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# PERSUASIVE DIGITAL ADVERTISING IN ONLINE ADVERTISEMENT

Case Study: MarkPrint Oy

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ABSTRACT

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The past decades have seen an unprecedented growth in digital advertising over its budget, efficiency and effectiveness. Since 2003, marketers' spending on online advertisement worldwide has increased by roughly \$1 billion over its previous business quarter. Return-on-Investment for digital advertisement triples traditional ones in numerous areas while the cost of operating online is among the most economical means to reach audiences. Thus, the aim of this thesis is to provide a theoretical foundation to maximize the persuasive potentials of digital advertising in online environment and to assist the Case Company in advertising operations.

The thesis employs deductive approach and utilizes both qualitative and quantitative methods to analyze empirical data, with an emphasis on quantitative thinking. Primary data was collected from a survey among digital consumers. Secondary data was acquired from books, journals, electronic database and the Internet.

Findings from the research supports the author's theoretical digital advertising framework, as well as pointing out key improvement areas for the Case Company in its advertising message, target engagement and delivery channels. To conclude, the author assesses the research as highly reliable and valid. Several suggestions for future studies are suggested, such as attentive stimuli mechanism, external factor's distortion and manipulation of digital channel combination.

Key words: advertising, digital advertising, digital channels, persuasiveness, online banner ad, email, social media, website.

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## ABBREVIATIONS

CMS	Content Management System
CPC	Cost per Click
CPG	Consumer packed goods
CPM	Cost per thousand impressions
ELM	Elaboration Likelihood Model
MAIN	Modality, Agency, Interactivity, Navigability
PTAT	People Who Talk about This
ROI	Return on Investment
SWOT	Strengths, Weaknesses, Opportunities, Threats

# 1 INTRODUCTION

This chapter is conducted to briefly explain the thesis' topic as well as its structure. First of all, the thesis background provides the current situation's explanation, which is the foundation for the research questions and objectives. Secondly, the theoretical framework and research methodology introduce applied fields of theories in conjunction with research approaches. Finally, the thesis structure outlining different stages in research is presented.

## 1.1 Thesis background

The digital world has changed our lives significantly in every corner. Especially in the business field, digitalization and internet expand the territories for companies to seek out new opportunities. Its greatest strength is the capability of transforming the needed tangible presence into intangible and low cost approach. As a result, digitalization necessitates the evolution of business models that shift focus on entirely new areas.

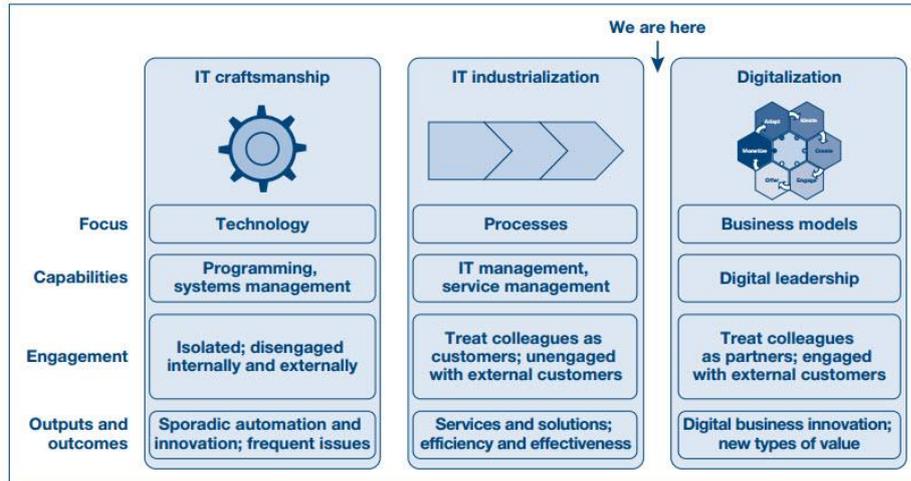


Figure 1: New era of business (Gartner 2014)

Admittedly, as the new digital world calls for extraordinary approaches, many pioneer marketers have revolutionized the traditional norms. New companies are born, new tools are invented to take advantage of the current stream towards digital advertisement. Google Inc., the largest global search engine, builds its founda-

tion based on the Cost-per-click model (CPC) – the first proof of how digital approaches will be the trend of near future. Facebook Inc., the leader in social media, formulizes several new metrics for viral advertisement: impression (how many times the post is read), reach (how many people see the post), engagement (how many interactions on post) and People Who Talk about This (PTAT).

As the modern era glooms, digital advertising has soared over its budget, efficiency and effectiveness. Concerning digital budget, the total spending on online advertising has risen from nil to roughly \$100 billion worth after 20 years (Hof 2013). Quarterly growth for internet advertising since 2003 has been almost always positive, roughly \$1 billion on average over the previous quarter.

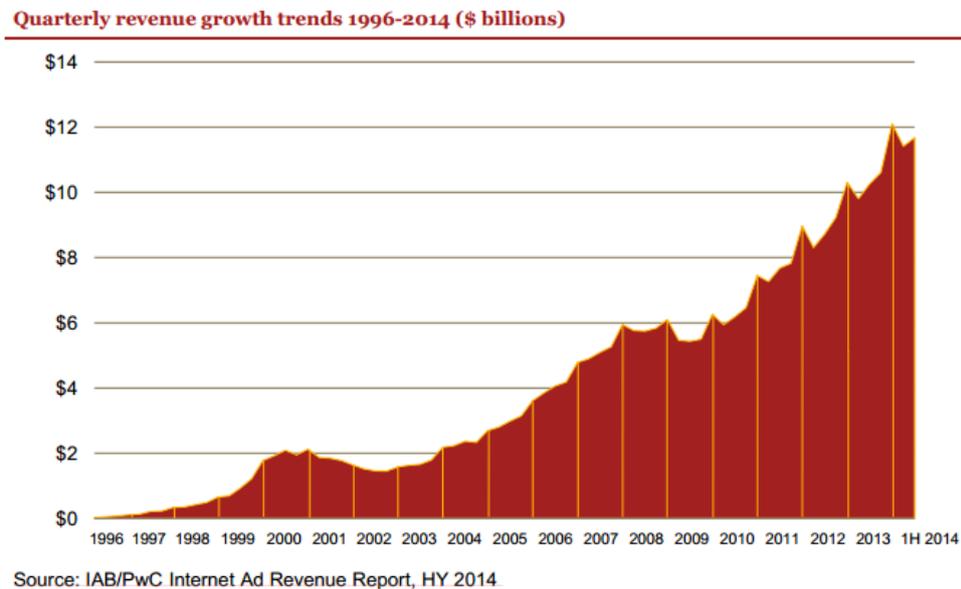


Figure 2: Internet revenue growth quarterly since 1996 (IAB internet advertising revenue report 2014)

In terms of effectiveness, Nielsen – an American global information and measurement company with over 800 studies over the past seven years, has pointed out that digital advertising can drive up Return-on-Investment (ROI) from three to five times the initial investment. In that research, Consumer packed goods (CPG) experience of almost three dollars per one dollar invested in digital advertising (Nielsen 2012). Other studies conducted by BrainScience in cooperation with Microsoft shows that not only online advertising yields excellent results, it also

boosts other media's performance (Microsoft 2012). When comparing the differences between ROI of advertising with and without online elements, researchers found a striking increase if digital advertising is added to the media mix, from a stunning +51% for outdoor to an impressive +70% for television (appendix number 1).

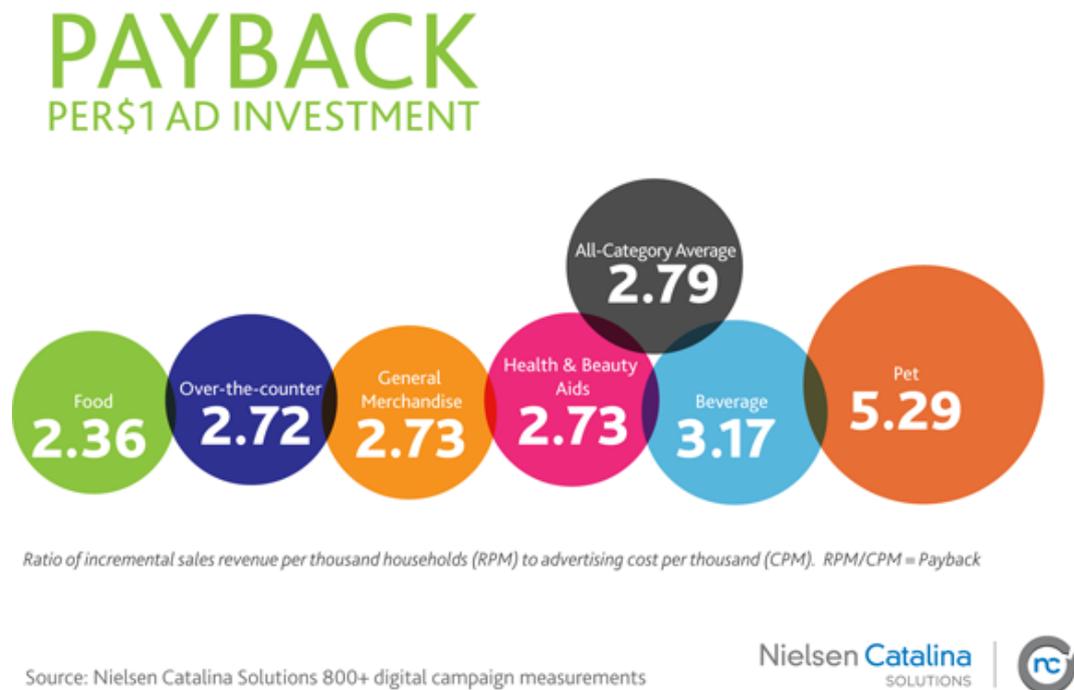


Figure 3: ROI per one dollar investment in online advertising (Nielsen 2012)

Regarding efficiency, McKinsey analyzed over 9000 new car buyers in terms of engagement touch points and found out that digital advertising is the fundamental building bloc to premium perception (only behind life experience). Online channels dominate McKinsey's "consumer decision journey" framework. (McKinsey 2012.) Furthermore, digital cost-per-thousand-impression (CPM) is argued to be generally most efficient among other means of reaching the audience, according to a research by Outdoor Advertising Association of America (OAAA 2014).

## Major Media CPM Comparison

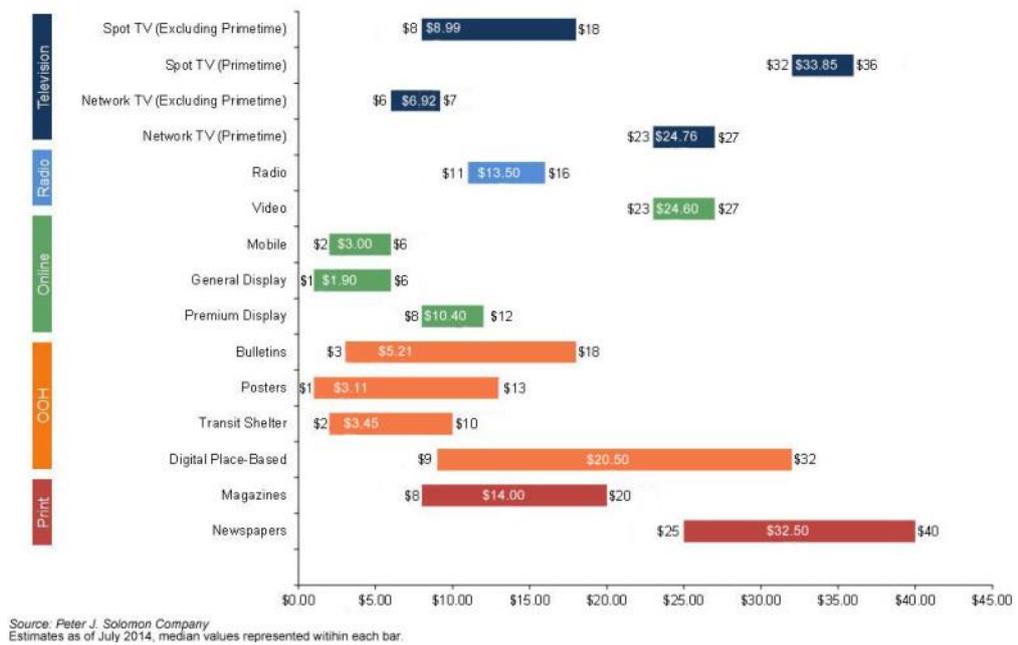


Figure 4: Cost-per-thousand-impressions comparison (OAAA 2014).

