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MARKETING | RESEARCH ARTICLE

Towards the Co-evolution of Food Experience Search Spaces Based on the Design Weltanschauung Model in Food Marketing

Qeis Kamran^{1,2*}, Saskia Topp³ and Jörg Henseler^{2,4}

Abstract: Contemporary socio-technological shifts within global societies indicate that the preferences and values of a converging, well-informed and digitally connected society have shifted towards a movement based on sustainability and healthy and environmentally friendly common values. The effect of artificial intelligence has changed the nature of marketing and communication between firms and markets. Food marketers need to adjust to this new situation and integrate proven interdisciplinary theoretical frameworks, as these approaches can be aligned to address this situation. Due to the limitations of traditional-marketing-theory, the field has not captured this gap by addressing emerging trends effectively. We address these new developments by introducing the design of the Weltanschauung model, which is based on marketing within the dimensions of designing a firm-consumer-relationship based on cocreation and coevolution in the design and meaning search spaces. We apply a model-based-management methodology by

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PUBLIC INTEREST STATEMENT

This paper describes the changes occurring in the food industry (FI) and provides food marketers with valid conceptual models to cope with the rapidly changing environment. This research is based on contributions of the Design Weltanschauung Model (DWA), which is a transcendence from the mere operational level of thinking. The embodiment of the firms' and FI's modes of existence is defined towards a triad of a systemic embodiment existing within the dimensions of "how-operations", "future-strategic" and "legitimacy-identity". The DWA has been substantiated by practical examples from diverse industries and applied here to food marketing and towards a design of global value chains (GVCs). It displays how marketing theory and practice can evolve towards a powerful framework of integrating diverse essential perspectives deriving from the contemporary needs, as the major car for converting the shifting societal dimensions towards sustainable eco-systemic innovations. Firms and GVCs can benefit much from alignment of sustainability mindset and high-tech innovations, which would contribute towards vital resilience in global FI.

aligning the nature of rigorous theory building and relevant practice via the design science research.

Subjects: Mathematics & Statistics for Engineers; Engineering Mathematics; Electrical & Electronic Engineering

Keywords: food-marketing; service dominant logic; design; artificial intelligence; cyber-physical-capabilities

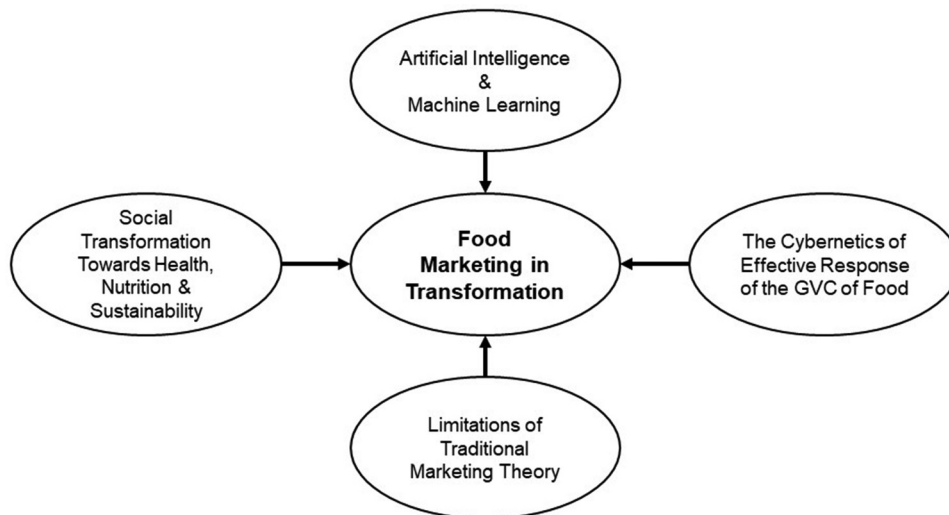
Introduction

The contemporary “digital turn” (DT) has provided food marketing (FM) with a great opportunity of exponential proportion. Thus, to shift its *raison d’être* inherited from the goods dominant logic (GDL) (Vargo & Lusch, 2004), where the boundaries of mass-marketing and concentration on a low-pricing and exchange-based *modus operandi* have dominated. Considering the possibilities available within the DT, we can shift the locus of innovation in FM towards designing sustainable global value chains (GVC) and ecosystems. The frontier of competition in FM is currently underway, such that firms are aligned based on a consensus of values, which is amplified by technologically driven model-based-management (MBM). The emerging convergence of a hyperconnected global and social habitus (Bourdieu, 1984) of consumers with mutual sets of values and concerns will have vital societal implications (Kamran et al., 2020). Many solid opportunities are currently available for FM to make a game-changing impact. The focal point of FM and its evolution can be designed for resilience when based on a solid MBM scheme within today’s cyber-physical-service economy. The notion of MBM was introduced by Rittel and Webber (1973), who pointed to research gaps and the lack of understanding of formal and mental models in management. Furthermore, he emphasized the dimension of how high-performing results within organizations could be achieved by their method of application. Based on a trend-based analysis of the contemporary environment and the changing behavior of consumers in relation to food consumption, we address the major developments within marketing theory and practice. As a response to Schwaninger’s call for high-quality models, we address the gaps in theory and suggest a set of solid practical solutions for FM.

The trends in FM suggest that a new lifestyle that embraces the global and digitally connected mindset of a healthy, nutrition-based, environmentally conscious and sustainability-minded consumer habitus has emerged. This lifestyle is founded on many aspects that go beyond the rational economics-based *Weltanschauung* of less-informed consumers driven by price and impulses alone. Hence, these individuals have evolved towards being highly informed and conscious consumers. They think and decide to consume food based on their assessment of the food miles of the items, which is a transparent documentation of the workers’ safety, the water and energy usage within the GVC, the treatment of employees and suppliers and the quality of the food in general. Above all, the nature of animal treatment that is based on the normative layer and the philosophy of the food ecosystem plays a key role. Furthermore, the notion of having a variety of choices due to the changing role of packaging and food esthetics is pivotal to the preferences of the globally converging and digitally driven consumer landscape.

The dimensions constructed above are aligned within a model of trends affecting FM based on the trends described in Figure 1, we propose a new framework called the design *Weltanschauung* (DWA). The lens aligns the diverse necessary challenges and research gaps, which FM needs to cope with. DWA fosters the dimension of co-creation within food-providers’ GVC and paves the way for a co-evolutionary foundation that transcends FM towards more promising business models. A new concept of “market-within” logic of relationships with the consumers is introduced, which bears many opportunities for innovation in FM based on the possibilities of direct-to-consumer capabilities firms can discern.

Figure 1. The emerging trends affecting contemporary food marketing. Authors' own illustration.



We conclude by providing a hybrid model for how to compete within the complexities of the cyber-physical-service-economy, and we derive solid examples from the real world for advancing FM.

The paper is organized as follows. The next sections outline key contributions from the perspectives of design, cybernetics and management. Based on our research design, we identify and discuss the dimensions of the DWA, the role of the meaning search space, and the essentiality of direct-to-consumer innovation and distribution and display them with supporting examples. The article ends with conclusions and recommendations for marketing scholars undertaking, theory building roles, consultancy roles in FM and for practitioners, who would like to have the latest theoretical and practical insights delivered within a single paper.

Food marketing

According to Dority et al. (2010) “The use of marketing practices—such as pricing, promotion, product design elements, and distribution strategies—to influence consumers’ food choices is widely established in marketing”. Contemporary marketing theory is required to conduct research into sustainable business models on consumers’ relationships with food and to dissolve diverse challenges in the process. Based on the new findings and rich data available within the refinement of options from design science research, the possibility of finding an entry point by which to make an impact within FM starts with the perception of consumer experiences. More than ever, firms in FM are turning to technology to decipher hidden patterns by a designerly “how can” approach to guide consumers’ interest, attention and satisfaction. Holistic consumer perception is based on a variety of information attenuating channels, such as 1) food product design, 2) packaging and labeling (including product history and origin of the GVC’s eco-system producing it), 3) pervasive cyberspace ubiquity in terms of placement, 4) brand-behaviour and association, and 5) the experiential pleasure of food (EPF) cognitive and emotional pleasure that consumers gain from appreciating the multisensory, esthetics, and cultural meanings of food experiences (Batat et al., 2019). The holistic dimension of consumer-product interaction based on the new possibilities available within the evolution of the technology poses some challenges to certain firms. As historically derived, firms had to focus on a niche to give them a sustainable position of competitive advantage (Porter, 1979, 1980, 1985), while also concentrating on communicating these hyperdifferentiated values and designed capabilities, which often ran counter to the new possibilities available for FM firms competing within the cyber-physical-capabilities of “direct-to-consumer experience and service-providers”. Thus, based on the position of the firm in the market,

