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MOMENTARY MOTIVATION IN CUSTOMER DECISION-MAKING AS POTENTIAL REPLACEMENT FOR TRADITIONAL CUSTOMER SEGMENTATION

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Abstract: This article deals with why and how brand leaders, marketers and their technology providers should challenge their practices of customer segmentation. It presents a new framework and design flow that guides how to use data and implicit personality tests as the key to achieve a new way to predict customer decision-making and create customer-centricity.

Keywords: momentary motivation, customer decision-making, implicit personality testing, NLP

1. INTRODUCTION

This article pursues the objective of introducing the concept of Momentary Motivation as an alternative to the current practices of customer segmentation. First, we open use case journeys of products and services to a broader market that is not ex-ante and limited by stereotyped assumptions. These assumptions result from customer segmentations, which are solely built in a static way out of socioeconomic, demographic, account and transactional behaviour based data. Second, we focus on understanding real-time the true psychological motivation drivers of customers and personalizing the marketing message as has been outlined by Scheffer and Manke (2017). The hypothesis to discuss in this paper is that a new maturity level of real-time discovery and prediction of customer preferences is achievable, desirable and already knocking at the door.

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2. BETWEEN DISCONNECT AND BUSINESS CASE

Marketers around the world and across industries realize every day that customer sophistication is on the rise: with an average of 8 seconds attention span, the research related to the buying process involves at least 10 pieces of marketing content, and before a sales representative is requested, the buying process is completed up to 60% (Cosentino 2016). At the same time, customer interaction happens during multi-channel respectively multi-event journeys (Maechler, Neher & Park 2016) and not just at touchpoints. Almost 90% of marketers agree that personalizing the customer experience is critical to their success, whereas nearly 80% of consumers say that brands do not understand them as individuals. At the same time, there is a huge gap between executive perceptions and true self-awareness as only 54% of executives rate their ability to act on insights derived from customer data as "poor" or "very poor" (IBM & Econsultancy 2015). Where does this executive tendency to see their own organizations' contributions to customer experience through rose-coloured glasses come from?

Looking into real-life practices, even of those who consider themselves leading edge, leave you with some serious questions: What is 'personalized Marketing' if the only effect you are creating is making somebody 'feel as if being personally addressed'? Creating a feeling as if the customer was addressed personally is not the same as addressing the customer personally, it is actually fake. Is 1:1 marketing just a matter of technology features (Tantry 2016)? Is it sufficient to assume you understand the person because you have insight into the web and social media behaviour to draw conclusions on the person you are targeting? Is it helpful to buy some account-based marketing software and assuming user search queries give you access to the customer's context? What does geo-targeting help if you are unclear about personal preferences or have only past transactions as proxy for preferences?

The company International Data Corporation (IDC) predicts that organizations that analyse relevant data and deliver actionable information will achieve an extra \$ 430 billion in productivity gains over less analytically oriented peers by 2020 (Vesset, Olofson, Nadkarni, McDonough & Schubmehl 2015). The economic motivation for executives to analyse customer data should be clear. Whether a company strives to convince new customers to buy a product or service, i.e., customer acquisition, whether to reduce the number of customer defections, so called customer retention, or to cross- and up-sell, i.e., to increase the footprint and convince customers to buy higher-end or complementary products and services. There is always a business case behind building and improving the enterprise capabilities to do something meaningful with the data that customers and enterprise processes create continuously.

3. DATA AND EVER MORE DATA BUT STILL A DISCONNECT

Van den Driest, Sthanunathan and Weed (2016) describe how to build an "insights engine", highlight how operational marketing skill has become table stakes and highlight the role of "customer centricity". However, customer centricity is not already created by engineering a "single source of truth" in data management, and by a focus on the collection of buying and usage of patterns. If only transactional activity gets measured, the focus is on results not on the understanding of motivation. True customer centricity and understanding is based on relationship and empathy in any moment.

The understanding of individual motivation and the real experience in every new context is what our advanced analytics ambition need to target if we want to predict customer decision-making behaviour. Hence, additional types of data have to be collected and analysed in order to get really close to customer centricity. Analysing the emotional content captured in social media and in conversations with the client is a very good first step. The much lauded and award-winning “Love at first Taste” (MullenLowe Group 2016) campaign of Unilever’s Knorr brand even got one step further and used market research results to analyse the psychology behind “flavour personalities” (IBM n.d.).