Despite all the said impact, the main purpose of digitalization still goes parallel with traditional business practices. In order to fully realize the potential of advertising digitalization, it is important to go back to advertising's root: the fundamental processing mechanism of advertisement. As digitalization has its own opportunities and challenges, the understanding of these theories is vital to wield such immensely powerful instrument effectively and consistently in practice (Krugman & Hayes 2012). Though multiple research have been conducted to discover the underlying features of behavior stimuli, it is utmost important to accumulated such studies to a comprehensive framework for persuasive advertisement processing.

### 1.2 Research Objectives, Research Questions and Limitation

By its definition, research questions not only guide the study focus but also establish connections with previous knowledge in an attempt to clarify deficits within current paradigms. In this study, the main objective is to examine the processing of advertising message; investigate the components of a persuasive advertisement; study the implications of digital channels to support such components; and to plot

an optimal combination for the advertisement program. The secondary objective is to provide the Case Company with suggestions for digital advertising in Business-to-Customer (BTC) model based on the researched literature. Therefore, the main research question is: *How can companies use digital advertising effectively in stimulating customer purchasing decision?*

In order to better supplement the principal question, several sub-questions are introduced:

- What is advertising?
- How do consumers process an advertisement's messages in general?
- How do marketers maximize the persuasiveness potentials of an advertisement?
- What should be done with digital channels in terms of persuasion?
- How can the Case Company improve its digital advertising practices?

Under the scope of business research, the author utilizes biological and psychological findings as foundations but only limited to advertising implications. These studies' sole purpose is to conceptualize media contents in order to advance theories on optimal processing of advertisement. The author does not concern with psycho-physiology as methodical paradigm in analyzing brain's activity nor biological responses. In addition, the effectiveness of persuasion attempt in question is not measured thoroughly, but only maximized via optimization of message delivery.

### 1.3 Theoretical Framework

The study aims to identify the "magic" route within the customer's mind that lead to an optimal processing of advertisement. Hence, in the next chapters, the author provides the knowledge which explains the underlying mechanism of advertisement interpretation. First of all, it is important to understand how the brain processes advertisement's information. Secondly, advertisement's message will not leave a lasting impact if it fails to engage with the consumers – in which the the-

ory of Involvement comes into consideration in order to create appropriate motivation and behavior stimuli upon contacting. Finally, the author investigates the influence of digital context, or channel technology, upon advertisement exposure to pinpoint the optimal delivering channels.

#### 1.4 Research methodology

Research is a ubiquitous term with a wide range of meaning. For example, everyday usage usually sees the word “research” from polls asking for people’s opinion, politician’s policies to marketing messages. However, these featured results are not research. The characteristics which clearly define “research” are the systematic collection, interpretation and discovery purposes. (Saunders, Lewis & Thornhill 2009.) In other words, a research requires a proper methodology to collect data together with an appropriate approach.

Regarding the research approaches, two possibilities exist: deductive and inductive. Deductive approach involves the development of theory upon literature reviews, thus designs a research plan to test such hypothesis whilst inductive approach begins with data collection to infer theories upon (Saunders, Lewis & Thornhill 2009). Since the author builds his theory based on previous advertising studies on consumer behavior, it is appropriate to employ deductive approach. Inductive research, on the other hand, would invoke such a vast number of possibilities that it is ultimately inconclusive to make clear inferences.

After the decision on research approach, the research method is chosen from the two alternatives: quantitative and qualitative methodology. Quantitative research refers to the exploration, examination of relationships and trends within raw data (e.g., numerical figures). On the other hand, qualitative technique is to collect and interpret observations of what people say in order to seek meanings, concepts, definitions and descriptions for such phenomena. However, the two methodologies are not mutually exclusive. In fact, the combination of both quantitative and qualitative – or pluralistic research has the advantage of triangulating multiple lines of sights to provide increased validity and complementary. (Anderson 2006.) In respect of the characteristics of this study, the author decides to use quantitative

methods with qualitative data as supplementations. As the correlation among different variables affecting customer behavior is best analyzed with numerical figures from consumer side, in-depth knowledge of how the Case Company sees the influence of said variables on advertising will provide another perspective from marketers' point of view. The combination of both data will bring necessary adjustment to the original theory.

The final step is to collect data sources. In this study, primary data is from the survey addressing consumer opinion in conjunction with the Case Company's practices of digital advertisement. Concerning secondary data, publications such as book, journal articles, electronic sources, and author's observations are also vital to supplement the original theory.

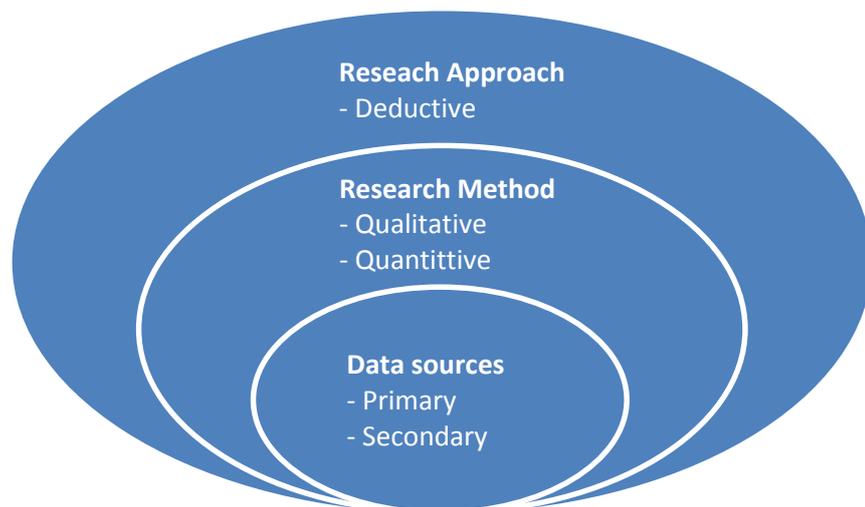


Figure 5: Research Methodology

### 1.5 Thesis structure

The thesis consists of both theoretical and empirical research sections, which comprise of the following chapters:

Chapter 1 describes the research background, research objectives, questions, limitation and theoretical framework as well as thesis methodology and structure.

Chapter 2 investigates the mechanism underlying advertising's message processing.

Chapter 3 presents the influence of technology in message delivery, together with hidden impacts from the features of said technology.

Chapter 4 evaluates the channel choice based on the presented theory in terms of persuasiveness.

Chapter 5 studies the Case Company background as well as its advertising practices.

Chapter 6 brings forth the recommendations for advertising structures and practices based on the research's findings.

Chapter 7 reports an empirical research conducted to shed light into the correlation between suggested advertising structure's variables and consumer perspective.

Chapter 8 succinctly answers the research questions, assesses research validity and reliability as well as giving suggestions for future studies.

Chapter 9 summarizes the thesis content and concludes the research.

## 2 ADVERTISING'S MESSAGE PROCESSING

In this chapter, the author conducts a literature review about the definition of advertising, followed by the theory in which advertising's message processing is explained. Based on these findings, the role of important elements in advertising processing is addressed and arranged in a manner that ensures optimization of such message's impact. The aim is to make the best use of the advertising message's influence on the consumer mind.

### 2.1 Advertising definition

Out of many possibilities to promote idea, brand, products, advertising consists of commercials (which refers to television programs) and advertisements (such as posters and online ads). An advertisement message is defined by Thorson & Rodgers (2012) as "*a paid communication from an identified sponsor using mass media to persuade an audience*". In this thesis's scope, the author concerns only advertisement as the main form of advertising. It is important to distinguish advertising among its peers under the forth "P-Promotion" umbrella of the "4P" marketing mix. Other types of promotion include public relation, personal selling and sales promotion. These activities carry a communication form, but they differ in terms of purposes. Public relation aims to increase long-term mutual understanding between sponsors and audience. Personal selling forfeit mass media for a direct approach, whilst sales promotion is targeted to change customer's perceived product value.

The purpose of advertising is divided into four major utilities: brand building, lead generation, driving purchase and changing life behavior (Thorson & Rodgers 2012). Brand building is to create concept and trust associated with the brand. Lead generation means to capture consumer attention in targeted marketing. Driving purchase serves the purposes of encouraging buying decision and changing life behavior is all about influencing consumer daily habits.

To better describe advertising concept, Thorson & Rodger (2012) illustrate the concept with seven components:

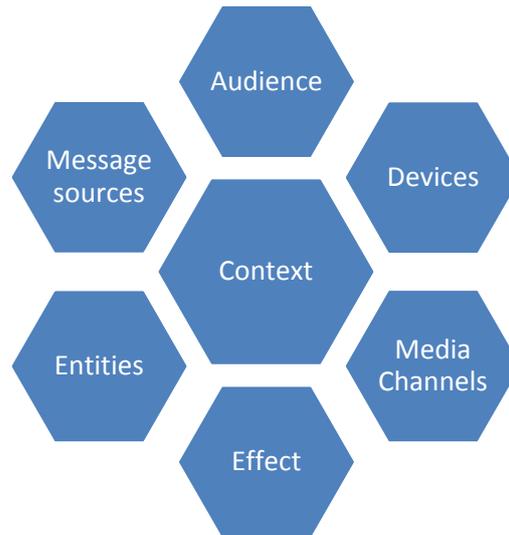


Figure 6: Components of the Advertising Process Circle

According to Thorson & Rodger (2012), “Audience” is the target of advertising message. It ranges from demographic features (e.g., age, education, and race) to profession segments and geographies (i.e., international audience). “Devices” are the instruments which display communication message, such as notebook, mobile phone or e-Readers. “Media channel” refers to the common sense notion of how the content is made available, for example, through television, radio, or internet. Though each media channel can be accessed through the same devices, it requires different technologies and elicits unique experience, hence the feature varies in advertising. The next component is “Effects”, referring to the intended behavioral changes that “Entities”- the advertising sponsors want to influence. However, advertising message can also invoke unintended behaviors (due to miscomprehension or ineffective persuasion). The “Message Source” implies marketers, corporations or celebrities who produce the message. All of these components centers on advertising “Context”, for instance: ethical, legal or historical background. The “Context” is argued to have a huge impact on the other components, shaping how the actual advertisement message is carried out.

## 2.2 Message processing mechanism

When an advertisement is displayed, a motivated mind will intercept the message, encode and store its components in terms of memories for later processing (Bolls,

Wise and Bradley 2012). As a result, conscious processing involves the use of *memory*, which includes declarative (explicit) memory and non-declarative (implicit) memory for storage.

These memories utilize different ways to store memory. Declarative memory is for assumption, cognition, and perception that can be consciously recalled to mind as verbal expressions (i.e., this flower is beautiful) or visual images. On the other hand, non-declarative memory refers to unconscious, reflexive mental shortcuts, such as skills, how-to knowledge, experience and emotions (for example, riding a bike does not need the body to be consciously controlled, it comes naturally after the skill is acquired). Beside emotion, non-declarative memory is inaccessible to conscious mind to be conceptualized. (Bolls, Wise and Bradley 2012.)

Recent neuroscientific evidences have pointed out that advertising processing is connected with less conscious level as traditionally thought. It takes a split of a second for the brain to activate non-declarative memory associations with the advertisement, ahead of any attentive action. (Vuilleumier, et al. 2001.) This enables the mind to support quick decision making based on emotions, experience or intuitive feelings when cognitive capability fails to comprehend. In fact, many theorists have suggested that the human mind utilizes the approach-avoidance response based on unconscious thinking (Percy 2012).

### 2.3 The Elaboration Likelihood Model of Persuasion

The Elaboration Likelihood Model of Persuasion (Petty, Cacioppo 1986) further advances the advertising message processing mechanism in terms of persuasion. It is essentially a theory which explains and describes the degree and type of processes that a person employs when being exposed to persuasive intentions. The Elaboration Likelihood Model (ELM) suggests that the attitude of an individual towards a persuasive attempt can be formed, changed or reinforced throughout a variation of “elaboration”, or thinking effort. In addition, the amount of thinking ranges from a lot, moderate to very little along an “elaboration continuum” effected by his or her *motivation* and *ability* to process the message. Motivation can

be defined as the inner desire towards continuous commitments. However, it vulnerable to the influence of numerous variables such as sense of responsibility, self-efficacy and perceived importance. Ability, on the other hand, is the innate resource and capability to decode the message. A person's cognitive comprehension is based on intelligence, time devoted and concentration during exposure to the message.

Based on these factors, the ELM anchored two distinctive routes to processing. When motivation and comprehension capability are high, individual is said to follow "central route" to persuasion – or extensive cognitive processing. However, if motivation and ability are low, people are more inclined toward "peripheral route" – which involves little cognitive brain's resource but more on emotion and feeling cues.