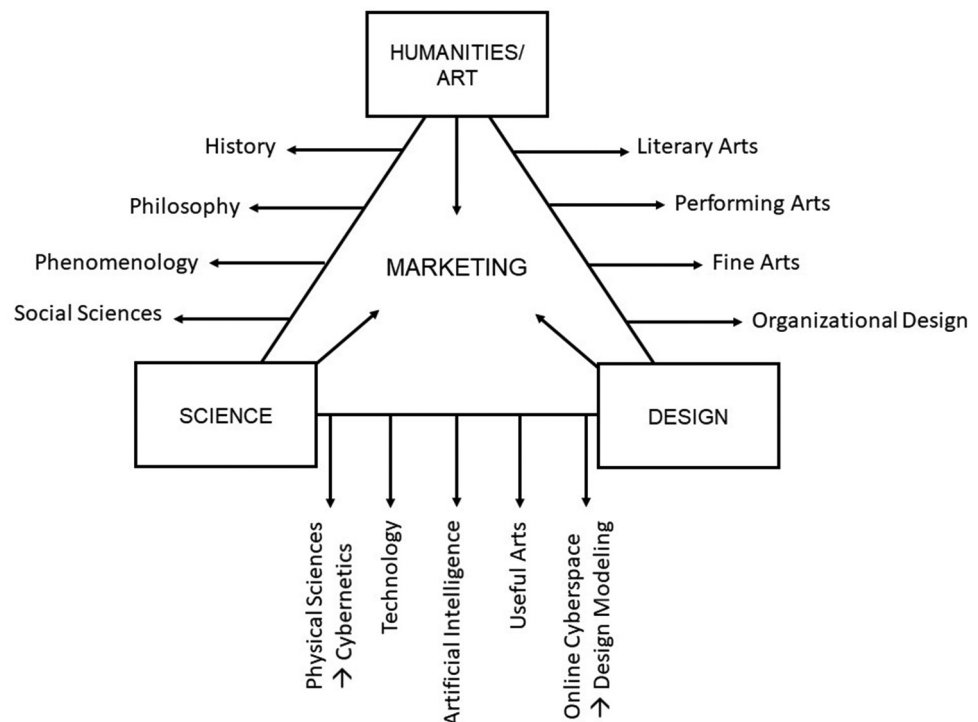
healthy food may produce tension in regard to taste and price sensitivity for some consumers, while trust in relation to labeling organic or nutritious food production may be highly dependent on the history of the brand and its eco-system GVCs. Furthermore, FM is challenged by diverse tensions such as 1) health versus affordability, 2) health versus taste, 3) sustainability versus taste, and 4) sustainability versus price (Gibson et al., 2018). Aligning these tensions is the pivotal task of contemporary FM. Approaching these contradicting factors is a solid foundation for a designerly inquiry; thus, we see design as the logic of postulating holistic artifacts and models by answering the essential questions FM must ask; for example, how can these tensions be approached to win consumers' loyalty and trust, while also transforming the firm's *raison d'être*? The literature on FM may be enriched via our approach of the DWA as a platform by which to embrace these contradictions via a high-quality model. "No matter what type of access issue serves as a barrier to the alternative adoption of consumers, the solution is in an inclusive approach ... and well-being" (Batat et al., 2016).

A brief history of design

From the launch of research-based journals in design as "Design Studies" in 1979, "Design Issues" in 1984, "Design History" in 1988, "Research in Engineering Design" in 1989 and "Languages of Design" in 1992 (Cross, 1999), the term "Design" has been much popularized, especially since it was originally introduced by Simon (1969). According to Cross (2007): "design practice does indeed have its own strong and appropriate intellectual culture ... we must avoid swamping our design research with different cultures imported either from the sciences or the arts".

The notion of constructing design as the third paradigm of inquiry beyond art and science and goes back to Archer's original definition as described below in Figure 2, which was popularized in the Design Society's Conference in 1980 (Cross, 1999). "Design research is systematic inquiry whose goal is knowledge of, or in, the embodiment of configuration, composition, structure, purpose, value, and meaning in man-made things and systems" (Archer, 1981). However,

Figure 2. Understanding marketing's *raison d'être* from an Archerian model of design with a "big d" as the 3rd area of education.



additional scholars have equally put design as the third paradigm of human inquiry (Cross, 1999; Dalsgaard, 2014).

This *raison d'être* of design is to be reached by identifying and acting upon underlying values and concerns, as they emerge to satisfy the principle qualities, which made the field of design evolve as an additional *Weltanschauung* for inquiry. The dimension of arts embraces the creative framework that encompasses philosophy, history, aesthetics of beauty and values, however we appeal to normative structure here, as law is not about being right but moreover about justice and medicine is not health care but actually maintaining the homeostasis of humans' health. Science, on the other hand, wants to understand the world as it is, by asking the foundational questions of what is out there and what are the essential laws and relations to be ontologically discovered, while design, as we understand it, is about forming and creating possible worlds, and asking how this can be done?

In this paper, we apply design as these different cultures distinguished above in its own right in terms of “designerly ways of knowing thinking and acting” (Cross, 2001, 2006; Simon, 1969). While we agree with the intellectual culture in design that has been paved by many scholars as L. B. Archer (1965), Buchanan (1992), Johansson-Sköldberg et al. (2013) and Rittel and Webber (1973). The theoretical streams of “design and designerly thinking” could be summarized in the following manner, which:

- (1) is the relation of artifacts (Simon, 1969), application of rationalistic epistemology
- (2) is the reflexive practice (Schön, 1983), application of pragmatist epistemology
- (3) is the problem-solving and a stating that activity (Buchanan, 1992), hence, application of the postmodernist epistemology
- (4) is a way of reasoning and making sense of things (Cross, 2006, 2011; Lawson, 2006), application of a practical perspective/epistemology
- (5) is creation of meaning (Krippendorff, 2006), application of hermeneutics epistemology

Owen (2007) states: “... a combination of science thinking and design thinking is better than either alone as a source of advice”. While constructing on the diversity of the intellectual stream as described by (Johansson-Sköldberg et al., 2013; Simon, 1969) furthermore, argued for establishing a design approach in economics and engineering and other disciplines including all activities relating to producing artifacts and the design of the organizations which goes *avant le lettre* (Bayazit, 2004; Beer, 1993). Design research has also much profited from architecture (Alexander, 1963), military, NASA (Bayazit, 2004; Rittel & Kunz, 1972; Rittel & Webber, 1973), IT (Brooks, 2010), business and strategy (Dunne & Martin, 2006; Martin & Martin, 2009), organization and management theory (Beer, 1959a, 1959b, 1971, 1972, 1973, 1975, 1979, 1985), cybernetics (Wiener, 1948), brain science (Ashby & Stein, 1954), MBM (Conant & Ashby, 1970; Schwaninger, 2009), bio-inspired robotics and embodiment theory for AI (soft-robotics) (Pfeifer et al., 2011; Pfeifer & Scheier, 2001), and constructivist epistemology (Glanville, 2007; Piaget ((1937)); Piaget, 1950b).

Generally, research in design is based on the below illustrated dimensions (Bayazit, 2004):

- (1) Physical embodiment of artifacts—performance and function
- (2) Human activity—cognition and action based on ubiquitous recursion
- (3) Purposeful activity—how an artificial thing appears and what it means
- (4) Embodiment of configurations—scientific practice
- (5) Systematic search and acquisition of knowledge related to designing

According to Thomas and Carroll (1979): “Design is a type of problem solving in which the problem solver views the problem or acts as though there is some ill-definedness in the goals, initial conditions or allowable transformations” quoted in Cross (2006) and Schön (1983). Schön

substantiates this claim by stating: “The designer shapes the situation, in accordance with his initial appreciation of it; the situation ‘talks back’, and he responds to the backtalk” (Schön, 1983). The pragmatic nature of the designer’s work feeds back through the larger wholes characterized as habits (Kilpinen, 2009). To this notion, Peirce referred to as “Knowledge is habit” (Peirce, 1906), while Dewey underpinned the analogy of “continuity” (Dewey, 1938) within the spectrum of the designerly inquiry. Design research is thus a continuous process of action and reflection of adaptation and course correction based on a circular causality of the feedback loops of iterations that hermeneutically bring forth inventions leading to innovations.

Another emphasis concentrates on the notion of reflective activity (Schön, 1983) which has a deeper root in second-order cybernetics (Foerster, 1995), constructivism (Piaget (1937)), 1950a, Piaget, 1950b) and radical constructivism (Foerster, 1981; Glasersfeld, 1995). For Piaget empiricist knowledge objects in themselves mean nothing, until one does something with and to them, hence, knowledge is deriving from action, innatist knowledge or built-in ability is also rejected by Piaget because it is still within the dimension of giving importance to action and that actions are carried out on objects or based on human and object and human and environment interaction that knowledge is produced. Piaget has developed the constructivist paradigm of knowledge; hence, knowledge is not ready made and it is a continuous and ubiquitous process of organizing our knowledge that creates knowledge by action and adaptation, which again fits to the pragmatic mantra paved by late early pragmatists (Peirce, James and Dewey are usually referred to in literature as early pragmatists).