A positive brand experience today should be founded on recognizing and responding to each customer as a segment of one, i.e. understanding what an individual in a particular moment and context perceives as positive. Though most brands have already shifted from organizing campaigns and optimizing touchpoints to orchestrating customer journeys, we can still see that many of these journeys are being built, operationally executed and maintained based on representative users, i.e. on static and coarse-grained segmentations of historic data. Moreover, in many cases they do not have means of integrating individual feedback appropriately to iterate design choices. Consequently, we can also see that very often experience design does not fit with customer expectations.

A recent study (Berman, Goff & Baird 2017) reveals that more than two third of retail and consumer product brands are only offering generic marketing messages and even do not create environments where they can start to learn about preferences of their customers. The IBM 2017 Customer Experience Index study shows that 70% of the 507 brands surveyed in 25 countries restrict customer contributions to their personal profile/preference centre and only 2% offer self-service facilities for customers to provide additional data that can be leveraged to adapt the experience to their individual preferences. Overall, only 3.4% of brands can be considered as being leaders in creating good customer experience while more than 50% are falling or even lagging behind. Even worse, while companies invest ever more into digitization initiatives, there is a big disconnect between executive decision-makers and customers when it comes to understanding the motivation of customers to try digital customer experience applications. Executives have misunderstood why consumers would be willing to try businesses’ digital customer experience applications and executives have underestimated the role generational differences play in consumer adoption of companies’ digital CX applications. As a result, many customers were disappointed with their initial experiences in using companies’ digital CX applications.

The big questions are why companies are so slow in adapting to the changing customers’ needs and where this big disconnect between executive world view and customer experience reality does come from.

4. THE HYPOTHESIS: UNDERLYING CONCEPTUAL THINKING NEEDS TO CHANGE RADICALLY

The hypothesis for this discussion paper is that slowness and inflexibility in marketing, product and service design, sales, and service result from sticking to a possibly outdated marketing concept and resulting practices: Customer Segmentation. This needs to be replaced by insights into individual ‘Momentary Motivation’. This concept is alike what good sales people have always done in the very moments of selling: they select relevant information about the context of the customer, his/her actual needs, his/her socio-economic role and personality. After having gathered this information about the customer they compute a holistic view of the motivation of the customer that is valid in this moment and calibrate their actions accordingly (Scheffer, Binckebanck & Eisermann 2016).

Marketing practices in Fast Moving Consumer Goods (FMCG) are still far away from this kind of practice as the business process benchmarking data analysis in 2017 shows (Huber 2018). In order to drive insights into response patterns, only less than 5% of the companies use advanced multidimensional segmentation to identify customer value based on real-time self-adjusting algorithms. The majority (53%) of FMCG-companies, however, let business units develop segmentation models and simple patterns of behaviour based on account history and demographics.

4.1 Growing data ignored by obsolete segmentation practices

In times of ever growing amounts of data and a continuously improving ability to make intelligent use of them at speed and scale, the arguments for sticking to static and coarse-grained segmentations, target group milieus and other socio-cultural interpretations in customer acquisition, customer retention and market activation appear worn out.

The explanatory value of segmentation for predicting concrete customer decision-making is averaged out and therefore only limited if at all. Norman (2013) highlighted the problem with averages in the context of product design “average a left-hander with a right-hander and what do you get?” You can generalise and transfer this metaphor to customer segments.

Moreover, segmentations cannot cope with ever accelerating dynamics in societal and technological developments and they are conceptually not able to grasp the notion of the moment, which is essential to understand customer context. Current segmentation concepts do not create results that can be easily shared across ecosystems, especially not if they are being built predominantly from transactional account or product usage history. Moreover, most, if not all, of the currently available segmentation concepts, bound target groups to panel research and explicit questionnaire based, pre-defined static segments, which limits the market opportunity scope, compared to dynamic, behaviour based implicit real-life observations.

4.2 Old decision-making theories are obsolete

Psychology and neuroscience have revealed that human decision-making is not that rational like marketers around the world have been teaching since the 1960s. Just to mention some relevant models, the Theory of Reasoned Action (TRC) by Fishbein and Ajzen from 1975 or the Engel-Kollat-Blackwell Model (EKB), which depicts that probably 95% of all cognition, all the thinking that drives our decisions and behaviours, occurs unconsciously – and that includes consumer decisions (Zaltman 2003).