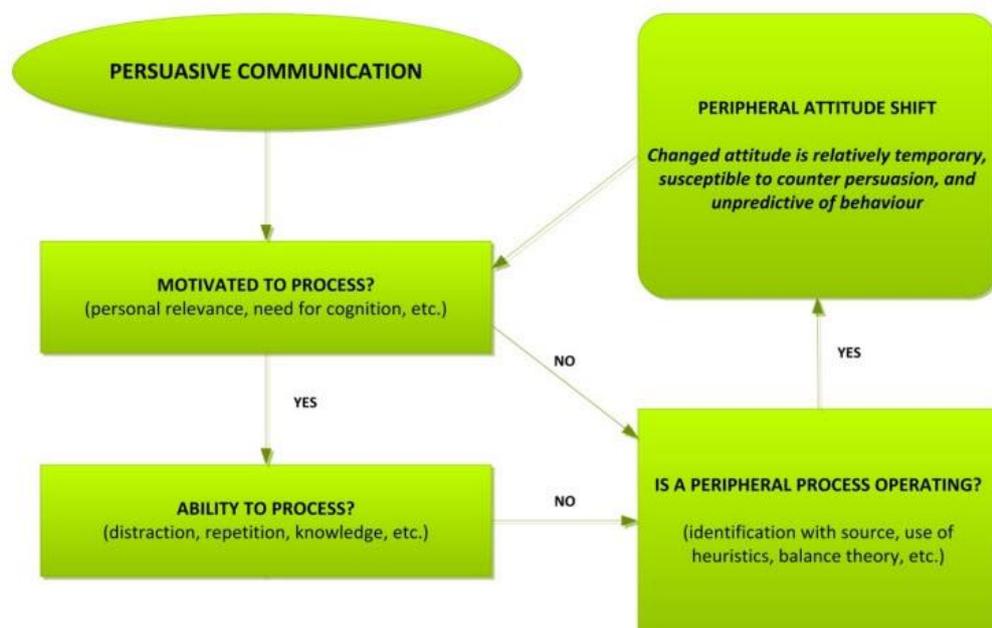


Figure 7: The Elaboration Likelihood Model of Persuasion, adapted from (Petty 2009)

### 2.3.1 Central route to persuasion

If an individual possesses adequate motivation and ability to think about the message (for instance, product of high importance, no distraction during exposure), he

or she is more likely to follow the central route to persuasion. In this route, different aspects of the message are dissected carefully and purposely by the viewer to determine whether the content logically makes sense. In other words, the central route focuses on the strength of the message argument. If the argument performs favorably in the communicator's point of view, the receiver will generate more positive attitudes towards the message than negative ones. But if the message contains many weak arguments, the engaged individual may invoke unfavorable thoughts in response. Nevertheless, the strength of such argument is largely dependent on the context of the exposure. For example, participations in a research have shown more positive attitudes when they are in a happy state than a neutral state. Generally, the central route to persuasion through cognitive comprehension is difficult to achieve, but it yields more enduring and consistent behavior. (BehaviorWorksAustralia 2012.)

### 2.3.2 The peripheral route to persuasion

As everyday consumers are bombarded by various commercials, individuals usually lack the motivation and ability to purposely and carefully take persuasive messages into consideration. In the ELM, such circumstance calls for a peripheral route to persuasion – or a mechanism that involves little cognitive resource but simple cues as the mean to process information. For example, a person may perceive an advice more favorably if he or she is listening to an expert (as the mental shortcut “the experts are correct”). Another cue is the number of positive previous response towards the message (e.g., testimonials), which generally dictates that the message is “safe” and “trustworthy”. Under the peripheral route, the strength of the message's argument is little of important to the attitude forming compared to the presentation of each elements. Thus, this route is easier to leave an impact in terms of persuasiveness, at least in short-term. (BehaviorWorksAustralia 2012.)

## 2.4 Involvement theory

As the ELM describes the concepts of extensive and limited problem-solving, the Consumer Involvement theory illustrates the motives for individual in processing

advertising messages. One of the earliest terms explaining why a person may pay attention to advertising is the notion of involvement, or “relevance”. Robertson (1976) advanced the individual’s relationship with a product or brand as “commitment”. The concept was defined based on the number of distinguishing attributes among the brands and the importance of such purchased compared to perceived risks. Under high commitment condition, consumers would be more active to seek information, for instance, buying an expensive car would require significant consideration with great deal of attributes to be taken into account. For low commitment situation, such as buying staple commodities (e.g., bread, sugar, and salt), it is suggested that consumers would be more passive in the sense of that purchase. (Haley 2012.)

The FCB grid, an advertising planning tool by Foote Cone and Belding, further developed the commitment concept into “involvement theory” with rational/emotional distinctions (Haley 2012). The grid recognized that brand purchase would involve both rational and emotional responses, thus suggested different learning models for each situation. In the high involvement/thinking grid, Foote and Belding argued that consumers would follow an informative/economic learning model, which product attribute precedes attitude formation. In high involvement/feeling situation, however, consumers would rely on an affective/psychological model, in which feeling is the most important aspect. For both low involvement quadrants, the consumers’ action goes ahead of the learning behavior (feel-learn-do). Purchase is quick and impulsive, characterized by habitual/responsive behaviors or satisfaction/social recognition model.

	Thinking (Rational)	Feeling (Emotional)
High Involvement	<p><b>Expensive, Commitment products</b> Ex: Cars, homes, furnishings</p> <p>Informative appeals: Heavy copy, provide detailed information on the product. Use two-sided arguments, present the strongest argument last.</p>	<p><b>Appearance Products</b> Ex: Jewelry, cosmetics, fashion goods</p> <p>Psychological appeals: Heavy imagery, little copy, vicarious emotional experiences.</p>
Low Involvement	<p><b>Habitual Products</b> Food, household cleaning items</p> <p>Responsive appeals: Use one-sided arguments, present the strongest argument first, and provide a conclusion for the consumer. Use reminders to keep product on top of mind.</p>	<p><b>Impulse / Self-satisfaction Products</b> Cigarettes, liquor, candy</p> <p>Social appeals: Glitter, lights, and everything showy allowed here. The key is to use attention-grabbing designs and arrangements.</p>

Figure 8: The FCB Grid (Kugler 2011)

Understanding of FCB grid provides some certain advertising implications. As each quadrant follows a unique learning model, different message strategy is required to “strike” the right spot. For example, buying a life insurance plan is under high involvement/thinking situation, hence an advertising message explaining the reason “why” with corresponding wanted attributes (e.g., economical or safe) would perform better than illustrating the generalized benefits or added gimmicks in the plan. The advertising implication, therefore, should focus on clear explanations of striking features in a relevance presentation manner, such as the use of infographic, explaining video, slideshow or information rich website. High involvement/emotional category includes commodities such as office furniture, poster design, and advertising materials. According to the FCB grid, advertising in this category should emphasize strong visual and emotional appeal. Interactive website and brochures are the examples of such manner (McNamara 2015).

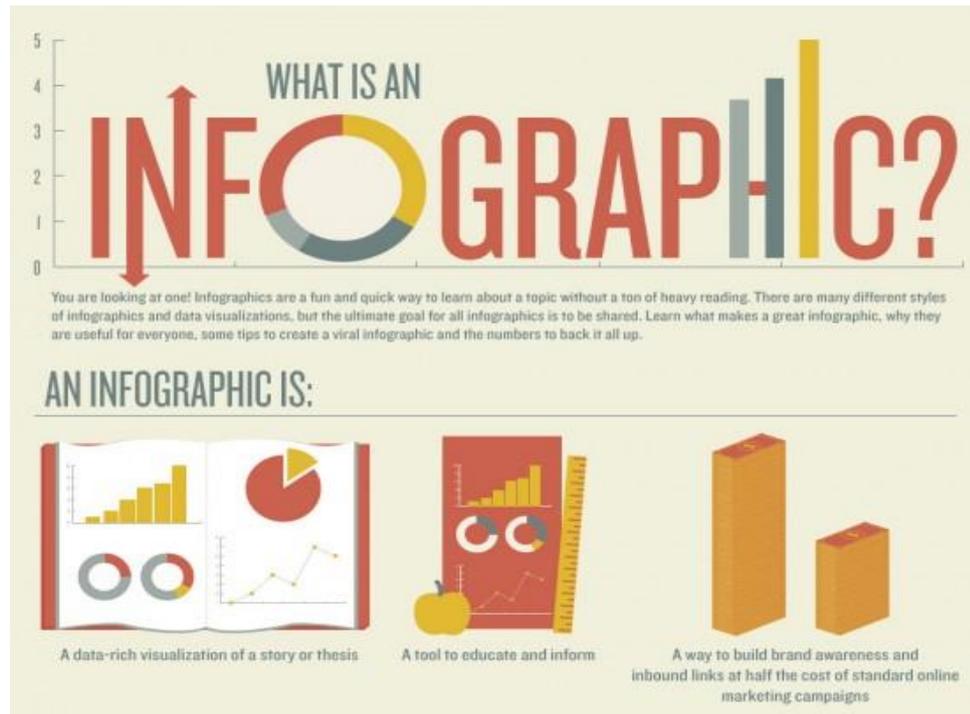


Figure 9: Infographic as an information rich carrier for high involvement purchase (Infographic: What is an Infographic? 2013)

Low involvement/rational purchase falls under habitual products. This includes office supplies, grocery goods, or household cleaning items. Advertising in this grid should persuade consumers to break the habit by giving compelling reasons to try out according to the learning model feel-learn-do, or incentive to buy (e.g., discount). For the low involvement/emotional circumstances, consumers do not spend a considerable time on purchase. Good examples for this would be magazine, movies, and birthday cards. Thus, the advertising practice should be able to be understood quickly and vividly. Movie trailer and advertising with explicit sensory gratification are among suitable approaches under this category (McNamara 2015).



Figure 10: Sensory gratification advertising for low involvement purchase (McNamara 2015)

Haley (2012) also suggests that the involvement concept can be seen as a moderating variable for other theories on persuasiveness. For instance, the theory of involvement effects both central processing and peripheral route as presented in the ELM section of this chapter. With high involvement, strong message's arguments have significant advantages over low involvement situation, together with the benefit of better brand recall. On the other hand, source credibility as peripheral cues is more persuasive when the involvement is low. As a general rule, high involvement purchase demands strong arguments while low involvement circumstance seeks peripheral cues.

### 3 DIGITAL CHANNEL

As suggested in the previous chapter, consumers process persuasive messages through two basic routes: central processing and peripheral cues. When a person possesses sufficient ability and motivation, he or she is more likely to judge the message based on its argument's strength. However, if an individual lacks the motivation and knowledge to digest the argument, the peripheral processing route which relies on mental shortcuts is preferred. In the case of message carrier, the digital channel is clearly not the direct target of mental processing. Hence, it is appropriate to assume that an engaged person does not have high motivations nor sufficient cognitive abilities to analyze the channel in terms of persuasiveness. According to the ELM, digital channel's credibility is processed through mental cues.

In fact, one of the earliest studies in online consumer behavior, which involved over 2500 respondents, had identified the "design look" elements as the most desired credibility consideration. The second most-concerned feature was "information structure/design", accounted for nearly 30% of the responses. (Metzger & Flanagin 2008.) Further studies by Metzger (2007) confirm that consumers rely heavily on design/presentation of online elements in judging the information quality and credibility. These findings clearly indicate the importance of surface characteristics, or peripheral cues, in online credibility evaluation. As a result, a strategy for harnessing these technological features is vital to the success of authentic message delivery.

#### 3.1 MAIN Model

According to Putnam (2008), the "way in which technology offers or supports certain things" is defined as "affordance". This term has been broadly used in studies concerning the credibility of digital channels. One of the most widely known research is the Modality (M), Agency (A), Interactivity (I), and Navigability (N) approach or MAIN model in short by The Media Effect Research Laboratory at Penn State University.