The design world functions in multiple worlds of perceptions, interpretations and constructions. The ability of a good designer is not to hold the only one absolute reality but in developing the ability of holding multiple, complementary and competing realities, which makes him a good juggler in realities corresponding with the notion of the domain and the method theories. Design, therefore, is a construct of an action that produces additional actions that are teleological in nature of the overall designerly pursuits.

“The ability to design well is an obligation and an opportunity ..., design establishes and defines solutions to and pertinent structures for problems not solved before, or new solutions to problems, which have previously been solved in a different way” (Blumrich, 1970). Owen (2007) also observes: “Design exists because of the need for form. The form giver, in the broadest use of the term, creates order. Because the world of design is the world of the artificial, the values of design tend to be ones associated with human needs and environmental needs created by or resulting from human actions”. The structural conditions of form are the ability of form giving based on the reality that constructs further functioning realities. This dimension has been taken to address the latest theoretical insights that are developed within marketing theory to be derived and practically applied into FM.

The construction of new forms requires the dimension of design; hence, from the form of habits construed as the inheritances of cultural forms in terms of habitus, the quality of seeing and observing of future forms arise, which brings forth as second-order understanding of a design of design into the discourse of intellectual consideration. “To design artifacts for use by others requires second-order understanding” (Krippendorff, 1996, 2006). The notion of second-order understanding is the cybernetics of observing systems, rather than of the observed systems, of designing the design of the next set of actions in a circular causality (Foerster, 2007). This dimension will be explained thoroughly in the next part of the paper.

Design embraces the bridge between the first-order and second-order stipulation. The foundation of the designer’s work is based on the recursive nature of subjectivity and objectivity in a hermeneutic loop. This notion of constructing the logic of observing the designer’s own observing is therefore the foundation, whereupon the notion of experience as stream of connecting properties enters the loop by stipulating the direction of observation towards a favorable future and design.

Cross (2011) states: “... designing utilizes aspects of emergence; relevant features emerge in tentative solution concepts and can be recognized as having properties that suggest how the developing solution-concept might be matched to the also developing problem-concept”. Ashby observed this notion based on his design of the Law of Requisite Variety: “Only variety absorb variety” (Ashby & Stein, 1954). “Ashby had developed many interpretations of his Law of Requisite Variety, including that the human ability to understand systems is limited by the variety available to the cybernetician’s brain relative to the complexity of the system being experimented with. Ashby always included himself as experimenter or designer of systems he was investigating as observer” (Krippendorff, 2009b, 2009a).

Methodology

The methodology of this paper is based on the taxonomies outlined in Keating (1995), which characterized that contributions to theory building aim to 1) discover, 2) illustrate, 3) specify, or 4) refute theory. We specify our findings and relate them back to the theoretical issue under investigation in marketing theory. We display the applicability of the theory in light of the cases essential for FM and reassess these findings to specify how they complement and extend existing theories of marketing (Keating, 1995). We identify knowledge gaps that are thus far unresolved by research within FM, and we construct upon solid theory refinement possibilities obtained from design science research (DSR) (Hevner et al., 2004). Thus, we seek to see the reality of conceptualizing a robust theory for marketing based on the design lens (Archer, 1979; Simon, 1969).

Theories often appear to embody two distinct roles, which have been introduced as the dimensions of domain theory and method theory (Lukka & Vinnari, 2014). Based on the concept of domain theory, we illustrate a set of insights into marketing theory and derive implications for FM practice. Furthermore, by applying method theory, we define a meta-level conceptual framework from the domain of service dominant logic (SDL) and we design science for studying the essential and substantive issues affecting FM in the future. We stress the importance of theorizing based on the necessary intertwined-ness of the two dimensions of the “domain and method” theories. We accept that their boundaries are not absolute; hence, no theory is purely structured on either one of these two dimensions per se, as the difference between them is based on the role of the study question (Lukka & Vinnari, 2014). Specifically, we ask the following questions. What is the changing nature of FM? How can we integrate the new theoretical developments within marketing theory into FM? What practical implications can we hope for? In addition, what empirical evidence exists in the real world, that would justify and underpin our claims?

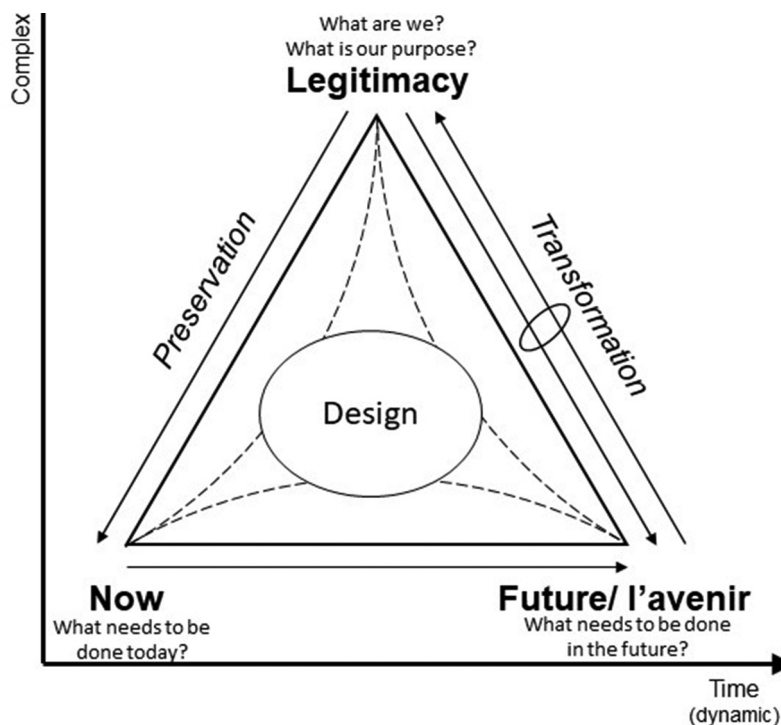
To answer these questions, our approach concentrates on the integration of DSR by covering sufficient aspects from an interdisciplinary perspective. Our suggested new models illustrate how sustainable business models in FM can be designed.

We limit our research contribution by stating that we do not intend to refute any theory but rather build upon available theories and embrace their functionality. Furthermore, by building on the domain and method dimensions, the two are able to interact with each other and construct roles of a non-static category. We align these dimensions with the possibility given within the DSR methodology that this intertwined relationship can be structured to develop and justify solid theories for marketing.

Design weltanschauung

We propose the DWA model as illustrated in Figure 3, which is based on a designerly dimension of a system of the GVC understanding the essentiality that the global markets are shifting towards complexity of vast proportions. A good example to clarify the point here would be to understand the dimension of globalization of a few years back, which is reduced to the notion of “containment” today, thus putting goods on a container and shipping it around the globe was once the textbook definition of globalization of goods and capital.

Figure 3. The design weltanschauung model that combines all the essential realities of firms and GVCs. authors' own illustration.



Furthermore, that the time to react to crises and challenges is becoming much shorter; then, it is modelled within the crisis management and decision systems of the firms. The danger of the time lag until an adequate strategy is formulated and executed, makes the crises to become more severe, as the situation has changed from what it originally was a few days and a few hours before. Thus, marketing managers are chasing a problem that has been shaped by the collective actions and responses of the global actors.

Firms, therefore, as it is illustrated in Figure 3, need to be able to train and to develop their organizational ambidexterity, which means, being able to exploit and explore simultaneously. According to O'Reilly III and Tushman (2008): "The ability of senior managers to seize opportunities through the orchestration and integration of both new and existing assets to overcome inertia and path dependencies is at the core of dynamic capabilities". The notion of dynamic capabilities was introduced by Teece et al. (1997) by stating: "We refer to this ability to achieve new forms of competitive advantage as 'dynamic capabilities' to emphasize two key aspects that were not the main focus of attention in previous strategy perspectives. The term 'dynamic' refers to the capacity to renew competences so as to achieve congruence with the changing business environment; certain innovative responses are required when time-to-market and timing are critical, the rate of technological change is rapid, and the nature of future competition and markets difficult to determine. The term 'capabilities' emphasizes the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment."

Based on the DWA model, it is essential the one additional dimension as the notion of legitimacy of the firm is added to the firm's ability of self-assessment (Schwaninger, 2009). While this dimension of an organizational reality is not subject to radical changes as it is the operational layer of the firms and which deals with the contemporary duties of the firm. However, some essential changes may be necessary, when the market conditions are adequate for growth or the firm can detect weak signals of

the market and the industry that can turn to become major future disruptions, whereupon the transformation dimension of the firm’s raison d’être can be perused. Hence, based on the DWA model, a firm and its ecosystem of GVC must ask itself three essential questions:

- (1) Who are we and what is our legitimacy?
- (2) What needs to be done today?
- (3) What needs to be done in the future?