Waytz and Mason (2013) highlighted that the mechanism in the brain regarding situations, past decisions, and persons is a ‘tagging’ mechanism in terms of emotional significance. When a human brain computes comparable experiences later only the tags are being accessed as a kind of shortcut that creates feelings. This leads to the discovery that feelings inform thoughts and not vice versa. Affects precede cognition.

From neuroscience we also have models of the process of taking conscious voluntary decisions and how long the time span is to realise that you are taking a decision and prepare your acting accordingly. According to Brass, Haynes, Heinze and Soon (2008: 545) unconscious brain activity influences a decision for up to ten seconds before it reaches awareness.

Hence, you can argue that a true understanding of a customer context and the ability to predict decision-making cannot be limited to transactional, social or demographic data and events but is being driven by insights into emotions and implicit psychometric measures.

5. THE CONSEQUENCE: IMPLICIT MEASURES OF PERSONALITY

Acknowledging psychometric differences measured implicitly means that you are willing to accept the parallel existence of a number of ways to see or perceive the world in terms of how we gather information, how we relate to this information and to others, how we prioritize and how we make decisions.

This is all independent from our demographic, economic or social profile. Let us assume for a moment that none of these traits can be assessed as desirable or undesirable because this is often a theoretical ambition due to the cultural and educational context. We can see and assess different personalities, cognitive styles and associated cognitive biases or use heuristics associated with different psychological preferences. Accordingly, generic and product-centric marketing messages will be, on the one hand, without profile and irrelevant for most of the potential buyers (Scheffer & Manke 2017; Zaltman 2003).

5.1 Implicit and explicit measure instruments

In marketing, the current research methods based on self-reports, gathering the data with questionnaires, interviews, etc. have a number of well-known limitations: the halo effect, the wording may bias the responses, the testees answer dishonestly, the answers are biased to be socially desirable, etc. Moreover or precisely for these reasons, they are not good at predicting consumer behaviour (Schoen & Crilly 2012: 2).

The explicit questionnaires are based on direct questions about specific individual behaviour of the testee, they are “an explicit self-report about the conscious beliefs about one’s own personality” (Scheffer, Eisermann, Tissen-Diabaté, Germar, Mikoleit & Boecker 2016: 13). People tend to answer explicit questions biased by the overall concept they have built over time about themselves and their desired relation to others, through cultural context, education, peers and interestingly through the influence of marketing messages, “being a loyal fan of the brand reassures them that they are succeeding in being a certain kind of person.” (Jutkowitz 2015).

Experimental and applied psychology present evidence that “the strong reliance on respondent measures like self-reports has been a great problem in many fields (...)” (Scheffer 2017: 269) and a number of instruments to measure implicitly attitudes, personality and motives have been developed. These tools are based on visual input and participants respond to the stimuli using a keyboard or other input device (Schoen & Crilly 2012:2). The hope is that “implicit measurement techniques may overcome some of the problematic elements of traditional self-report measures of attitudes” (Schoen & Crilly 2012:2). In marketing surveys, we need to add the constraint that the tests consist of a scale of questions that make them impractical to use in a real-time marketing context. Besides, the users of such tests hardly share the results with brands.

More to add to the point to use implicit tests to assess consumer personality, are the cross-cultural aspects. Tests which assess explicitly personality traits such as the Five-Factor Model (FFM) also called Big Five Inventory (McCrae 2002) shows the problem whether the scales are equivalent across cultures or not (Schmitt, Allik, McCrae & Benet-Martínez 2007: 175), i.e., whether the tests are testing the same traits across cultures. Besides, although it has been proven that the FFM assesses universal personality factors, the proposition that “these five factors are universal does not necessarily mean that there are not also additional personality factors specific to individual cultures (...) they may not all be equally important in every culture” (McCrae 2002:4).

Apart from the methodological problems of explicitly testing personality traits, when potential buyers take the test, they might give culturally desirable answers to fit into the most desirable or common way to behave in their culture. It has been found out that the distribution of the traits Extraversion and Agreeableness is lower in East Asian countries than in other world regions (Schmitt, Allik, McCrae & Benet-Martínez, 2007: 197). Therefore, these potential buyers might answer the test to fulfil these cultural expectations and might not give an insight into their individual motives and their personality. For marketers these findings do have implications such as to avoid jumping to stereotyped conclusions about their international potential customers, which would limit market opportunities.

In the last decades a number of instruments to implicit measurement of personality have been investigated and continuously developed. The interesting variety of today's workarounds to avoid explicit questionnaires includes visual tests and semantic analytics to understand personal preferences.