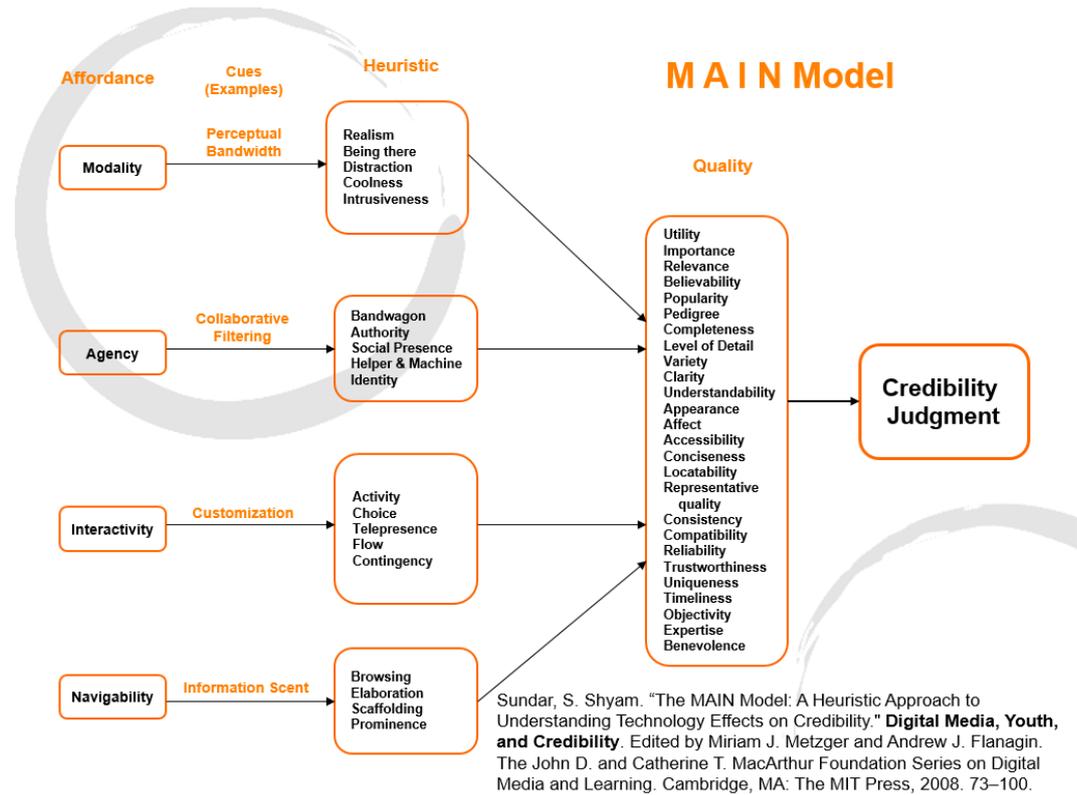


Figure 11: The MAIN Model (Sundar 2008)

In the model, each affordance is measured by a set of *heuristics* depending on how it is presented through *cues* on the interface. A *heuristic* refers to a mental shortcut, for instance, a generalization of knowledge or experience (i.e., “an expert’s claim is probably right”) as a quick judgment. Customer’s rating is the testament bandwagon heuristic which conveys the idea of “safe choice”. A *cue* is the salient aspect of the presentation that allows quick evaluation triggering heuristics, such as customization of product’s color, package, add-on which enables the feeling of being “in control”, thus enhances overall credibility of the channel in question. (Sundar 2008.) This original formula dynamically alternates the credibility of peripheral cues in message processing.

### 3.1.1 Modality

The first and foremost affordance that consumers encounter in advertising message nowadays is Modality, or how the data appeals to viewers’ senses. These include animation, pop-up, virtual reality, and so on. According to Sundar (2008),

channel modality-related affordance is capable of influencing user's perception of the delivering content. Various studies have shown that audio/video presentation shows better results than text/picture in website (Appiah 2006), which concurs with the *realism* heuristic since audio with visual stimuli boost the genuineness of the message. *Being there* and *coolness* heuristics follow the same effect of conveying immersion, especially with big screen entertainment, in turn contribute better attitudes towards the content. *Intrusive* and *distraction* are the negative heuristics that arise when ad content is irrelevant, obstructive or hijacking consumer attention blatantly with excessive movements/animations. (Sundar & Sriram 2006.)

### 3.1.2 Agency

Research in consumer behavior has attributed the information source as an important factor for persuasiveness evaluation, such as expertise, friendliness, and similarity with the source. However, with the introduction of digital media, the concept of the online source, or the agency who delivers the message, becomes murky. (Sundar 2008.) The online information's source is manifested through numerous heuristics that are unique to digital technology. For instance, customization tools trigger *identity* heuristic from user, inserting himself or herself into the process of creating genuine product with the user becomes the source. Another personalization which increases the user's similarity with the source is called *helper* heuristic, identified as personalized recommendations. This advanced technique can be achieved by using algorithms to analyze consumers' previous behaviors or other consumers' similar buying patterns (e.g., Amazon.com suggested product, Google.com relevant Ads display). In addition, automated suggestions given by retail website have been found to be more effective than human sources in various circumstances (Senecal & Nantel 2004). Sundar (2008) explained this phenomenon by implying *machinery* heuristic. He argued that the non-human recommendation makes it more objective, hence drives trustworthiness.

Another noteworthy heuristic is called *bandwagon*, which is elicited through cues such as star ratings, recommendations, and ranking. These ratings calculated from

consumer opinions are found to have a significant influence on an individual's behaviors (Sundar & Xu 2012). The higher the rating from other consumers' reviews, the more favorable attitude an engaged person has towards the product.

When an e-commerce website offers customer-service agent communication with an avatar, the *social presence* heuristic is said to be activated. It adds to the retail website a sense of community with social entities rather than a rigid medium. This anthropomorphic cues would encourage consumers to apply social interaction, casual communication rules and emotional attachments to the purchase. In fact, perception of social presence has been found to be more effective in terms of generating satisfaction with the retailer and positive attitudes towards the purchase.

Furthermore, studies by Koh and Sundar (2010) pointed out that the consumers who are exposed to specialist retailer websites or expert sale agents on an exclusive product (e.g., wine) show greater trust in the advertising message than a generalized website of multiple products. In such case, the expertise in which the consumers experience conveys the sense of *authority* heuristic, creating greater confidence in purchasing especially when the consumers are not familiar with the products or brand beforehand.

### 3.1.3 Interactivity

By definition, interactivity is the possibility of providing choices, controls over media, and inputs into the system for a responsive outcome (Sundar 2008). Various implications of user interactivity, ranging from click-to-pull advertisement, click-to-get information, to product model with color palette customization are the examples of *activity* and *choice* heuristic. These functional options provide users with heightened affinity to the website and the product advertised, which in turn, leading to a more positive persuasion outcome (Sundar & Xu 2012). In an experiment by Sundar and Kim (2005), high interactivity advertisement with multi-layered hyperlink was revealed to yield better perceived product values, involvement and intention than those without. The technique of manipulating interactivity using hyperlink and alike is classified under *contingency* heuristic. The fact that an

advertisement responses contingently to user's interaction is proved to be highly effective in engaging with customers.

Another feature that is arguably distinctive to digital technology is the possibility of seeing real-time input effects on the product, such as 3D product models changing color and shape at the consumer will, cueing *telepresence* heuristic. This attribute stimulates authentic interaction feelings, thereby enhance user's experience and engagement with the product virtually. However, if the digital system fails to demonstrate consumer interactivity in tune with the user expectations, or appropriate changes according to the user's input, it will break the *flow* heuristic. As Sundar and Xu (2012) have pointed out, this interruption results in negative attitude toward the website.

#### 3.1.4 Navigability

Navigability means the capability of the medium to facilitate user's browsing experience through devices, sites or even advertisements. Different from traditional mass media where information is presented in a linear-near narrative manner (newspaper, magazine), digital advertising offers the possibility of interwoven fashion through the use of links and navigation menu. Numerous studies have supported the importance of navigability in online channel by showing the variations in cognitive, attitude and effectiveness outcomes on the use of different types of navigation (Sundar & Xu 2012). For example, the presence of links – or *browsing* heuristic as Sundar (2008) pointed out, encourages consumers to skim for relevant topics. When the links are embed within the context of the message, they in turn reinforce the relationship among topics of the contents in the user's mind. This type of structural heuristic is called *elaboration*, as it enhances elaborative processing and knowledge-structure integrity (Sundar & Xu 2012).

Another set of design heuristic in navigation are *scaffolding* and *prominence*. When consumers recognize the navigational aid, they are more likely to perceive the channel as easy to use, user-friendly and thus express more positive attitude (*scaffolding* heuristic). The order of which the information is presented also has an effect on its interpretation. In online advertising, the website that shows up on

higher ranking in search engine is usually regarded as more relevant (Sundar 2008). In addition, other research by Sundar and Heo (2000) revealed that putting advertising on the sides of the page would yield the best visual attention. This is explained by the *prominence* heuristic, which stresses the importance of information positioning.

## 4 CHANNEL CREDIBILITY EVALUATION

In this chapter the author evaluates the credibility affordance of the most common digital channels in advertising, based on the model presented in the previous chapter. The findings shall be proceeded to be put into order, from the lowest to the highest credible channels.

### 4.1 Channel credibility affordance for advertising message

Online advertising consists of various vehicles to deliver the message, from traditional banner ad, email marketing to social media presence and website. These channels carry different limits and affordances, which in turn affect the credibility of each channel. The author decided to evaluate the capability of the major online delivering channels in terms of persuasiveness according to the MAIN model. Search-engine-optimization (SEO) is not included due to the fact that search engine ranking's algorithm presents the most relevance results on search, not the intention of bringing communication message to the audience as advertising does (chapter 2). Therefore, its application for message's credibility affordance is extremely limited to be considered.

#### 4.1.1 Traditional banner ad

Banner ad, or web banner, is an advertisement embedded in a website. It consists of texts, image or multimedia objects (e.g., flash content). Depend on the technology, banner ad can be either static or animated. Most banners ads are clickable with the intention of driving traffic and increasing visibility.

In terms of modality affordance, banner ad is capable of delivering audio/video content which boosts *realism*, changing size or animation to increase *coolness* and enabling various 3D visualization for *being-there* immersion (Pedersen 2015). Despite the fact that banner ad is very effective at capturing consumer attention with fast animation and flash, it is susceptible to creating unwanted *distraction* and *intrusiveness*.

Banner ad's capability to support agency affordance is limited to *helper* and *machinery* heuristics by analyzing online consumer patterns to serve the right ads (e.g., Google AdWords) with *identity* via brand presentation. Some other heuristics under this category are not elicited explicitly, such as *bandwagon*, *authority* or *social presence*.

Interactivity affordance is also constrained for banner ad. As the ad is traditionally measured with click-through-rate (CTR) and Cost-per-Click (CPC), it is both economical and more effective to limit the click interaction with ad to minimum (Harris 2008). Banner ad usually redirects consumers from publisher's webpage to sponsor's one, hence it employs one-click method. However, highly advance ads can response to user's mouse movement as in *telepresence* heuristic.

Regarding navigability affordance, banner ad does not support navigational menu bar. However, it can be positioned among various space in a webpage or email template. As a result, banner ad only invokes *prominence* heuristic, which implies the position of information within the page.

#### 4.1.2 Email

Email channel, in the advertising sense, means advertising a commercial message to a group of people via email. Its purpose is to either create brand awareness, reinforce consumer loyalty, introduce promotion or persuade purchasing. Thus, the form of email advertising can be newsletter, promotional email or targeted sales inquiry.

In terms of modality affordance, email channel possesses the ability to display both text and multimedia content for *realism* heuristic. It can avoid the *intrusiveness* and *distraction* pitfall because email content must be opened purposely in order to view. Nevertheless, email format restricts its capability to include various *coolness* gimmicks that banner ad offers, such as animation or pop-up.

For agency affordance, email channel is not capable of suggesting products utilizing *machinery* or *helper* heuristic. Instead, it can display *bandwagon* consumer

testimonials, *authority* and *social presence* in targeted sales, and *identity* in the case of authentic email's origin.

Interactivity affordance is not one of the strengths of email channel. Email does not support the possibility to interact with its content except for hyperlinks which lead to another channel. This constrain is the result from the technology involved in email formatting.

As in the same situation of banner ad, an email message does not support a navigational menu. The message is not multi-faceted to be explore inside an email, hence it is a common practice to lead from email to sponsor's website for more layers of information rather than navigating within the email.

#### 4.1.3 Social Media

Social media is defined as the media designed to distribute content via social interaction using internet and web-based technology to transfer a message from monologue (one to many) to social dialogue (many to many) (Mills ja Botha 2012). One distinctive feature of social media is that it changes the interactions and participations of Internet users, from passive undertaking to active contributing.

Concerning modality affordance, social media is entirely capable of displaying both text and multi-media content as in *realism* heuristic, yet unable to employ proper visualization technology for *being-there* immersion. Social media is especially vulnerable to negative heuristics such as *distraction* and *intrusiveness*, as the information is not streamlined but multi-input, not taking into account the appearance of many banner ads on social media. *Coolness* heuristic is constrained by the fixed design of the medium, however, it can be elevated over-time when the social media companies decide to change their appearances.

In respect of agency affordance, social media offers excellent capability. It provides users with the ability not only to identify the source but also to insert themselves into the information flow (*identity* heuristic). Furthermore, social media an-

analyzes user's behaviors to bring forth *helper* and *machinery* heuristic using recommendations (e.g., Facebook fanpage or Youtube's channel suggestion). *Bandwagon* is elicited through the number of Likes as in Youtube, Facebook or retweet as in Tweeter. *Social presence* and *authority* are ubiquitous in social media channel.

