohessa Hämeen ammattikorkeakoulussa kansainvälistä liiketaloutta. Lisäksi olen aiemmin opiskellut kasvatustiedettä Tampereen yliopistossa, josta valmistuin 2004. Tutkijana minua kiinnostaa käyttäytyminen ja sen ohjaaminen, joten lopputyöni aiheeksi valikoituikin tutkia näkemyksiä tuuppaamisen vaikutuksista käyttäytymisessä. Tutkimukseni tavoitteena on selvittää, miten Nudge-teoria on sovellettavissa käytäntöön ja miten Takuusäätiössä sen mahdollisuuksien hyödyntäminen koetaan. Tutkimukseni ohjaajana toimii Annikka Lepola Hämeen ammattikorkeakoulusta.

Tutkimukseni empiirinen osa koostuu kirjallisuuskatsauksesta ja haastattelusta. Teemahaastattelun avulla pyrin kartoittamaan kokemuksianne ja näkemyksiänne Nudge-teorian mahdollisuuksista.

Tutkimukseen osallistuvien henkilöiden nimiä ei mainita tutkimuksessa. Takuusäätiön nimi ja lyhyt esittely on tarkoitus tuoda esille, mutta ovat myös mahdollista jättää mainitsematta ja näin tutkimuksessa mainitaan vain toimiala. Tutkimus keskittyy Nudgeteoriaan ja kokemuksiin sen mahdollisuuksista käytännössä. Toimialan toimintaperiaatteet eivät kuulu tutkimukseeni ja ne rajautuvat ulkopuolelle. Tutkimukseen osallistuvalla on oikeus jättäytyä pois tutkimuksesta milloin tahansa. Haastatteluaineisto käytetään vain tämän tutkimuksen tekemiseen ja se hävitetään tutkimuksen valmistuttua.

Tutkimuksen raportti on valmistuttuaan käytössänne. Olettamukseni on, että tutkimuksen avulla saadaan tietoa Nudge-teorian mahdollisuuksista, joka voisi kannustaa teorian laajempaankin kokeiluun.

Annan mielelläni tarvittaessa lisätietoa tutkimuksestani.

Kunnioittavasti, Mari Rajala Meckenbeuren, Germany 26.3.2018

Tutkimuslupa on hyväksytty ja myönnetty Mari Rajalalle edellä mainitussa yhdistyksessä.

Appendix 4

INFORMATION TO INTERVIEWEE

Bachelor's thesis Tutkija: Mari Rajala

Ohjaaja: M. Sc. (Econ) Annikka Lepola

DP in international Business, Hämeen ammattikorkeakoulu

INSIGHT OF NUDGING IN CHANGING BEHAVIOUR NÄKEMYKSIÄ TUUPPAAMISEN VAIKUTUKSISTA KÄYTTÄYTYMISESSÄ

Tervetuloa mukaan tutkimukseeni. Tämä tutkimus käsittelee Nudge-teorian käytäntöä ja kokemuksia. Tutkimukseni tavoitteena on selvittää, miten Nudge-teoria on sovellettavissa käytäntöön ja millaisia mahdollisuuksia sen hyödyntämisestä nähdään.

Tutkimukseni etsii vastausta kysymykseen:

Miten Nudge-teoriaa voi hyödyntää käytännössä?

Tutkimuksen teoreettinen tausta

Nudge- eli tuuppaustoimenpide pohjautuu siihen, että arjen päätöksiin vaikuttavat erilaiset ajatusvinoumat. Näiden avulla ihmisen valintoja voidaan hyödyllisempään suuntaan tekemällä pieniä muutoksia tilanteeseen, jossa päätöksiä tehdään. Nudge-termi tulee käyttäytymistaloustieteilijöiden Richard Thalerin ja Cass Sunsteinin päätöksenteon ohjaamista käsittelevästä kirjasta. Kirja ilmestyi vuonna 2008, joka nostikin käyttäytymistieteelliseen tietoon nojaavan yhteiskuntapolitiikan puheenaiheeksi ympäri maailmaa. Thalerin ja Sunsteinin mukaan pienillä ja merkityksettömältä vaikuttavilla yksityiskohdilla voi olla suurikin vaikutus ihmisten toimintaan ja käyttäytymiseen. Tuuppauksella tarkoitetaan mitä tahansa osaa olevien vaihtoehtojen esitystavasta, jolla vaikutetaan käyttäytymiseen ennustettavalla tavalla ilman, että kielletään mitään vaihtoehtoa tai muuten merkittävästi pyritään vaikuttamaan taloudellisiin kannustimiin. Tuuppauksen muodoista valinta-arkkitehtuurin tarkoituksena on helpottaa ihmisten päätöksentekoa, harkitusti ja tarkoituksenmukaisesti esittämällä heille vaihtoehdot tavalla, joka kannustaa valitsemaan positiiviseen lopputulokseen johtavan vaihtoehdon.

Haastatteluun liittyvää

Haastattelumenetelmä on puolistrukturoitu teemahaastattelu, jolloin edetään tiettyjen keskeisten teemojen ja niihin liittyvien tarkentavien kysymysten varassa. Haastattelu kestää arviolta noin tunnin ja se nauhoitetaan. Haastattelusta saatava tieto käytetään vain tähän tutkimukseen ja aineisto hävitetään tutkimuksen tekemisen jälkeen. Nimeäsi ei tuoda esille tutkimuksessa, ainoastaan toimiala ja mahdollisesti yhdistyksen nimi mainitaan tutkimuksessa. Voit halutessasi jättäytyä tutkimuksesta pois milloin tahansa.

Tutkimuksen valmistuttua, toimitan sen teille. Olettamukseni on, että tutkimuksen avulla saadaan tietoa Nudge-teorian mahdollisuuksista, joka kannustaa teorian laajempaankin kokeiluun.