Furthermore, according to the DWA model, we distinguish between two types of futures. The prescribed and scheduled future and the future that is based on Derrida’s analogy of l’avenir, meaning to come or the essence of an opportunity that reveals itself and where a firm needs to sense that and orchestrated an action. A good example here, to make the point clear would be, how Apple transformed itself and changed the whole industry by introducing the iPod, then the iPad and the iPhone. All of these precise movements by Apple were windows of opportunities that were executed with a solid and orchestrated strategy, thus, making Apple the most valuable firm in the history.

Figure 4 and Figure 5 give solid accounts of how the DWA model can be applied to an organization and its GVC. In Figure 4a, the recursive nature of the relationships of the firm is demonstrated, which then is illustrated within the dimensions of first- and second-order cybernetics. The interaction of these recursive fields is displayed in Figure 4b. Cybernetics, according to (Beer, 1959a, 1966, 1972, 1981), “... is the science of effective organization”, thus constructing on Wiener’s original definition: as “the science of control in the animal and the machine.” (Wiener, 1948).

While the cybernetics of the first order as table 1 displays is based on the notion of understanding how systems interact with their environments, cybernetics of the second order is defined for the modeler designer to stipulate his purpose by forming the model towards a worthy ideal. In the case of Figure 4 this means the designer enters the room of the designing, in terms of joining the design search space of the organizational interaction with the environment. This reality is illustrated within the model of the logical spheres of a GVC for a sustainable management system. The birthplace of second-order cybernetics can be traced back to the conference in Philadelphia “Communication and Control in Society” in 1974, where Heinz von Foerster established the notion of observing systems (second-order) based on Norbert Wiener’s original work (Wiener, 1948). Wiener’s work defined a new science that started the information age and various branches of informatics, systems sciences and complexity sciences. The foundational role that Wiener’s

Figure 4. The holistic logical framework of designing gvc's understanding the three essential layers: (a) the recursive nature of the firm and gvc; (b) the dynamic environment attenuated by management system/design team. Authors' own illustration.

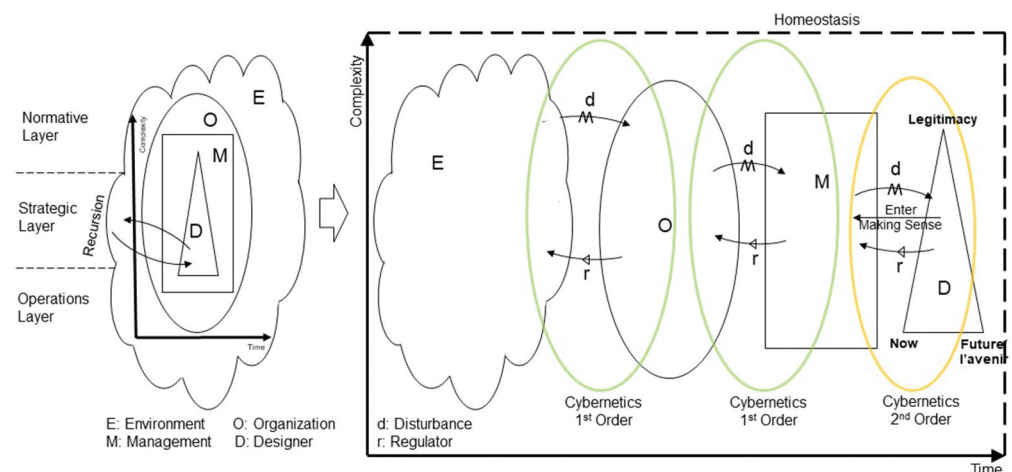
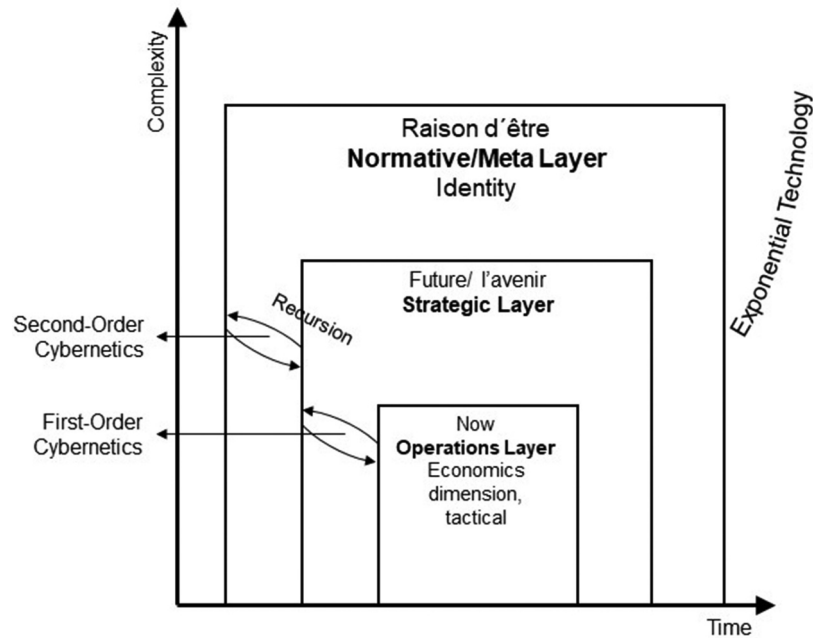


Figure 5. A holistic logical framework designing gvcs for sustainable fm. Authors' own illustration.



cybernetics played was observed by von Foerster as the notion of the “observed systems” (first-order), while to the notion of “second-order” or “cybernetics of cybernetics”, he referred to as the terminology of observing systems. According to Heylighen and Joslyn (2001), “Cybernetics focuses on how systems use information, models, and control actions to steer towards and maintain their goals while counteracting various disturbances. Being inherently transdisciplinary, cybernetic reasoning can be applied to understand, model and design systems of any kind: physical, technological, biological, ecological, psychological, social, or any combination of those”. By taking the second-order Weltanschauung, the human factor enters the observation and thus “the shift from a first-order to a second-order cybernetics signaled a shift in scientific attitude toward reality, from privileging the perspectives of detached observers, spectators or engineers of a world outside of themselves to acknowledging our own participation in the world we observe and construct as its constituents” (Krippendorff, 1996).

Figure 5 displays, how the firms' logical spheres are recursively intertwined to create a whole within the dimension of rising complexity, the necessity of short time responses and the necessity of how the effects of exponential shape market realities. As technological dimensions and possibilities are growing rapidly, the MBM of management must also be updated to face these new realities. FM and GVCs need to embrace the multidimensionality of managerial work and design organizational structures that embody this reality.

| Table 1. The difference between first-order and second-order cybernetics | | |
|--|--|--|
| Authors | First-Order Cybernetics | Second-Order Cybernetics |
| Von Foerster | The science of observed systems (1979) | The science of observing systems (1984) |
| Pask | The purpose of the model (1963) | The purpose of the modeler (1981) |
| Varela | Controlled systems (1972) | Autonomous systems (1986) |
| Umpleby | Interaction among the variables in a system (1990, 2005) | Interaction between the observer and the observed (2016) |

Meaning search spaces

We construct the notion of meaning on Victor Frankl's original assertion that the "will to meaning" is the basic motivation for human life and which has forever changed the way we understand the dimension of meaning (Frankl, 1985); thus, we enter the world by entering meaning. The world is constructed as a will to meaning and all forms of an organizational dimension are the essence of designing a search space of meaningfulness. GVC and firms especially in FM are required to incorporate and convey meaning within the dimension of their legitimacy within the ecosystem they are embedded by devising a construct of an ecosystem design, which embraces a meaningful purpose of what the system believes in to the consumers and stakeholders. Meaning within the spectrum of effective marketing is the synergy of subjective and objective reality in a hermeneutical recursion of organizational evolution towards maturity. Hence, the world of innovation is created by the context of meaning that is constantly extended to some sort of customer relationships, to which one can refer to as product line extension or product life cycle.

The DSS is the sphere designers are situated in when observing, hypothesising, constructing and reflecting upon a design situation. It encompasses all processes, dynamics, direct and indirect influences and factors necessary for the creation of artefacts by solving a problem in reality. This notion was stated by Simon as improving the status quo, thus creating a better state (Simon, 1969).

An essential dimension here is that designing always depends on a goal-oriented pursuit of the designer, who is designing to co-create a joint-value within the ecosystem. Designs and artefacts without meaning to an observer are irrelevant, which is why its importance needs to be stressed as a generator-test-cycle (Simon, 1969) and also a focus on the notion of reflection (Schön, 1983).

The Joint Meaning Search Space (JMSS) is a term coined by us based on the notion of the DSS. Design is also the process of finding means and ends for solving wicked problems (Rittel & Webber, 1973) in a satisfying way (Simon, 1969) and for creating meaning (Krippendorff, 2006). As Kamran (2018) states: "Design thinking embraces the bridge between the first-order and second-order stipulation", it is, therefore, essential for designers to reflect as practitioners (Schön, 1983) on the infinite quest for creation and thus, the hermeneutical sensemaking and sense giving, which serve as a ubiquitous part of the design search process for relating the designer's phenomenologically created reality within the design act of the artefact, designing a social system or an experience for the consumers.