Interactivity in social media is rather unique, as it is also a form of communication. *Activity* and *choice* are expressed through comments and responses between users and involved parties, such as advertisement sponsors. Advertising message on social media is also capable of reacting *continently* to consumer action (e.g., comment). Nevertheless, this *telepresence* heuristic is susceptible to the commitment of channel or page's owners. If the channel is deserted, it will break the *flow* of consumer expectations.

In terms of navigability affordance, social media provides some basic navigational aids to different area of the channel (*scaffolding*). Other capabilities in this affordance category include the presence of *browsing* link, embed *elaboration* support within posts, and *prominence* heuristic which is made available with a fee (e.g., Facebook boost).

#### 4.1.4 Website

A website is a connected number of pages on the World Wide Web, containing hyperlinks to each other and maintained by an individual, a company, an organization or a government (Merriam-Webster 2015). Like other digital mediums, a website has its own set of affordance capabilities that imply peripheral cues.

Under modality affordance, website can support animations such as drop-down menu or slide-in form. It is also capable of displaying various forms of texts and multimedia contents for *realism* heuristic, as well as visualization technology for *being-there* immersion. Website owner, given sufficient knowledge, can equip numerous *coolness* heuristics, from zoom-in, changing size to altering color of the theme. However, because of its versatility, website is vulnerable to excessive use

of modality presentation which results in negative attitude from consumer (*intrusiveness & distraction* heuristic).

In terms of agency affordance, the website makes clear of its owner *identity* through the use of brand names, logos, or contact information. E-commerce sites are also capable of deploying advance scripts to give suggestions and recommendation based on user's behavior (e.g., Amazon.com, Youtube.com) as in *machine* and *helper* heuristic. *Bandwagon* and *social presence* heuristic are backed up by the possibility of inserting comment section on a website, together with consumer rating add-on in modern Content Management System (CMS) such as in Wordpress, Magento, and Prestashop package. Specialized websites in one certain commodities or industry help convey the sense of *authority* heuristic, reinforcing the consumer's trust in the expertise presented.

Regarding interactivity affordance, website offers the possibility to interact with its content, for example, a clothier shop can allow its user to choose color, size, and different packaging options. Beside *activity* and *choice*, a website can calibrates its structure to react *contingently* with user's activity, opening new section or leading to another page. Sophisticated programming also boost *telepresence* heuristic through real-time feedback on user's input, thus enhance the smooth *flow* of interaction on the consumer side.

As in navigability, a website can afford numerous navigational aids, such as a menu bar, search section or sitemap. *Browsing* link with embedded *elaboration* heuristic are present within the content of the site. Since website has limitless control over its displayed interface space, it can position important information, notices or advertisements into different locations. One important feature of website is the Search-Engine-Optimization, which plays a decisive role whether the site will gain high rank in search engine to be presented first to consumer (*prominent* heuristic).

## 4.2 Advertising channels positioning

In terms of credibility affordance, the author evaluated the digital channels' persuasive effectiveness by crediting each heuristic supported (except for negative ones, namely *intrusiveness* and *distraction*) with one point. The following table describes the total heuristic effectiveness of the aforementioned digital channels:

Table 1: The author's evaluation of channels' capabilities to support credibility in digital environment

	Modality	Agency	Interactivity	Navigability	Total
Banner ad	3	3	2	1	9
Email	4	4	2	2	12
Social Media	4	5	5	4	18
Website	5	5	5	4	19

As illustrated in the table above, website and social media score the highest credibility affordance. Email channel's effectiveness is at medium level while banner ad is lagging behind in terms of peripheral persuasiveness. Therefore, content aside, website and social media are the most proficient channels to deliver behavior-changing advertisements. However, these two channels are not mutually exclusive. Website's capability can be leveraged by linking with social media or displaying customer's review from the community and vice versa.

## 5 CASE STUDY: MARKPRINT OY

This chapter is dedicated to the presentation of the Case Company: MarkPrint Oy. The author begins with a brief background information, followed by the Case Company's products, digital advertising practices and finally a SWOT analysis. The chapter shall give the readers an understanding of the Case Company situation and its premium products, which is especially important for the later part of the thesis.

### 5.1 Case Company Background



Figure 12: MarkPrint Headquarters (MarkPrint 2015)

Kirjapaino MarkPrint Oy is a Printing company, established in 1985 by the co-owners and co-founder Arto Näveri and Matti Pukkila. Its premise is located in Heinlammintie 62, Lahti: a spacious area connected by road and train track to many directions. Excellent connection to the city center proves to be an important perk as production goods are supplied from metropolitan area.

The company operates with both enterprises and private customers, employing 20 personnel as in 2014. Client cluster includes advertising agencies and other companies' marketing units. MarkPrint Oy constantly approaches new clients via different channels while maintaining good relation with old customers.

The heart of the company is the new hybrid printing machine, Heidelberg Speedmaster XL<sub>75.5</sub>+LX, launched in 2008. MarkPrint Oy is proud to have mastered the possibilities that the new hybrid technology offers. The new investment provides

both versatility and uniqueness in its products that none can imitate. Along with the 5 color hybrid printing machine, MarkPrint Oy is also equipped with offset printing platform and digital printing.

The image which MarkPrint Oy wants to convey to its clients is the quality, reliability, adaptability and uniqueness in its products. The motto for the company is to combine aesthetic and professionalism for the benefit of the customers.

## 5.2 Products

MarkPrint Oy's catalog ranges from menial printings (business card, envelope, postcards) to product brochures, annual reports, roll-up prints, and graphic design. The modern technology that MarkPrint Oy has mastered creates a competitive advantage which cannot be surpassed by competitors. The company offers printing products exceeds one's widest imagination. For example, people can feel the fur when they touch an animal graphic printed by MarkPrint Oy. These products are also resistant to natural hazards such as moisture or collision.



Figure 13: Roll-up product from MarkPrint Oy

In 2008, an investment in the hybrid printing machine Heidelberg Speedmaster XL 75 modernized the whole printing solution. The new platform reduced make-ready time by integrating UV-light drying module so that the product is ready for post-production immediately. In addition, the machine can print on various surfaces by utilizing water and UV-lacquers and color, which results in unique printing products. Not only numerous opportunities arise from the hybrid printing machine, but also it saves costs by cutting waste up to 90%, as well as consuming significantly less energy and resources.

Overall, the strategy and vision from MarkPrint Oy is to deliver superior printing quality with amazingly unique compositions while being durable under distress. The company can work with both corporate customers and private entity, alternating its products accordingly to customers' need.

### 5.3 Digital advertising practices

MarkPrint Oy employs email, social media (Facebook), website and banner for its online advertising. The main channels are email and company's own website. Via email, the company sends advertisements to registered customers in the company system. Its website is aimed to advertise products' portfolio (gallery section), get request for quotation and if necessary take the contact to person. Other channels, namely social media and banner are under limited usage due to restricted human resource available to digital advertising. (Messo, Communication Manager 2015)



Figure 14: MarkPrint Oy's products on its website gallery (MarkPrint 2015)

MarkPrint Oy's brightest innovation is the hybrid printing technology. The prices for hybrid printing materials are approximately 10% higher than ordinary printings (i.e., offset and digital), but the quality is exceptionally better. Hence, through these channels, MarkPrint Oy wants to convey the message of superior quality work, extremely flexible service and exemplary design in its products, especially for those made from hybrid printing technology. Despite the fact that customers usually need to consult the company about special printing method, the company are always ready to take contact and elaborate its technology.

#### 5.4 SWOT Analysis

As in Quincy, Lu and Huang's research (2012), a SWOT analysis can be used in business corporations to gather meaningful information regarding innate abilities (strengths, weaknesses) and external influences (opportunities, threats) in order to evaluate the operational capabilities:

- Strengths are the characteristics of organizations, groups, or teams which bring advantages over other competitors.
- Weaknesses are the flaws exposing organizations to various disadvantages.
- Opportunities are the prospects that enhance organizations' capabilities within the context.
- Threats are influencing factors engulfing risks in organization's performances and wellness.

Generally, strengths and weaknesses refers to the internal abilities of organizations, such as personnel, finance, and board performance. On the other hand, opportunities and threats focuses on external factors, for examples, economic situation, technology advancement, socio-culture and competition (Quincy, Lu & Huang 2012.) Thus, in this section the author conducts a SWOT analysis on the Case Company's performance based on the interviews with the company's Communication Manager, Ms Tarja Messo, to point out the Company's advantages, drawbacks, exploitable opportunities and related risks to the company's operations. The details are summarized into the following table:

Table 2: MarkPrint Oy SWOT Analysis

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Cooperation with diverse business line (e.g., Stora Enso) improves know-how</li> <li>• Master unique hybrid printing technology</li> <li>• Adequate printing house with off-set printing, digital printing and hybrid printing machine</li> <li>• Professional personnel in printing business</li> <li>• Environmentally certified products &amp; production operations</li> <li>• National and worldwide delivery network</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive products</li> <li>• Require experts knowledge to work in the company</li> <li>• Focus on offline meeting, not utilizing online resources</li> <li>• Digital advertising and online public visibility are lacking (e.g., Search-engine-optimization)</li> <li>• Niche market oriented, focusing on premium hybrid prints</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Internationalization are bringing new opportunities</li> <li>• Packaging and cosmetic industry are on high demand for quality prints</li> <li>• Hybrid printing technology is still exploitable in the future</li> <li>• Spacious room for expansion</li> </ul>	<ul style="list-style-type: none"> <li>• Emerging E-commerce and digital practices</li> <li>• Other Printing companies also possess hybrid printing technology</li> <li>• Political instability worldwide dampens efforts to go international.</li> </ul>

## 6 ADVERTISING SUGGESTIONS: CASE COMPANY

In this chapter the author constructs a theoretical advertising framework that ensures the potential of advertisement persuasiveness. The foundations for such structure are from the previous chapters on message processing mechanism, target engagement and digital channel affordance. Several Case Company implications are also presented based on the interviews and materials from MarkPrint Oy.

### 6.1 Theoretical advertising message's structure

In order to put forward an optimal advertising message's processing for the consumer, the author proposes a three-layer strategy based on the ELM, Involvement theory and MAIN model.

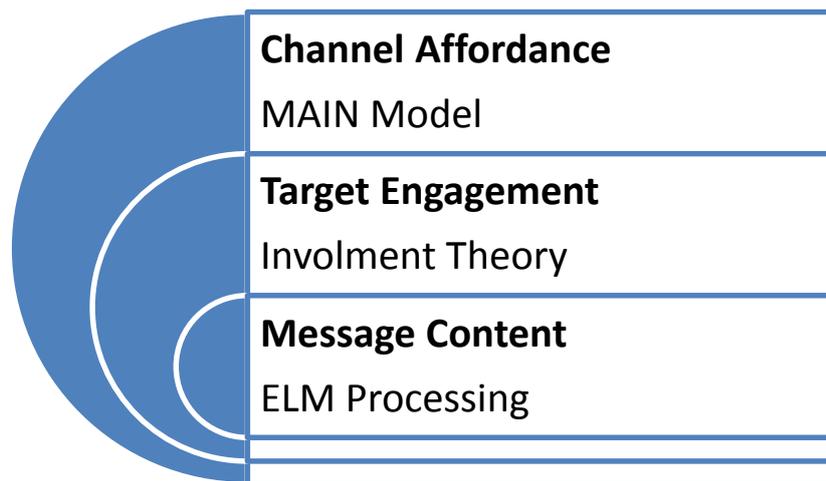


Figure 15: Persuasive Digital Advertising Message

At the core layer is the message content. As mentioned in chapter 2, the ELM explains two routes to message processing: the central route, which requires rationalization of perceived message's aspects and the peripheral route, which relies on mental shortcuts, or cues for fast intuitive processing. The choice of processing route is largely dependent on the motivation and ability of the viewer to decode the message. When motivation and ability to acknowledge the message is high, an individual is said to be more likely to follow the central processing. When the motivation and understanding of the subject is low, the involved person is more in-

clined towards the peripheral cues, seeking mental shortcuts to circumvent intellectual constraints. In addition, the central route has been pointed out to have better lasting effect upon behavior changes than the peripheral one.

The second layer is message's involvement. In order to capture the consumer attention, the advertising message must appeal accordingly to the motive, or commitment of the viewer. For example, renting an office requires considerable amount of information, such as costs involved, existing furniture, or installed facilities. In order to serve the right content, an advertisement in this category must provide proper informational source. The Consumer Involvement Theory elaborates this issue using the FCB grid. Under this model, consumer motive to decode the message is categorized into high involvement/low involvement and thinking/emotional quadrants. Each quadrant, in turn, is suitable for different advertising practices. In addition, the nature of consumer involvement moderates the message processing. Under high involvement situation, central processing is preferred while with low involvement purchase, peripheral cue has better impact on the viewer's decision.