5.2 ViQ Personality test

Frequently included in the offerings of human resource consultancies and headhunters, you find a purely visual questionnaire (ViQ®) that is based on the Neuropsychological Implicit Personality System approach (NeuroIPS®) developed by David Scheffer. According to Scheffer (2016: 2), the ViQ reveals "how a person processes collative factors, complexity, predictability and rationality". This is achieved by measuring responses to visual stimuli, which are processed in areas of the brain also responsible for non-cognitive decision-making.

This 5-minute test promises to reveal the implicit personality structure of the person completing the test. Depending on how the viewer perceives visual symbols, the ViQ® identifies fundamental behavioural patterns and personality traits. "We are what we see" (Scheffer & Manke 2017). The ViQ® makes use of this phenomenon, as it links these implicit processes via an analysis of our perception to our decision-making and ultimate behaviour (Scheffer & Manke 2017). Its effective use in neuro marketing was proved in a series of studies with renowned market research institutes, such as GfK, TNS Infratest and ACNielsen and has been included in marketing tools like newsletters from OTTO Group (Optivo 2012).

5.3 Natural Language Processing

DeepQA systems, one of the underlying technologies behind IBM's Watson™ can extract syntactic knowledge and its implied semantics from documents (Fan, Kalyanpur, Gondek & Ferrucci 2012). They can parse text to provide linguistic analyses of questions and content in order to find and hypothesize answers (McCord, Murdock, Boguraev 2012). To identify and separate different facts in nested sentences, they are able to decompose and re-write text based on machine learning and heuristic selection strategies (Kalyanpur, Patwardhan, Boguraev, Lally & Chu-Carroll 2012). As natural language often contains hidden associations and implicit relationships, recursive spreading-activation algorithms help these DeepQA systems to bridge missing-link questions and potential or candidate answers and understand intention behind a text (Chu-Carroll, Brown, Lally & Murdock 2012).

This is what enables the core of today's Natural Language Processing (NLP). Combined with dialogue capabilities that go beyond 'one-question-one-answer' talks, it detects and interprets emotions, social tendencies, and language styles. We can have real conversations with machines, so-called bots or virtual agents.

Speech-to-text and text-to-speech has really advanced and listening to such a virtual agent does not bring back any more memories of Lyman Frank Baum's tin man. Even more intriguing are the Watson Personality Insights that use "linguistic analytics to infer individuals' personality characteristics, including Big Five, Needs, and Values, from digital communications such as email, blogs, tweets, and forum posts." (IBM n.d.). Deriving insights from social media, enterprise data and other digital communication, the future for marketers would be a bright one: you press a button and you know what kind of communication is more suitable to turn your customers into advocates. You do this by inferring people's personality, emotions, and communication tone characteristics and linking these with the available contextual and transactional data. That would create a new level of 360° customer insight and personal relationship. Analysts like IDC see very good opportunities for such technology in commercial communication (Girard 2016).

There is a number of providers in the market that support brands with so-called micro targeting based on behavioural science and big data. One particular provider made it into the news even in Europe when media repeatedly quoted an article from the Swiss publication *Das Magazin* that statisticians and big data would have contributed to Donald Trump's election for President of the United States (Grassegger & Krogerus 2016). Independent of the recent discussion around data privacy, unlawful use of private data (e.g. Cambridge Analytica (CA)) and the role of those who collect data (e.g. Facebook) and also independent of the question if the above highlighted "result" is true or not, the data-driven marketing services provided by companies alike demonstrate very well two things: there are companies, entrepreneurs and investors out there who believe that data can help to understand and even drive behaviours, and that you can earn money with it. Yet, even CA offered "audience segmentation" services to profile customer universes. (Cambridge Analytica n.d.)

However, independently from any access to most advanced algorithms, AI and machine learning, we should always bear in mind that any clumsy approach to data, no matter with which technology, will create undifferentiated results. It is therefore also essential that we keep an eye on what AI, machine learning and automated process robotics are doing with our data. Especially, how historically grown skews influence results of predictive and prescriptive analytics, which might lead to contradictions with our ambitions for the future regarding gender equality, anti-discrimination, fight against poverty or other societal or ethical ambitions that are not yet reality. Nobody needs to go as far as a recent article of *The Telegraph* (Bodkin 2017) to call AI robots sexist and racist. Nevertheless, being more in control of how AI and machine learning create insights and the wisdom of the future for us and how we train or even educate them, should be on the task list of everybody concerned with data. Artificial Intelligence (AI), Cognitive and Big Data are not just a disciplines important for data scientists but at least as relevant for ethicists and philosophers, not just for general, high-flying theories, but for the practical work within the algorithm training projects. Moreover, political factors like missing national and international regulations governing AI, uncontrolled advances in military use, and general risk of loss of control, makes AI a field full of opportunities but also risks (Meek, Barham, Beltaif, Kaadoor & Akhter 2016). We need to make sure that marketers strive for ethically proper relationships with customers and always bear in mind David Ogilvy's statement "the consumer isn't a moron" (Ogilvy 2013).