All observations are offsprings of a co-created meaningfulness of a reality observed within a system. This means that observations are meaning-laden and thus, constructions of a system's collective intelligence towards occupying solid niches within an ecosystem. This dimension defines the Eigen-behavior of a system, as "... the purpose of a system is what it does ..." (Beer, 2002). The ubiquitous reality of observations and the resulting experience are inevitably subjective at the event, as meaning can only be existent subjectively and the notion that every observation is made by an observer indicates that experience longs for an emotional inner awareness of the observer (Eigen-behaviour).

As displayed in Figure 6, realities in terms of hermeneutics (R) create additional realities (R+), which themselves may constitute more robust realities in the future (Rn). The ability of the navigator of a GVC to put meaning into the system's observation determines the constructions of favorable realities; thus, high-quality observations are integrated into the quality of the situational analysis of the observer, within a sense-making and sense-giving hermeneutical circularity. As all design activities are interactions with and within an environment, the domain of interaction with consumers requires a solid loop of back-and-forth feedback within the MSS, exchanged towards a JMS as co-created by the designer of the GVC based on the defined Eigen-value, which is based on the normative layer of the system. Hence, Eigen-values encompass Eigen-behaviors of an ecosystem. Based on the preceding elaborations, of the notion of meaning, which has been defined, the dimension of Eigen-values (which captures the terminology of the firms' legitimacy and self-assessment), aimed at communicating the value and the sets of beliefs

that the system has developed, is introduced. This means that how unique is the notion of the differentiation that the firm occupies within the related ecosystem.

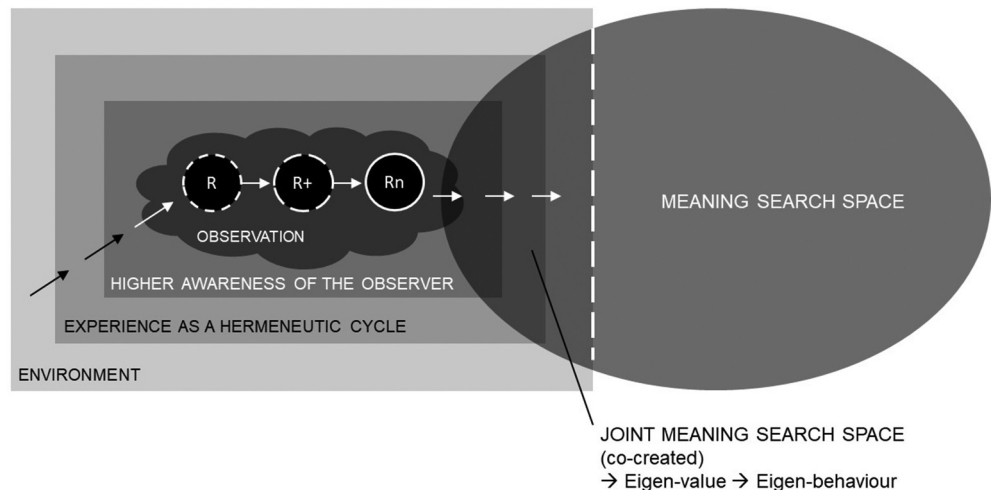
The phenomenon of meaning appears as a surplus of references to other possibilities of experience and action, which the reader can observe in Figure 6. Something stands in the focal point, at the center of intention, and all else is indicated marginally as the horizon of an “and so forth” of experience and action.” (Luhmann, 1980–1981). Thus, the designer proposes a virtualisation of possibilities while the user/consumer determines his perception of its potentiality for being meaningful. This conjunction is described by us as the ZOP(J)M and illustrated in Figure 7, as “every specific meaning qualifies itself by suggesting specific possibilities of connection and making others improbable, difficult, remote, or (temporarily) excluded” (Luhmann, 1980–1981). Because of its referential structure, the form of meaning forces the next step to selection (Luhmann, 1980–1981), narrowing down the ZOP(J)M so far, as the designed artefact is positioned in the intersecting areas of meaningfulness of the designer and the user/customer. Due to the evolving dimension of MSS, JMSS and ZOP(J)M, their structure dynamics and Eigen-behaviours, which recursively are co-creating the Eigen-value of the artefact-systems, the JMS is resulting from the design process in a final stage.

This JMS enables the organisation-human-artefact relationship to be autopoietic (reproducing viability), thus, by designing for innovative possibilities to create value based on the internal and external capabilities of the firm and the underlying (dynamic) needs and wants of the consumers.

When an artefact is designed in the previously described manner, its contribution to the technical and normative progress of society is maximised as far as its capabilities allow and an invention is achieved in a meaningful way for both, the designer and the user/customer. By a continuation of the feedback loop established throughout the process from the DSS over the MSS and the JMSS (Figure 6) to the ZOP(J)M and finally JMS (Figure 7), a further development of the artefact is more easily attainable and the firms’ competitive position in the market will be dynamically advantageous.

To summarize, it can be said that the JMS is a ubiquitous dimension in every design process. Starting in the MSS, the proceedings to the JMSS have been established to be necessary for co-creating meaningful designs. This co-creation of meaning is therefore inevitable for the creation of a JMS, as it emerges from the hermeneutical cycle of resonating back-and-forth in the JMSS. The ZOP(J)M limits the possible areas of meaningfulness to be perceived by the designer and customer/

Figure 6. The co-evolution of mss and jmss based on the hermeneutics of meaningfulness in design science. Authors’ own illustration.



user and thereby builds the basis for the definition of the JMS, which has been shown to be the sine qua non for creating an organization-human-artefact relationship.

The JMS is presented in every event of purchase, as without it such decision would not be made for the meaningfulness is missing to the customer/user. Hence, the development of this framework enables organizations to understand the dynamics of a long-term relationship with its customers by constantly re-evaluating the product specifications and co-creating additional meaningfulness of the artefact in time and space.

Especially for the research on design, this notion is essential in its contribution to including a co-evolving perspective into the frequently objective dimension of the scientific stream. Capturing these conscious and unconscious processes within the DSS, designers can be more innovative and substantial to others by the means of their meaningful designs.

Direct-to-consumer innovation and distribution

As marketing's raison d'être has shifted from the boundaries of a pure physical market towards capturing the digital spheres, which has had essential and vital societal implications in the development of taste and judgement of food consumption, the dimension of thought in FM needs equally to meet the evolution of the design-based-cyber physical-platform-service-economy. The sustainability mindset delivers many aspects that go beyond the rational economics of Weltanschauung. As FM has evolved towards becoming a field, which is highly technologically driven. The evolution of AI, ML, DL and DS, deliver solid opportunities in a holistic manner.

As with the power of the ubiquitous connected markets, the notion of access to key technologies and market opportunities has emerged; thus, a global democracy of access to top brands is taking place. Top brands such as Apple, Amazon, Netflix, Spotify, Disney and also access to fashion and taste in "fast-fashion segment" based on the efficiency of their global market ubiquity and superb GVC strategies by brands as Zara (Inditex), H&M and also Mango have changed the way the global societies observe apparel brands and their brand Eigen-behavior.

The revolution of service marketing (SM) to converge goods-dominant logic (GDL) with service-dominant logic (SDL) was a necessary step in evolving towards a new logic of marketing science in the contemporary era; thus, advances made by service scholars have provided a foundation for

Figure 7. The Co-evolution of JMS and ZOP(J)M integrated in the JMSS/MSS in Design Science. Authors' own illustration.