The final layer is the message carriers, which in this research scope are the digital channels. As the delivering channel is not the direct target of advertisement processing, according to the ELM the channel is more likely to be processed under peripheral cues. The MAIN model describes four main peripheral categories, or credibility affordances, of the digital channels in terms of persuasiveness. With this model, the author analyzes the credibility affordance of the most common online channels (banner ad, email, social media and website). The result is presented in chapter 4 with website and social media are the most proficient channels for persuasive message processing.

## 6.2 Case Company implications

In order to shed light into the implication of the theoretical structure, the author conducts two interviews with Ms Tarja Messo, the Communication manager of the Case Company, both in face-to-face and via email. Together with printed and

online materials supplemented by the Case Company, several suggestions are put forward regarding advertising operations.

Firstly, the printing products from the Case Company are classified as premium quality, high price, especially those made from hybrid printing technology – the main focus of the company for advertising. Therefore, the company's products fall under the high involvement category. Ms Tarja Messo mentions that the clients desire products not only with exceptional features but also aesthetic values, with a slight edge toward features. As a result, the target products for advertising are placed between High Involvement/Thinking and High Involvement/Emotional quadrant. Advertising implication is this category includes infographic, explanation clip, interactive website, and online brochure supporting information seeking behavior.

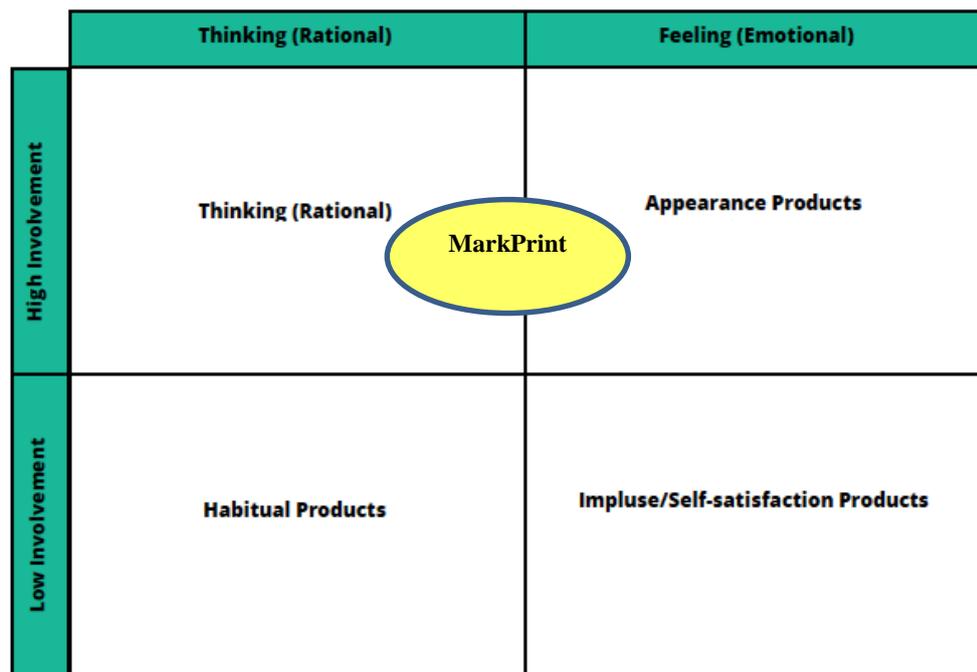


Figure 16: Case Company's product position in the FCB grid

Secondly, as mentioned before, the high involvement purchase is best suited with central processing which involves logical comprehension of the message: strong arguments, compelling figures and features. However, the premium quality products from the Case Company are highly technical. In addition, from the clue that clients need to consult the Case Company, the author infers that customers are

particularly inexperienced to deal with printing products. In other words, the advertisement viewers are not knowledgeable to process the message effectively. According to the ELM, the consumers are more likely to follow peripheral routes with a certain degree of central processing. Combining with the first finding, the author suggests that the mediums should focus on the aesthetic value of the products with special highlighted features. For example, the video clips at the Gallery section on the Case Company's website shows great aesthetic presentations, yet do not express the feature of the products. The Case Company, therefore, should address this problem by filling in features highlight.

Lastly, the digital channels which the Case Company focuses on are email and website. Nevertheless, as in chapter 4, the author has pointed out social media and website are most proficient channels to deliver messages persuasively. Since the Case Company is constrained by human resource towards digital advertising, it is recommended to focus more on website as main delivering channel while email acts as a reminder or special notice. Furthermore, following the MAIN Model, the Case Company website should employ consumer reviews section, product star rating as *agency*, *bandwagon* and *social presence* – the most prominent heuristic of social media to compensate less effort put in social platform at the moment.

The author's suggestions are summarized into the following table:

Table 3: Case Company advertising suggestions

Layers	Suggestions
Message content	<p>Focus on aesthetic value while highlighting most special features. Avoid excessive informational text or without any at all.</p> <p>Especially the video clips on Gallery section, the Company needs to include features highlight rather than pure presentations. Consumers are generally</p>

	inexperience to process the presentation effectively without guideline (feature's explanations).
Target engagement	Employ infographic, explanation clip, interactive website, and online brochure as the mediums to carry the message.
Delivering channel	Emphasize the role of website. Additionally, website should contain consumer review and product rating. Social media is the next target platform in the future due to high credibility affordance.

## 7 EMPIRICAL RESEARCH

In this chapter, the author designs an empirical survey to verify the theoretical suggestions given to the Case Company concerning its digital advertising operations. First of all, the author explains the survey objectives and its design. Then the author gives reasons for the sampling size and concludes the chapter with an analysis of collected results from survey participants using quantitative approach. The population selected is digital consumers group, whom the author utilizes personal connections to reach.

### 7.1 Survey objectives

The survey has two major goals: to test the assumption that digital channel's peripheral credibility has an influence on purchase decision and to adjust the advertising suggestions to the Case Company if necessary. In order to archive the first goal, the author puts forth the following hypotheses:

- $H_0$ : The peripheral credibility of digital channels has no effect on the influence of purchase.
- $H_1$ : The peripheral credibility of digital channels has an effect on the influence of purchase.

Concerning the second goals, the survey focuses on testing the suggestions given in table 3 (chapter 6). These include the choice of digital channels, product oriented advertising message and target engagement mediums in the Case Company context.

### 7.2 Survey design

The survey is powered by Google Form service. In order to rectify the validity of aforementioned suggestions, the author employs 9 questions (including 2 personal identity ones) divided into two sections (appendix number 3). The first section contains 4 questions concerning the usage of 4 common digital channels (banner

ad, email, social media and website), such as credibility rating, influence on purchase decision and the importance of certain suggested elements. The questions are expressed in the form of multiple-choice answers or grid layouts.

The second section focuses on the Case Company specifically. A video clip taken from the Case Company's website (with the permission of the company in question) is included in the survey, together with other questions about the characteristic of the advertising mediums to be used. All survey questions are presented in multiple-choice format with the possibility of inputting participant's own thoughts on the subject.

### 7.3 Survey sampling

Due to the restriction of time, financial resources and accessibility, the author does not employ a census scenario, in which every possible case or group will be chosen for data analysis. Instead, the thesis' survey targets sub-group among digital consumer population – also known as sampling. (Saunders, Lewis, & Thornhill 2009.) This approach is suitable for the research because of several reasons:

- It is impracticable to collect data from the whole population of digital consumers.
- The time and budget constrain the possibility of prolonged survey across mass population.
- The results are to be analyzed thoroughly to confirm the hypothesis rather than spotting new patterns.

The sampling technique available can be divided into two types: probability (or representative) sampling and non-probability (or judgmental sampling). As in probability sampling, the chance, or probability of each sample to be selected as representative for the population is either known or equally distributed. For non-probability technique, such chance may not be possible to infer, nor appropriate to answer specific subjective research questions. (Saunders, Lewis, & Thornhill 2009.) In regarding to the thesis' survey research, the author follows the probability sampling technique as it concurs with survey-based strategies where inference

can made from statistically random selected sample about the population. Additionally, the aforementioned research questions does not analyze specific subjective judgments from the sample (e.g., individual's perspective) thus judgmental sampling is unnecessary.

After deciding the sampling technique, the author calculates an estimated minimum sample size for a defined category pilot survey based on the below formula, adapted from (Sauder, Lewis & Thornhill 2009):

$$n = \rho\% \times q\% \times \left(\frac{z}{e\%}\right)^2$$

Where:

$n$  is the sample size required at minimum

$\rho\%$  is the percentage of answers that belongs to the defined category

$q\%$  is the percentage of answers that does not belong to the defined category

$z$  is the value corresponding to the confidence level in statistics

$e\%$  is the chosen margin of error.

To put into perspective, the survey is to test the given suggestions to the Case Company's advertising operations based on a defined category assumption that the population chosen is generally not experienced with the products. Thus, to find the  $\rho$  and  $q$  value, a pilot survey of 30 respondents was given to infer the likelihood of such proportion in the population. The question was asked after presenting a product selection video clip from the Case Company (appendix number 3).

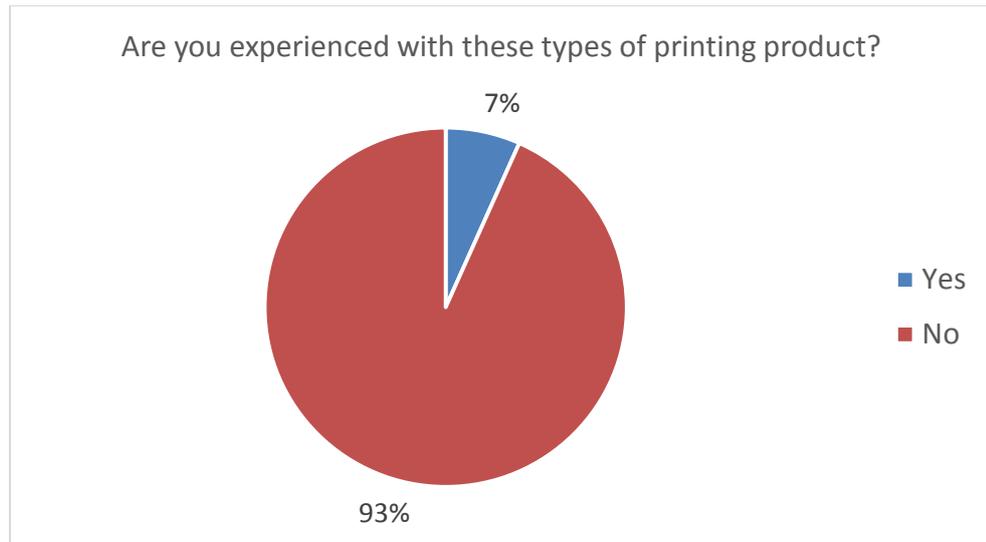


Figure 17: Defined category proportion for inference in pilot survey

As illustrated, the value of corresponding proportion  $p$  and non-corresponding  $q$  are 93 and 7, respectively. Out of 30 answers from the pilot survey, only 2 participants says “yes” to the question “Are you experienced with these types of printing product?”. Applying the tolerant margin of error 5% and confidence level of 95%, the figure for  $e\%$  is 5% and  $z$  value is 1.96 (Sauder, Lewis & Thornhill 2009). Thus, the minimum required sample size is calculated as:

$$n = 93 \times 7 \times \left(\frac{1.96}{5}\right)^2$$

The result is 100, which means the minimum sample size should be around 100 responses from the chosen population in order to make statistical inference for the survey.

#### 7.4 Survey analysis

The survey was concluded after two weeks of collecting data with 101 responses. Though the layout consists of both structured multiple-choice and input fields for consumer comment, only 4 out of 101 responses contain user generated inputs, which center around the product selection clip from MarkPrint Oy. Nevertheless, these inputs are deemed to be either insignificant as they mirror the author’s structured multiple-choice or out of the research scope (e.g., “the clip is too fast”).

#### 7.4.1 Influence of digital channels' peripheral credibility

Regarding the hypotheses of the peripheral credibility of digital channels, the author examines the results from questions 3 and questions 4 in the survey (appendix number 3) using Chi-square test in IBM SPSS software. According to Laerd Statistic, the Chi-square test for independence (also known as Pearson's chi-square) is used to determine whether a relationship exists between two categorical variables (Laerd Statistic, 2013a). In this thesis's survey, the categorical variables are the digital channels' credibility levels coded in Likert scale from 1 to 5 (1 = Never trust, 2 = Rarely trust, 3 = Neutral, 4 = Usually trust and 5 = Always trust) and purchase influence (1= No influence, 2 = Little influence, 3 = Neutral, 4 = Heavy influence and 5 = Extreme influence). The margin of error chosen is 5% and confidence level stays at 95%.