6. THE POTENTIAL SOLUTION

The consequence of the Momentary Motivation hypothesis for the future prediction of customer decision-making is, that brands have to leave the shore of an approach centred in transactional product or service, backed by static target groups and reinforced by the concept of segments and move to effective market segmentation. It is recommended a leading cloud-based CRM software provider to target customers purposefully by reaching a high number of potential customers and then make every targeted customer feel as if they were addressed personally (Leung 2017).

In the future, we believe, you do not just create the illusion of personal marketing but you do personal marketing. You do it through contextual data that leverage the power of mobility, not as a channel but as the glue that holds together the physical and the digital world, through automation, and through real-time cognitive analytics that includes knowledge about the psychometric measurements of your customers – yes, of every single individual, streaming in (near-) real-time. However, next to proper data management practices in line with the European GDPR, you need to challenge the concept of customer segmentation in its entirety. This will lead you eventually to the thinking of segmenting moments, not humans.

This way, you can focus on three things. First, detecting the moment of interest, second, real-time prediction of the individual personality traits and psychometric preferences. Last, instantaneously removing time, resource, or relationship constraints off your individual to create a superior experience and back up the Momentary Motivation of customers making a decision in favour of your brand, your products, or your services.

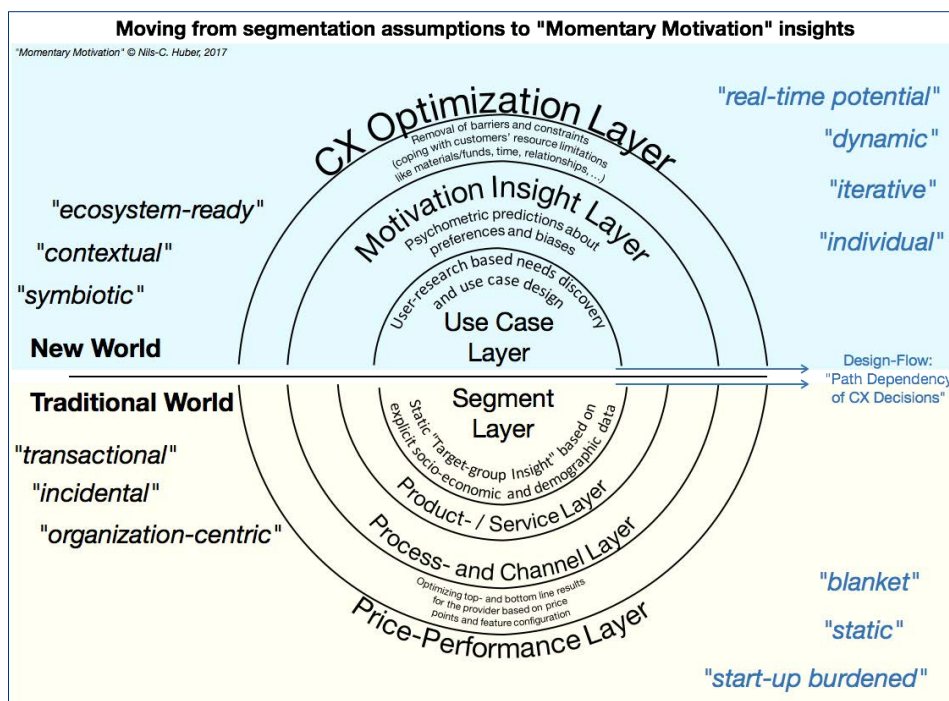


Figure 1: Moving from segmentation to Momentary Motivation (Huber 2018)

In consequence, current design thinking practices would have to reorder the sequence of activities, especially resulting in postponing the creation of persona(s) and related tasks. That means, you first deconstruct products, appliances and services into the moment when they are used or consumed to identify the 'persona-independent needs discovery points'. There is a number of influencing factors for customer preferences that are not tied to demographic, socio-economic or individual psychometric results but are rather linked to the use case itself.