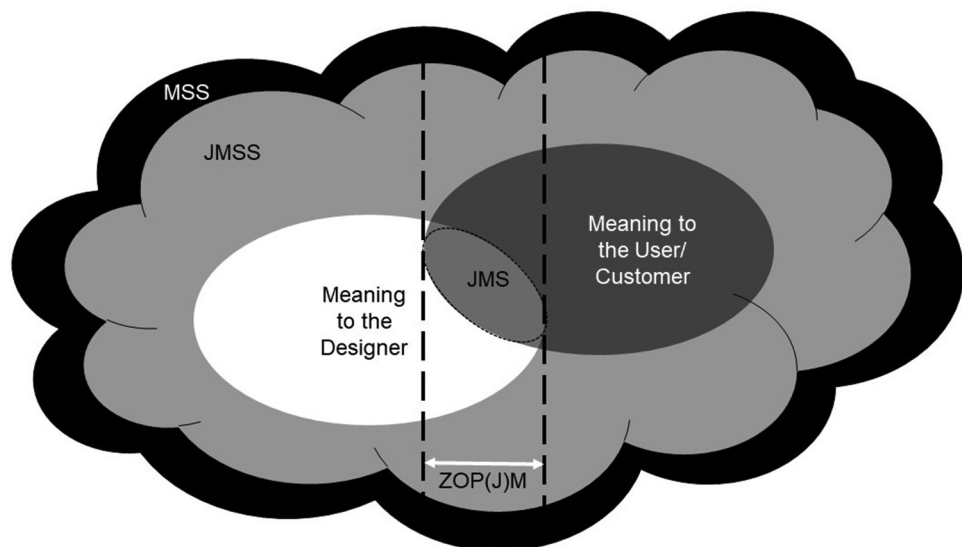
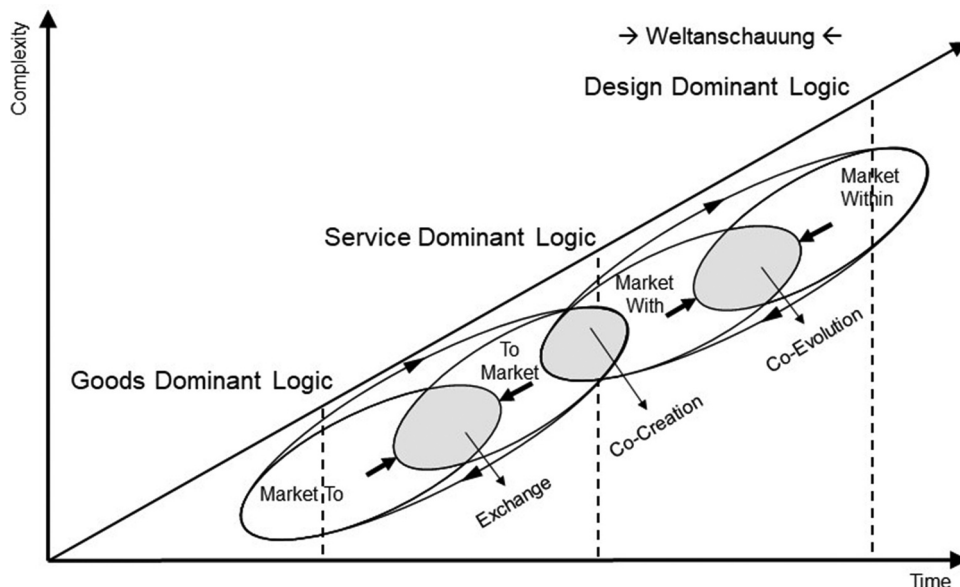


Figure 8. Marketing Theory Development from GDL and SDL towards DDL. Authors' own illustration.



a more service-oriented and technologically driven view of all exchanges, wherefrom more appropriate normative strategies of marketing can be have been derived for all of marketing (Vargo & Lusch, 2004). The four myths of service marketing (intangibility, inseparability, heterogeneity, and perishability) have not distinguished services from goods; thus, they only have meaning from a production point of view. Understanding Service as a normative strategy for marketing is pivotal to pave the way towards a holistic and evolving marketing theory to a new and more robust foundation by a redefinition of the notion of service within the holistic phenomenon of global market relations and the challenges to their resilience.

The inherited GDL based on the exchange model that focused on tangible goods has been challenged by the new defined dimension of what “service” implies within the spectrum of SDL; hence, this emerging perspective is focused on intangible resources and the co-creation of value with the customer. Therefore, marketing, in essence, is the provision of service to be rendered or a doing a job that occurs in the lives of some sorts of consumers (Christensen, Hall, et al., 2016; Vargo & Lusch, 2004). A vital insight within this shifting paradigm was to see the locus of innovation within the field of marketing by enhancing the understanding of service provision towards a unique foundation and a change from the exchange mode of market relationships towards a co-creation mode of value generation phenomena (Vargo & Lusch, 2004). Vargo and Morgan (2005) suggest that the service-centered model of exchange is pivotal for the advancement of the understanding of exchange relationships in marketing. Thus, a service-focused mode of exchange is vital to understand how relationships between actors within a GVC could be understood more precisely (Vargo & Morgan, 2005). The shift within the field of economics that focuses on the production and distribution of goods has been challenged by a broader logic that SDL has provided; hence, the ubiquitous transmission of information and export of skills beyond topological and time-zone boundaries provides a much better understanding of the societal shifts that could be better observed and coped with via the SDL (Lusch et al., 2006). Vargo and Lusch have clarified the diverse essential themes of why it is necessary. SDL, therefore, is indicating a process of doing something for someone (Christensen, Hall, et al., 2016), rather than the plural general observation of the notion “services” in contrast to goods. In SDL, service is the common denominator of exchange and thus is hypernymic to goods. There is no goods-versus-service winner or loser in SDL.

Based on the dimension of SDL, a new dimension of strategic thought delivered by Kamran et al. (2020) coined as the design dominant logic (DDL) provides a new lens for marketing. The theory is enhancing the dimension of service dominant logic (SDL) by constructing a conceptual framework coined as the aligning the diverse challenges the future of marketing has and proposing a holistic framework that delivers a solid model to cope with resulting disruptions. DDL has gone beyond the notion of co-creation of value and paves the way for a co-evolutionary foundation that transcends towards a designerly and self-organizing concept of the “market-within” dimension of customers and firm relations (Figure 8).

DDL advances the notion of co-creation towards the dimension of co-evolution, wherein the marketing spectrum based on the self-organization of the actors brings-forth additional windows of opportunities that may not be foreseen *avant la lettre*, which is coined here as “market within”. It perceives actors to align themselves within the spectrum of a “co-evolving” and “self-organizing” foundation of a unique design proposition (UDP). The “unique design experiences” (UDE), which evolve to a global consumer attraction and loyalty force lie beyond pure product development and linear consumer relationships. The DDL provides an alignment of all the essential dimensions that the firm would require to excel in coping with disruption. Furthermore, the firm’s core competencies are intertwined by the JMS and ZOP(J)M, which are powered by the interplay of technology, cyberspace and physical experience spaces. Here, the DWA delivers a normative robustness for the firm by constructing a model of convergence from reductionism towards holism of a co-evolutionary relationship and design search space.

Food marketers are able to decode the weak signals of the wider market and design favorable direct-to-consumer-strategies (DTCS) by embracing disruption as a powerful motor to proactively design non-linear consumer-experience-spaces (NLCS). This notion would give the firm a proactive flexibility to create a sustainable competitive advantage (SCA). FM according to the DWA and DDL has the possibility of delivering access to food literacy, food well-being, food accessibility and availability, nutrition assurance and food policy (Block et al., 2011) by designing a GVC, which includes a brand behavior above the level of food mass-marketing and over-processing. The resulted health and also social well-being in terms of a shared value strategy (Porter & Kramer, 2011), would give a solid boost to the food industry. Food carries a symbolic meaning and the notion of a functioning society and the health of its population has a strong correlation with the quality of the food and the food literacy that is available to the general public also in terms of the pricing dimension of food within that specific market and society.

Furthermore, the notion of food aesthetics also plays a major role within the generational shift. Block et al. (2011) have defined a model of paradigm shift from the old to the new food-experience-search-spaces (FESS); thus, a shift is sensed in the dimension of functional, medicinal, a paternalistic and normative, restraint and restriction based, and focus on body mass index towards a holistic and integrative, consumer oriented, with a positive approach and attitudinal and behavioral dimension food-wellbeing culture. Food socialization plays a major role in the development of culture and also family relations. Cherbuin and Walsh (2019) established that brain health may decline much sooner in a person’s life span than previously anticipated as a result of a societal cultural habitus that makes unhealthy food consumption by to be normal and accepted. Thus, unhealthy lifestyle and lack of exercise have not only significance in the bodily health of people but moreover it directly affects the brain health of persons, who engage in this kind of behavior. Hence, damages are irreversible, once a person reaches midlife and this holistically affects the health system of the society at large. Firms, which may want to educate their customers indirectly by providing choices that are “marketed within” the DDL. Market-within gives a domain of choices and possibilities, wherein the firm receives the customers individually, as already established via the framework of DDL. In addition, this dimension of marketing theory enhancement as already established above, transcends the notion of co-creation relationship *modus operandi* towards the spectrum of the “co-evolution” of a “marketing-within” foundation of marketing (Kamran et al., 2020). All leading platform and

surface providers have established the status of cyber-physical embodiment, which means that they have captured the world of the digitality and digital ecosystem via their superb organizational capabilities. This means they have the ability to create a solid digital-strategic-differentiation and are working based on the modus operandi of a market-within-relationship in their markets and industries. Therein they dominate or provide such a special niche within the cyber(market)space that has promising business model projections of becoming a solid disrupter (Christensen, 1997; Christensen, Hall, et al., 2016; Christensen, Raynor, et al., 2016). This also corresponds with Ashby's Law, hence stating "only variety absorbs variety" (Ashby, 1956, 1991) as established in part 3 of the paper.

In order to understand Ashby's Law applied to the dimension of FM a solid example is presented in the paper. However, according to Ashby the complexity of the environment can be captured by the marketer/regulator of a system by the internal variety the system can generate. This means, what is the capacity of the system to adequately perceive the environment and to enhance the number of possible choices in a manner that is viable and corresponds to the position of the firm within the strategic niche it occupies within that ecosystem. Furthermore, how is this operationalized considering the dimension of cost and time to respond to a new situation or moreover as a pro-active conditioning of the food provider's eco-system.