Table 4: Online banner ad Chi-Square test for credibility and purchase influence

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	64.558 <sup>a</sup>	12	.000
Likelihood Ratio	62.942	12	.000
Linear-by-Linear Association	31.126	1	.000
N of Valid Cases	101		

Firstly, in table 4 the Pearson Chi-Square coefficient for Online ad channel is displayed as 0.000 – which is significantly smaller than the margin of error (0.05). By definition, when the Chi-Square coefficient does not exceed the margin of error, it is concluded that the relationship between two variables exists firmly (Laerd Statistic, 2013a). Thus, the peripheral credibility of online ads definitely related to its influence on consumer purchase decision. To further investigate this relation, a symmetric measures table is presented:

Table 5: Symmetric measures for Online banner ad

Symmetric Measures				
	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.

Ordinal by Ordinal	Gamma	.724	.081	7.637	.000
N of Valid Cases		101			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

Because the data variable belongs to ordinal (ranking) types, the author employs Gamma symmetric measurement. Gamma metric ranges from -1 to +1 comparatively to the strength of relationship (SPSS eTutor 2015). Hence, in table 5 a gamma of 0.724 indicates a strong positive relationship between peripheral credibility and purchase influence for online ad. In addition, gamma value is also statistically significant as in Approx. Sig column ( $p = 0.000 < 0.05$ ).

Table 6: Email Chi-Square test for credibility and purchase influence

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.255 <sup>a</sup>	16	.012
Likelihood Ratio	27.279	16	.038
Linear-by-Linear Association	12.023	1	.001
N of Valid Cases		101	

- a. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .01.

Secondly, in table 6 the Chi test for Email channel shows a coefficient of 0.012, which is smaller than the margin of error (5%). It is concluded that for email, the peripheral credibility also effects the purchase decision from the consumer perspective.

Table 7: Symmetric measures for Email

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	
Ordinal by Ordinal	Gamma	.433	.118	3.474	.001
N of Valid Cases		101			

- a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Using the gamma symmetric measure, the relationship between peripheral credibility and purchase influence as in table 7 is valued at 0.433 – a moderate positive correlation. The conclusion is also statistically significant, as  $p = 0.001 < 0.05$ .

Table 8: Social Media Chi-Square test for credibility and purchase influence

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.368 <sup>a</sup>	12	.018
Likelihood Ratio	25.704	12	.012
Linear-by-Linear Association	7.825	1	.005
N of Valid Cases	101		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .16.

Table 9: Symmetric measures for Social media

Symmetric Measures					
		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Ordinal by Ordinal	Gamma	.336	.103	3.089	.002
N of Valid Cases		101			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Thirdly, the Chi test for Social Media channel as shown in table 8 and 9 demonstrates a clear connection between peripheral credibility and purchase decision (Pearson  $p = 0.018 < 0.05$ ). The connection is valued at gamma metric of 0.336, which is a moderate positive relationship. The result stays at a statistically significant level (symmetric  $p = 0.002 < 0.05$ ).

Table 10: Website Chi-Square test for credibility and purchase influence

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.635 <sup>a</sup>	9	.000
Likelihood Ratio	34.563	9	.000
Linear-by-Linear Association	18.740	1	.000
N of Valid Cases	101		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .62.

Lastly, in table 10 the Chi test for website illustrates a dependency between the two variable in question ( $p = 0.000 < 0.05$ ). A symmetric measurement by gamma metric is used once more to determine the strength of the relationship:

Table 11: Symmetric measures for Website

Symmetric Measures					
		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Ordinal by Ordinal	Gamma	.643	.090	5.597	.000
N of Valid Cases		101			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

As can be seen from the table above, the gamma value is 0.643, referring to a statistically strong positive relationship ( $p = 0.000 < 0.05$ ).

In conclusion, the Chi test has confirmed the assumption that digital channels' credibility is connected to the purchase influence. Thus, the null hypothesis ( $H_0$ ) is rejected. Among these relationships, online ad possesses the strongest link (gamma 0.724), followed closely by website (0.643), then email (0.433) and social media at the last position (0.336).

#### 7.4.2 Case Company suggestions test

In this test, the author compares the suggestions made in table 3 (chapter 6) to the empirical data collected from the survey. The methods employed are mainly frequency analysis for nominal data (unranked) and median comparison for ordinal (ranked) variables. As mentioned, though the survey results contain 4 consumer own inputs beside the author's structured choices, these data are insignificant in both quantity and quality. Therefore, the author analyzes only valid answers from the structured multiple-choice questions.

As for the message content suggestion, the survey expresses this aspect via question number 6 and 7. The following frequency tables reveal how the collected data reflect on the author's assumption:

Table 12: MarkPrint Oy's Clip suggestions frequency

<b>6. In your opinion, which addition would make the clip more engaging?</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
	Product's feature explanation	43	42.6	42.6
	Improving visual effects	11	10.9	53.5
Valid	Both of these	42	41.6	95.0
	Others	5	5.0	100.0
	Total	101	100.0	100.0

Table 13: High-quality printing products' wanted characteristics frequency

<b>7. When buying high-quality printing products via Internet, which characteristic you want the most?</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
	Technical features (durable, high quality paper)	27	26.7	26.7
	Aesthetic value (beautiful, good looking)	12	11.9	38.6
Valid	Both of these	61	60.4	99.0
	Others	1	1.0	100.0
	Total	101	100.0	100.0

From the above data tables, it is clear that digital consumers prefer a combination of both features and aesthetic value for high-quality printing products (41.6 % in clip suggestions and 60.4% in the wanted characteristics, respectively). In the first case, because the product selection clip from MarkPrint Oy is already aesthetically satisfying, which is expressed through a meager 10.9% of total votes asking for special effects improvement, a large proportion of concerns goes to the lack of feature highlights (accounted for almost 43%). This result mirrors the author's suggestions in chapter 6 that the product selection clip needs further feature highlights. In the latter case, the data demonstrates a low tendency towards aesthetic value as a decisive characteristic for high-quality printing products, scoring at 11.9% of the responses. Hence, it is concluded that for the Case Company's products, the emphasis on the look is not as important as the combination of features' explanation with aesthetic values. It is also noted that a surprising one-third of total votes in the latter cases supports technical features as the most important aspect for purchase.

Regarding the target engagement assumption, the survey presents a multiple-choice question numbered 9. The frequency table below shows the results for the most suitable advertising types in the Case Company's context:

Table 14: Most suitable advertising type for Case Company's Products

**9. In your opinion, which advertising type that is most suitable for high-quality printing products?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Infographic, explaining video, information-rich website	53	52.5	52.5	52.5
Online brochure, gallery, interactive website	27	26.7	26.7	79.2
Incentive to buy, discount, trial & demo	21	20.8	20.8	100.0
Total	101	100.0	100.0	

As can be seen in the table 14, more than half of the total responses favor "Infographic, explaining video and information rich website". The runner up is "Online brochure, gallery and interactive website". The results from this table confirm the

author suggestions in chapter 6 about engagement mediums in digital advertising for the Case Company.

For the choice of delivering channels, the authors deploy two questions, numbered 3 and 4 in the survey, to gather responses towards credibility ranking and channels' influence. Since the data is formatted in rank, it is considered as ordinal data. Consequently, a median analysis is suitable to disclose the representative value for both credibility and influence ranking.

Table 15: Channel's credibility ranking in Likert Scale (1 is the lowest)

		<b>Statistics</b>			
		3. How do you rate the credibility of these channels for online purchase? [Online banner ads]	3. How do you rate the credibility of these channels for online purchase? [Email]	3. How do you rate the credibility of these channels for online purchase? [Social Media]	3. How do you rate the credibility of these channels for online purchase? [Website]
N	Valid	101	101	101	101
	Median	2.00	3.00	3.00	4.00

In table 15, the median comparison reveals that Website channel has the most prominent credibility rating with highest median (4 = usually trust) while Online banner ad elicits the lowest (2 = rarely trust). Email and Social media score in between Online banner ad and Website. Nevertheless, a tie between Email and Social media rating calls for a more thorough examination.

Table 16: Credibility rating for Email and Social media in cumulative percentages

<b>Credibility Rating</b>	<b>Email</b>	<b>Social Media</b>
Never trust	8.9	7.9
Rarely trust	45.5	29.7
Neutral	82.2	69.3
Usually trust	99.0	100.0
Always trust	100.0	100.0

Throughout a cumulative percentage analysis in table 16, it can be seen that roughly 82% of the answers see the credibility of Email channel as Neutral or below. On the other hand, only about 69% of the total responses rate Social media as Neutral or below. In other words, Social media channel has more positive distribution of response towards credibility. As a result, the order of consumer perceived credibility ranking, from the lowest to the highest, is: Online ads, Email, Social media and Website.

The final test is to verify the influence of aforementioned digital channels on purchase decision. Though the connection between digital channels' credibility and their corresponding influenced is already proved, a positive result from the influence median test will strengthen such conclusion.

Table 17: Channel's purchase influence in Likert Scale (1 is the lowest)

		<b>Statistics</b>			
		4. How do you rate the influence of these channels on your online purchase decision? [Online banner ads]	4. How do you rate the influence of these channels on your online purchase decision? [Email]	4. How do you rate the influence of these channels on your online purchase decision? [Social media]	4. How do you rate the influence of these channels on your online purchase decision? [Website]
N	Valid	101	101	101	101
	Median	2.00	2.00	3.00	4.00

From the data table above, Website is the channel which has the most influence on consumers' purchase decision compared to other channels in question (4 = High Influence). Social media follows closely (3 = Neutral) while Email and Online banner ad fall behind (2 = Little Influence). However, the median representation fails to illustrate the distinction between Email and Online banner ad's influence. Therefore, a cumulative percentage analysis is conducted:

Table 18: Purchase influence of Online banner ad and Email in cumulative percentages

<b>Influence Rating</b>	<b>Online banner ad</b>	<b>Email</b>
No influence	27.7	13.9
Little influence	65.3	54.5
Neutral	91.1	91.1
Heavy influence	99.0	99.0
Extreme influence	100.0	100.0

It is interpreted from table 18 that about 65% of total response see Online banner ad has little influence and below, while the same figure for Email is roughly 55%. Because the cumulative percentages from Neutral response and up are the same for both channels, Online banner ad shows less positive response distribution towards influence than Email channel does. Thus, the order of digital channel's influence, from the lowest to the highest, is: Online banner ad, Email, Social media and Website.

In summary, the Case Company suggestions test concurs with the author assumptions. The order of credibility and influence, message content, and engagement mediums are proved to be in-line with the suggestions made in chapter 6 of this thesis.

## 8 CONCLUSION

This chapter is written as a recap after the author has studied the literature regarding digital advertising's effects on consumer perception as well as the results of his empirical research conducted to confirm such impacts. Firstly, the author presents answers to the research questions put forth in chapter 1. Secondly, the reliability and validity of the research are assessed. Finally, as the author acknowledges the limitations of his research, suggestions for future studies are given.

### 8.1 Answers to the research questions

Upon completing the research and literature reviews, the author provides the answers to the research questions as below. The sub questions are restated first, followed by their answers. The main research question is highlighted last.

#### **1. What is advertising?**

In the online environment scope, advertising is defined as a paid communication form by an individual or organizations using mass media to deliver certain stimulating messages to the audiences. The purpose of such stimulation is divided into four categories: brand building, lead generation, driving purchase and changing life behavior. In marketing terms, advertising is expressed as a promotion practice.

#### **2. How do consumers process an advertisement's message in general?**

Upon exposure to advertisements, an individual is said to activate both of his or her conscious (logical) and unconscious (emotional) mind. According to the Elaboration Likelihood Model (ELM), when an engaged person possessed adequate knowledge, motivation, concentration and time, he or she is more likely to rely on logical comprehension to analyze the message – or central route to persuasion. However, if the mentioned individual fails to have necessary understandings of the message's topic, or dedicates little time to decide, and possess low motivation for purchase, he or she is inclined to utilize peripheral route – or mental shortcut for quick decision. Though the peripheral route provides an effective method to

circumvent numerous constraints for the consumers, it usually does not leave a lasting impact. The central route, however, is argued to have a significant influence on purchase decision if it is deemed to be reasonable by the involved person.

### **3. How do marketers maximize the persuasiveness potentials of an advertisement?**

In order to maximize the potentials of an advertisement, the audiences must first be “engaged”. Under the Consumer Involvement theory, such engagement is classified as involvement – a concept defined based on the number of distinguishable attributes among the brands compared to the perceived risks and importance of such purchase. The FCB grid further advances the Consumer Involvement theory by providing a high/low involvement with rational/emotional distinctions. Each quadrant in the FCB grid explains different learning curve from the consumer perspective, suggesting certain corresponding advertising implications. For example, if a person is looking for a premium sport car, an advertisement emphasizes on emotional experience when driving utilizing heavy imagery would be more effective than the explanation of technical features. In addition, researchers have confirmed the connection between the Involvement theories and the ELM, in which high involvement situations call for central route to persuasion while low involvements circumstances need peripheral appeal. In the premium sport car example, the advertisement could maximize its potentials by presenting authentic visual driving experience with stunning visual highlight.