Accordingly, the first stage of product and service design would be based on 'minimal viable factors' that are unbiased from segment or target group assumptions. In the second stage, basic use case design would then lead to modified components according to general psychological archetypes and related preferences, i.e. use case derivatives.

For quite a while, the huge variety of external data sources has been identified to be able to help a modern company to understand more about the context a particular client is in: Data extracted from social media, geospatial data, or weather data (IBM Corporation 2011) to name a few. With little more effort, companies could likewise understand now deeply rooted preferences of their personality to select and provide those components that fit to personality and context.

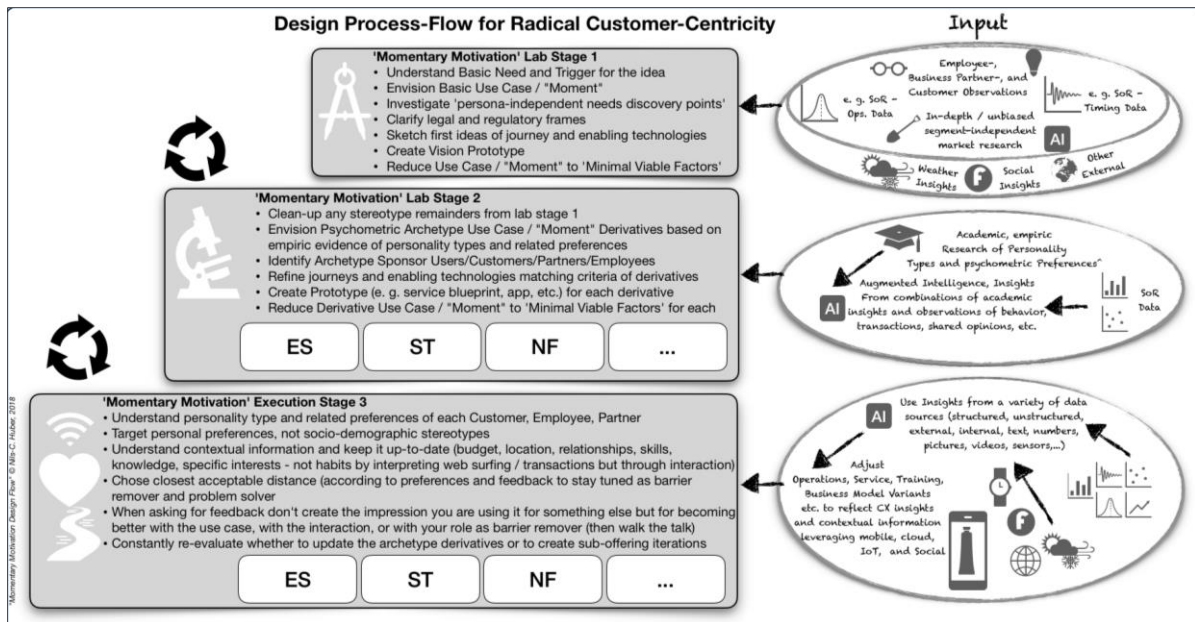


Figure 2: Design Process-Flow for Radical Customer-Centricity (Huber 2018)

This way, focusing thirdly on assuming the role of a *barrier remover* and *problem solver* enables your product and services design to select the right derivative as an offer to an individual and to create unique business models for targeted moments with a perfect fit for the individual context instead of designing 'pre-configured' features and functions of products and productised services out of context.

In contrast, this is what actually happened traditionally in extremely simplified terms: the products and services have been designed for and based on assumptions associated with a particular market segment. Not always, characteristics of these segments would have been updated appropriately and frequently. Therefore, any association of potential customers and consumers to a particular segment was, if at all, only close to an average of reality. Designed products and services, processes and access channels had to be prepared to provide these products and services to the customer or consumer instead of seing them as integral part of the use case.

One important point to mention for the better understanding of the concept of Momentary Motivation is that you need to distinguish contextual information that relates to the use case and the contextual data that relate to human decision-making. For this, a strong and tested theory about the connections and dynamics of personality systems and context interaction is needed. The PSI theory of Kuhl (Kuhl & Kazen 2008; Scheffer & Heckhausen 2010; Scheffer & Kuhl 2008) is more suitable than popular models like the *Big Five* because it is the only theory so far which states testable hypotheses about the relationships between context, needs, personality systems and conscious self concept and how these variables interact to form Momentary Motivation.

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