Designing food-experience-search-spaces in food marketing

Traditionally, we consume food via three dimensions: 1) grocery stores, then to be prepared at home, 2) by visiting restaurants 3) fast food and home delivery food options. Recently, a new dimension of a hybrid model has been emerged. This hybrid model is a subscription-based food provider model by brands such as Blue Apron, which started its operation from New York in 2017, which then was quickly followed by HelloFresh, Home Chef, Sun Basket etc. The nature of this hybrid model is to not only disrupt the grocery chains store industry but moreover to be a kind of solid substitute for restaurants and the fast-food industry, and food delivery chains as Lieferando or Uber Eats, etc. A solid path of transition of this hybrid-disrupting model is represented in [Figure 9](#), which illustrates the emerging convergence of the direct-to-consumer-distribution within FM, which is also significant for the developments within marketing theory from the GDL, SDL towards the DDL. This is the exact model of a Netflix type of disruption, as seen in [figure 10](#), which totally changed the nature of entertainment and the whole lifecycle of the product "movie", which is also happening right now within FM. This is a unique moment within industrial competition theory and competitive strategy, as the new direct-to-consumer-strategies are a bundle of core competencies, which are amplified by high tech (AI, ML, DL and DS) to disrupt diverse systems and ecosystem of GVCs now within the food industry. As within the movie producing industry a real innovation especially after the transition of food as a fast food and highly industrialized, highly processed and driven by low-price, low nutrition and without any regard to the obesity and health concerns of the people and the environment, this new model of direct-to-consumer-food-distribution (DTCFD) combines many aspects that represent the contemporary wants, needs, desires and aspiration of a young, hyper-connected and well-informed population.

This dimension corresponds with the trends that drive marketing at the beginning of the paper; hence, as [Figure 9](#) displays; dimensions as the time feature in shopping, waste reduction, variety of cooking possibilities, sustainability of the food distribution, organic quality and nutrition are some essential arguments that are feasible and the essential competitive edge delivered by DTCFD firms.

As described in [Figure 10](#) the movie industry has shifted from the linearity based the model, and while the product lifecycle of the movies has been seriously challenged, the typical movie industry as it was with Blockbuster rental chains, never committed itself to a real self-renewal; thus, totally they were violating all the features described in the DWA model.

In the case of FM, the DTCFD business model innovations as seen within the example of HelloFresh the model of this type of hybrid-disrupter by the power of fulfilling and obeying the Ashby's Law, it delivers much more variety corresponding to what the environment in terms of

“customer wants and aspirations” in FM is seeking, but moreover it is within the ability of these firms to apply models coming from the AI, ML, DL and DS that would give these new disrupters of food industry a huge boost and competitive advantage. The nature of relationships of the firms and the ecosystem of interaction with the customers are based on a non-linearity towards a dynamic relationship of mutuality and thus, based on co-creation of meaning within the JMSS and the ZOP(J)M that has the capacity to co-evolve towards much favorable possible futures not yet foreseen. As the boundaries of GDL were challenged by the platform and emergence of the surface economy, which was powered by technology the next frontier of competition with the food industry beyond the fast-food delivery apps and for FM in general today is the locus of innovation within the holism of good design capabilities via co-evolution. This “marketing within” paradigm shift is based on generating many variety of choices and good-corporate behavior illustrated transparently by the DTCFD firms, which can provide the design and construction of many essential philosophical bridges and by aligning the aspiration of the hyper-connected and well-informed public and hence, giving them the variety of choices based on these solid aspirations, as a sustainable business model, solid cyber-digital capabilities of a good customer choice journey and high quality of food within the marketing possibilities of a general and price conscious access to all of these features. DTCFD firms are enabled to see the consequences of the power the cyber-physical models and also that these new types of a direct interactive model of FM can bring forth. The model of DTCFD, as illustrated below, is a solid new model that can create many valuable models based on shared aspirations of a society that understands; “we are what we eat”.

We think that the framework developed in [Figure 11](#), on dimension of MBM, establishes a new reality that has the potential of contributing to an overall health of the FM industry and also the whole society as an ecosystem. Good FM is the measure of proactively establishing the right

Figure 9. The application of the shifts within marketing theory developments from the GDL, over SDL towards the DDL. Authors’ own illustration.

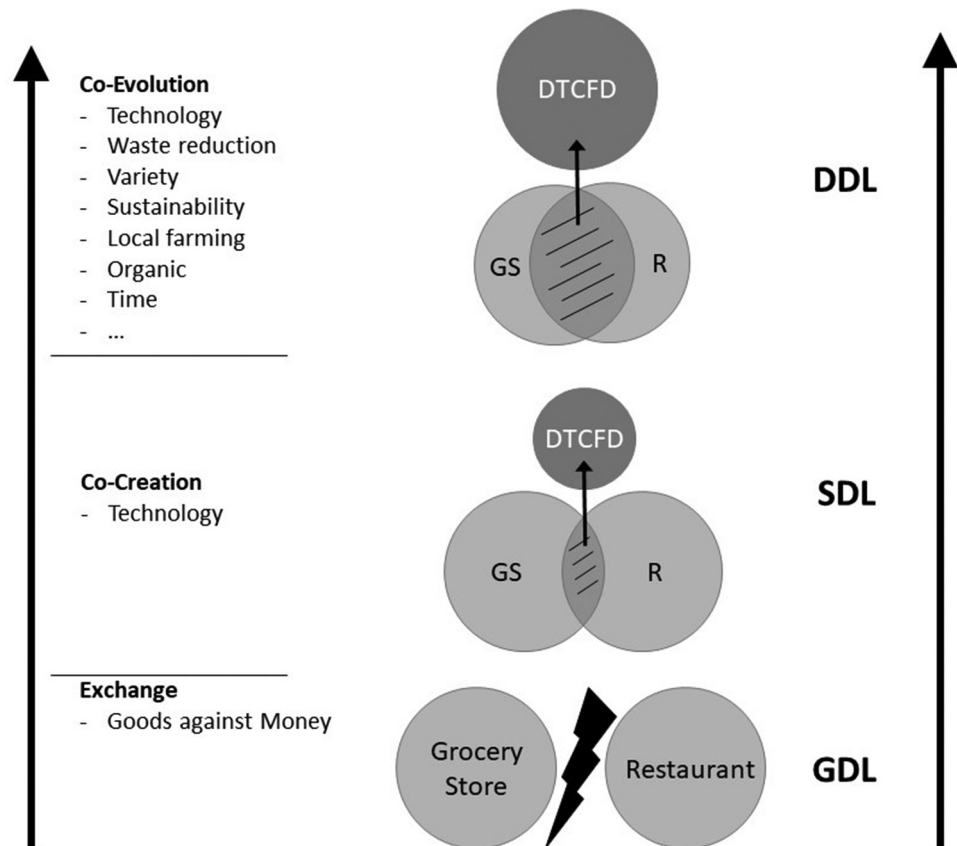
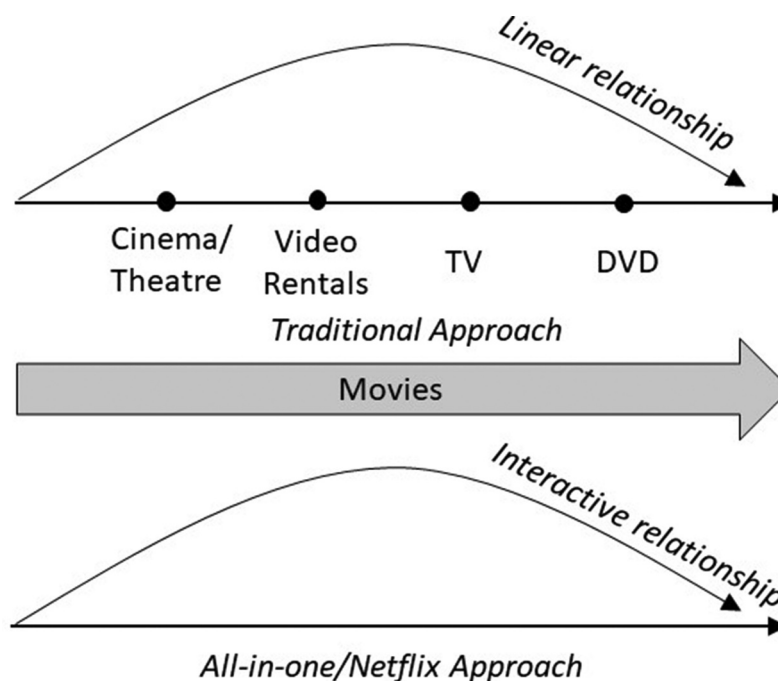


Figure 10. An Example of the Changing Nature of the Product Life Cycle of “Movies”. Authors’ own illustration.



strategic moves that are based on the amplification of technology towards worth ideals, which would bear many fruits for all.