### **4. What should be done with digital channels in terms of persuasion?**

A digital channel is not the direct target of consumer mental processing. Instead, it serves as a carrier for the advertisement message. Following the ELM, the impression of a digital channel is processed under the peripheral persuasive route. As a result, the surface characteristics of a channel are capable of influencing that channel’s credibility. The Modality (M), Agency (A), Interactivity (I), and Navigability (N) approach or MAIN model in chapter 3 of this thesis elaborates how different peripheral aspects of a digital channel can impact the consumer evaluation. In addition, each channel has its innate capabilities to support peripheral cues, thus appropriate channel implementation according to its targeted purpose is vital to

the success of persuasive message delivery. The author assesses the aforementioned capabilities of the four common digital channels, namely Online banner ad, Email, Social media and Website and proposes a theoretical ranking in terms of credibility in chapter 4.

### **5. How can the Case Company improve its digital advertising practices?**

The Case Company uses Website, Social Media (at limited capacity) and Email as the channels to reach its customers. Upon initial analysis, the author sees that the Case Company deploys some correct implementations, such as the product presentation via Gallery and Video clip. Nevertheless, the digital advertising practices need several improvements, which is illustrated in the table 3 of chapter 6. As a recap, the Case Company should focus on using a combination of both technical features and aesthetic presentations, with a slight edge towards features highlights. Website is the current emphasis of digital advertising, but Social Media also shows great potentials if the Case Company can dedicate more human resources to that channel. Infographic, interactive website and informative brochure are the most effective mediums to display the Case Company's products.

### **6. Main research question: How to use digital advertising effectively in stimulating customer's purchasing decision?**

The author proposes a theoretical advertising structure as illustrated in Figure 15 (chapter 6) to effectively stimulate consumer purchase decision for digital environment. The framework comprises of three layers: channel affordance, target engagement and the actual message content. The outer layer, which is the channel affordance, affects the whole structure as it either boosts or hinders advertisement persuasive capacity according to the MAIN model. The middle layer, or the target engagement following the Consumer Involvement theory, ensures that suitable messages will reach their appropriate targets. The inner layer, which is comprised of the message content, defines how an advertising message can appeal to the consumer mind through the implication of ELM.

## 8.2 Reliability and validity of the research

In order for the research to be authentic, the reliability and validity of the author's findings must be assured. Reliability is the degree of which the data collection method and its analysis will yield consistent findings. On the other hand, validity is the concern with whether the findings are the results of which are claimed to be measured (Saunders, Lewis, & Thornhill 2009.)

Regarding reliability, the author spreads the survey across two weeks with a diverse samples of digital consumers. Despite the fact that Likert Scale questions show a pattern of avoiding extreme answers from the participants, the fill-out rate reaches 100% with a proper distribution. During analysis, the author keeps a neutral attitude towards the results to avoid bias in interpreting data. Responses are analyzed using SPSS software to produce statistically sound results. Therefore, the author is confident that the research findings conform to the reliability requirements as non-biased, diverse and not subjected to a particular external influence.

As for validity, the author constructs the survey based on the research questions and the Case Company's advertising practices in conjunction with his deducted theories. To measure feelings, questions with Likert scale are implemented to provide a wide range of possibilities for the participants to express their thoughts on the subject. Furthermore, the rigid rules of how the results reflect relationship, connections, and strength of connection in statistics ensure correct correlations between data and its interpretation. As a result, the quantitative survey is valid as it claims to be.

## 8.3 Suggestion for future studies

During the research, the author acknowledges three key areas that would be the prime candidates for future studies in neuromarketing. First of all, though this thesis focuses on how "appropriate" advertising can be in the digital environment, the actual mechanism in which the elements of an advertisement operate to influence the consumer purchase motivation is left untouched. A study of how an attentive

stimulus can manipulate itself to become a purchase driver would be beneficial for understanding the motive for advertising.

Second, the thesis concerns the impact on the consumer perception of using a combination of several techniques. However, it is unclear whether the persuasion resistance due to saturation of advertisement exposures can distort the results. For this reason, future research on external factors' influence beside the advertisement message is necessary to better picture the whole matter.

Last but not least, the use of digital channels requires management and resources to keep them running at maximum capacity. When or whether, which or how to use these channels in what combination would definitely need further discussion. Not only would the internal expertise of an organization require compromised approaches but also the type, content and purpose of advertisements' message calls for different carriers to maximize the potentials.

## 9 SUMMARY

The thesis aims to establish a theoretical background for the use of digital channels in an effort to maximize the persuasive potentials of advertising. In addition, the digital advertising analysis assisting the Case Company provides an implication of such theories by utilizing real data from consumers. The author has achieved the research objectives by studying both the literatures reviews on the subject and his empirical survey to confirm the proposed theoretical persuasive advertising structure.

The author begins with an examination of the advertising message processing mechanism in chapter 2. The definition of advertising is presented, together with biological and psychological findings supporting such information. This research provide a strong foundation for other theories concerning appropriate approaches for advertising in general.

In chapter 3, the author focuses on the digital context of advertising. An analysis model is illustrated to elaborate the different aspects of digital channels that can affect their effectiveness in persuasion. These characteristics are classified as affordances, which show how a digital channel can support different credibility cues.

Chapter 4 analyzes the credibility affordance of the four common digital channels in advertising: Online banner ad, Email, Social media and Website. Each affordance is carefully evaluated according to the model in the previous chapter. Then the author positions the aforementioned digital channels in the order of perceived credibility, from the lowest to the highest.

Chapter 5 presents the Case Company's background, product line and its digital advertising practices. The author conducts a SWOT analysis to further clarify the Case Company's strengths, weaknesses, opportunities and threats in the current market.

In chapter 6, the author constructs an advertising suggestion framework for the Case Company based on its digital advertising operations. In addition, detailed recommendations are given according to the suggestion framework.

Chapter 7 is dedicated to the explanation of the empirical survey, including its objective, design, sampling justification and most importantly the result analysis. The author uses SPSS software to perform various tasks in order to verify the assumptions and suggestions given in the previous chapters. After a rigorous process, the author safely concludes that the suggestions are valid as they conform statistically to field data.

In chapter 8, the author concisely answers all the research questions presented in chapter 1, together with an evaluation of research reliability and validity. As a conclusion, the author acknowledges the research scope's limitation. Thus, several suggestions are given for future studies, such as attentive stimuli mechanism, external factors distortion and the use of digital channels in organizational context.

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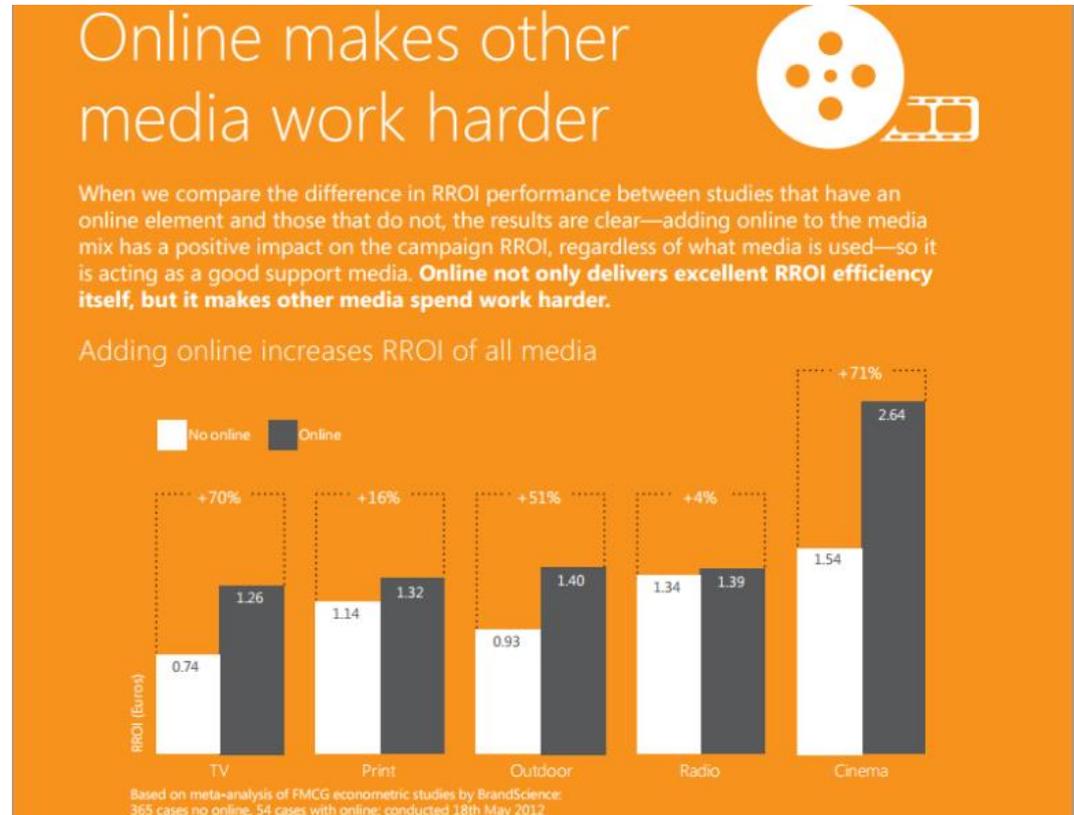
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## APPENDICES

## Appendix 1: FMCG econometric studies by BrainScience



Appendix 2: Email interview to Ms Tarja Messo – MarkPrint Oy’s communication manager

### **1. Digital Advertising Channel**

- Which channel does MarkPrint Oy use for digital advertising? (Email, Social Media, Banner ads or Website?) Do the company invest in digital advertising?
- Which digital channel is the main focus of the company for advertising? And why?
- Beside the main focus channel, what is the role of other channels (if multiple channels are used)?
- In your opinion, should the company use digital channels more in the future? How are the current channels performing? Are they sufficient?

### **2. Product Advertising**

- From the company’s website (<http://www.markprint.fi/fi/galleria/>), I can see many amazing presentations of the products. May I ask whether those products are high quality, expensive or easily affordable for the clients? Especially the products in the video clips, do they demand high price or used in important occasions?
- Do the clients require great deal of information about the products before purchase?
- Can you name some of the highly expensive products and affordable one in the company portfolio?
- What is the message that MarkPrint Oy want to send out via digital advertising? Is the message about the product features (e.g., high quality paper, carefully designed, moist resistance) or the aesthetic value (e.g., look great, beautiful)? Which one the clients want the most (feature or aesthetic value?)
- e. Do the clients need to consults the company? In other words, are they knowledgeable about the printing products?

Appendix 3: Survey questionnaire given to digital consumers

1. Full name:
2. Email address:
3. How do you rate the credibility of these channels for online purchase? \*

	Never trust	Rarely trust	Neutral	Usually trust	Always trust
Banner ads					
Email					
Social media					
Website					

4. How do you rate the influence of these channels on your online purchase decision? \*

	No influence	Little influence	Neutral	Heavy influence	Extreme influence
Banner ads					
Email					
Social media					
Website					

You are about to watch a short video clip introducing products from MarkPrint Ltd - a printing house located in Lahti, Finland. Please answer the questions below the clip.

MarkPrint Oy's Product Selection

([https://www.youtube.com/watch?feature=player\\_embedded&v=M4jzQGe\\_q9U](https://www.youtube.com/watch?feature=player_embedded&v=M4jzQGe_q9U))

5. Are you experienced with these types of printing product? \*
  - Yes
  - No
6. In your opinion, which addition would make the clip more engaging? \*

- Product's feature explanation
  - Improving visual effects
  - Both of these
  - Other (user input)
7. When buying high-quality printing products via Internet, which characteristic you want the most? \*
- Technical features (durable, high quality paper)
  - Aesthetic value (beautiful, good looking)
  - Both of these
  - Other (user input)
8. If buying printing products via website, how do you rate these following features of the website? \*

	Not im- portant	Little im- portant	Neutral	Very im- portant	Extremely important
Product infor- mation presen- tation					
Product rating (e.g., star rat- ing)					
Customer's re- view					

9. In your opinion, which advertising type that is most suitable for high-quality printing products? \*
- Infographic, explaining video, information-rich website
  - Online brochure, gallery, interactive website
  - Incentive to buy, discount, trial & demo
  - Attractive banner
  - Other (user input)