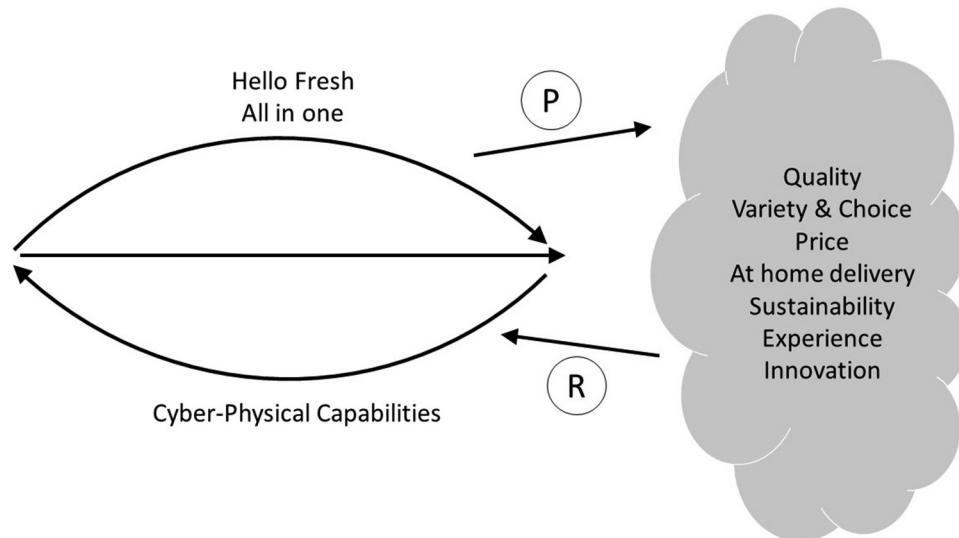
Discussion

Traditional marketing started with the notion of matter in motion, thus bringing the produced goods “to market”, within the “transactionary interaction-space of exchange”, by making sales via a “market(ing) to” modus operandi, which was dominated by the economic logic of the firm (Vargo & Lusch, 2004). The next managerial logic of marketing set-forth the foundation towards knowing the consumers’ perception of value by reductionism of market segmentation. At this stage exchange as a model of firm and consumer relations still dominated the foundation of marketing. SDL has paved the way towards the meaning of “what job arises within the lives of consumers and firms?” (Bower & Christensen, 1995), wherefore the actors (A2A or B2B, etc.) would hire only those firms, who do the job better than any other competing rivals, in terms of the meaningfulness of their service; what they stand for; what are the sets of their values and why do they exist. Here, a major step was paved by the understanding of the “joint co-creation-meaning spaces” as JMSS and ZOP(J)M of a value-based reality under the notions DWA and DDL.

Based on SDL, firms perceive the resources’ integrating actors under the spectrum of co-creator of value and as the shifting foundational premise of marketing from exchange towards “co-creation” in terms of “market(ing) with” modus was developed on a fruitful ground, additional possibilities of enhancing marketing theory has emerged. The development of DDL can be seen as such an advancement within marketing theory (Kamran et al., 2020). Thus, DDL perceives actors to align themselves within the spectrum of a “co-evolving” and self-organizing foundation of a unique design proposition (UDP). This transcending co-creation within the MSS towards a new “market(ing) within” reality, wherein marketing relations are an additional display of the intertwined-ness of a co-evolving foundation of marketing theory development, paves the way for further applied research.

This phenomenon of pivoting towards the evolutionary dimensions and varieties of a market-within based on a platform and wherein actors are engaged in co-designing cyber-physical

Figure 11. The Firm HelloFresh and How It Affects the Nature of Food Culture Today and in the Future. Authors' own illustration.



possibilities of the “market within” modus, it delivers a solid foundation, whereupon also contradictory aspects to take the exemplary challenges of FM, between price and quality, availability and food miles, employees and suppliers’ treatment and the usage of pesticides or the general treatment of animals cannot be on the contradictory corridors. Based on subscription-based models and additional possible MBMs and the application of AI, ML, DL and DS much better forecasting methods could be integrated. We could take packaging waste totally out of the equation by designing bionic materials circulated as deposits and pawns, which could be recycled back and forth. A transparent GVC based on all available items within the product portfolio could be displayed as a solid marketing tool, serving as a major source of differentiation in terms of competitive strategy in FM.

By providing these unique design experience possibilities, which would evolve towards a global consumer attraction force that lie beyond pure product development and linear consumer relationships, FM can be an attractive foundation for many cyber-physical entrepreneurs to participate, and thus achieve sustainable business operations’ practices.

Conclusion

In order to observe the *raison d’être* of marketing coping with the disruption of today we have introduced a meta model of the DWA as a new lens for the possible developments of marketing theory. Thus, to achieve a normative robustness, we have constructed models of convergence from reductionism of price and linear consumer-firm relations, towards the holistic design of firms and their interactional dynamics of co-creating and co-evolving relations in FM. The DWA model has displayed how marketing theory and practice can evolve towards a powerful framework of integrating diverse essential perspectives, as the major car for converting the shifting societal dimensions to sustainable innovations.

The dimension of “market(ing) within” based on the technological opportunities available today has displayed the possibility to go beyond the traditional paths, as the diverse examples (e.g., HelloFresh) have indicated. By changing the traditionally “search spaces” into “experience and meaning search spaces”, where consumers are the co-creators of the value, further evolutionary dimensions of growth and development can be achieved.

FM firms such as HelloFresh have aimed at disrupting both the grocery chain stores and restaurants simultaneously. The variety of options available to food direct distributors from

fresh, health and nutrition-based grocery, the ability to meeting the needs of all types of consumers from vegetarian to vegan to those who prefer a good diet mix between meat and fish, shipped with highly innovative recipes and products, and which deliver many solid opportunities for designing food-meaning-search-spaces in the future.

Furthermore, with the power of an interactive relationship with the customers based on the availability of actual consumer data, many co-evolving possibilities are given to put the locus of innovation on the spectrum of experience innovation of individual consumers. These possibilities of supply chain efficiency in terms of having an effective and transparent GVC would further enhance the possibilities of co-evolution towards much benefits for the firm and the consumer relationship. Most management studies, in particularly within the roam of strategic management has taught marketing to see the customer as a force (Porter, 1979, 1980, 1985), while theoretical advances in marketing such as SDL and the DDL construct upon the power of co-creation and its transcendence of co-evolutionary relationships, whereupon many high-tech firms have evolved to become the giants of today.

In addition, within the application of DWA in FM, the framework delivers a holistic foundation, wherein many fields can be put into a designerly context of synergizing the possibilities of diverse fields of academe as philosophy, semantics, ethics, aesthetics, cybernetics, physics, mathematics, statistics, robotics and computer science. Furthermore, the notion of available data from practice, which could be integrated to establish the firms' viability in a disrupting global and digital environment. Practitioners are able to decode the weak signals of the wider market and design favorable direct-to-consumer-strategies by embracing disruption as a powerful motor to proactively design more promising non-linear consumer-experience-spaces. This notion would give the firms a proactive flexibility to create a sustainable competitive advantage. In order to achieve a solid foundation for all the diverse fields, we suggest observing marketing from the lenses of design instead of a pure economics lens. While economics connects the actors in a transactional mode of interaction, design delivers a holistic foundation, wherein not only the diverse fields could be aligned, but moreover a foundation for the development of marketing theory for the contemporary era of the digital turn could be paved.

Furthermore, we have delivered many examples and substantiated them by the changing nature of FM, with the hybrid and technologically advanced models of direct-to-consumer relationships. This dimension gives a solid response to our question of the changing nature of FM. The new developments, which are based on the notion of understanding service and the roles of DWA, marketing within, co-creation and co-evolution within the design and meaning search spaces may change the nature of marketing theory and which will have promising implications for FM in the future. Additional practical implications we hope for are the transparency of food GVCs and the overall dimensions of food-wellbeing, which would contribute to sustainable models of FM. The examples of DTCFD models would enhance the evolving logic of experiencing and consuming food in the future in a way that will bear many fruits for the firms, the consumers and the society at large.

Finally, within application of DWA in FM, the framework delivers a holistic foundation, wherein many fields can be put into a designerly context of synergizing the possibilities of diverse fields of academe as philosophy, semantics, ethics, aesthetics, cybernetics, physics, mathematics, statistics, robotics and computer science. Furthermore, the notion of available data from practice, which could be integrated to establish the firms' viability in a disrupting global and digital environment. Practitioners are able to decode the weak signals of the wider market and design favorable direct-to-consumer-strategies by embracing disruption as a powerful motor to proactively design more promising non-linear consumer-experience-spaces. This notion would give the firms a proactive flexibility to create a sustainable competitive advantage. In order to achieve a solid foundation for all the diverse fields, the paper suggests observing marketing from the lenses of design instead of a pure economics lens. While economics connects the actors in a transactional mode of interaction, design delivers a holistic foundation, wherein not only the diverse fields could be aligned, but moreover a foundation for the development of marketing theory for the contemporary era of the digital turn could be paved.

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