

## **Purpose of the Study**

The primary purpose of this study is to comprehensively analyze the phenomenon of marketing schema fragmentation within the context of large-class education in Japanese universities. In this context, the term “marketing schema” refers to the implicit manner in which students curate and structure information. This concept not only molds the foundational knowledge of students, but also shapes their underlying premises, assumptions, and presuppositions regarding their interpersonal relationships, society, and the world at large.

The rapid and multifaceted evolution of personal digital devices such as smartphones, tablets, and PCs, which is driven by a confluence of technological and societal factors, presents a dichotomous impact as follows. On the one hand, it facilitates global access to a wealth of information. On the other hand, it amplifies the trend toward individualization. This pervasive tendency inevitably permeates the landscape of university lectures.

Our inquiry centers on a comprehensive examination of how this prevailing trend influences university lectures and places particular emphasis on large classes (more than 300 enrollments) in Japanese universities. Additionally, our aims are to elucidate the evolutionary trajectory of this phenomenon and to theoretically underpin the reasons behind its impact. Large class sizes are a ubiquitous feature within Japanese higher education institutions that predominantly stems from institutional conditions. Rather than simply addressing the preexisting challenges inherent in large classroom lectures, the matter of digital devices



compels a fundamental reconsideration of lecture content and pedagogical approaches.

### **Research Background and Induced Issues**

Discussions involving the use of technology in education are not new; recent issues have replaced old ones. A prime example of such a modern issue is connectivity. Although old technologies aim to expand and improve individual abilities and productivities themselves, new technologies augment individual abilities by connecting them to others via access to external resources.

Therefore, it is expected that digital devices are increasingly used in the classroom. Cumminskey (2011) posited that contemporary mobile applications play a pivotal role in enhancing user engagement in health management activities, contrasting with the passive act of merely listening to music within enclosed spaces. Phillippi and Wyatt (2011) illustrated the effective and efficient integration of smartphones in nursing education. For instance, the utilization of email and social networking sites (SNSs) for communication between educators and students can foster the transmission of precise and rigorously structured messages.

The aforementioned possibilities are poised to address the perennial challenges associated with large-class instruction in management education. Long-standing issues within this context, such as limited interactions and exchanges between educators and learners,



student anonymity and passivity, reduced commitment to coursework, diminished motivation, social isolation, resource constraints, and insufficient opportunities for discussion, have been extensively deliberated on in the literature (Gleason, 1986; Mulryan-Kyne, 2010), and the integration of digital devices is a potentially viable solution to these problems. By facilitating efficient and effective communication between instructors and students and among students (Clancy et al., 2021), these devices can contribute significantly to mitigating prevailing challenges in large-class educational settings. If these devices are used deliberately and correctly, they augment students' abilities; therefore, forbidding their use in educational contexts seems overly restrictive (Cavanaugh et al., 2016; Guardians, 2023).

Conversely, the facile access to information facilitated by the internet, accessible through various digital devices, analogously resembles students being perpetually accompanied by an extensive encyclopedia. This information is often new and unusual, and it may not have been published in a standard textbook at the time. Nonetheless, it is imperative to recognize that the information available on the internet is not invariably accurate nor substantiated by evidence. In light of this consideration, the endeavor to enhance students' proficiencies through the utilization of digital devices is likely to yield unforeseen and undesirable consequences within the ambit of large-class management education.

Specifically, digital devices have the potential to distort certain foundational assumptions that educators implicitly demand as prerequisites prior to the inception of



coursework, particularly among students. If we think these prerequisites within the purview of management studies as constituting the marketing schema, digital devices undeniably amplify students' capacity to effortlessly access a broad spectrum of information. Regrettably, from our vantage point, the influx of this information may result in the fragmentation of the marketing schema.

From our point of view, this marketing schema fragmentation may influence education content in a large management class. In the ensuing discourse, we expound upon the aforementioned causal relationships. The principal objective of this paper, therefore, is to elucidate the ramifications of this fragmentation within the marketing schema on standardized textbook lectures.

### **The Idea of Marketing Schema and Knowledge Fragmentation**

The notion of a marketing schema finds its origins in the realm of social and cognitive psychology. Marshall (1995) extensively explored the historical antecedents of the schema concept and found that, linguistically and semantically, the roots of this concept can be traced back to ancient Greek philosophy—its meanings were contextualized as “form,” “shape,” or “figure.” Contemporary interpretations of the schema concept have been articulated within the domains of social and cognitive psychology, most notably by scholars such as Bartlett (1932) and Piaget (1932).



After an examination of extensive reviews on the marketing schema spanning several decades, it becomes evident that their concepts have not yet undergone thorough evaluation (Iran-Nejad and Winsler, 2000). This is despite the schema concept's inherent ability to encapsulate our mechanisms of memory. Drawing from recent advancements in research (Rubínová et al., 2021), we posit that the schema concept remains a valuable tool for delineating the process of organizing our experiences, as will be elucidated in subsequent research hypotheses.

The marketing schemas of students have two main characteristics. First, their marketing schemas are limited to work, just like a consumer's marketing schema. Furthermore, as consumers, their decisions are also limited. They buy goods only for themselves. Second, their experiences are limited as well. This stems from spatial and temporal restrictions on their behaviors. Hence, digital devices can expand students' experiences and knowledge.

Fragmentation denotes the process of decomposing an entity or partitioning it into multiple discrete components (Firat, 1992; Firat, Dholakia, and Venkatesh, 1994). It is frequently employed to characterize how postmodernist perspectives deconstruct the foundational tenets of modernism. From a philosophical standpoint, the more consequential manifestation of fragmentation lies within discursive formations. Contrary to efforts aimed at suppressing or reconciling fragmentation through the discovery of unifying themes, postmodernism unreservedly embraces this phenomenon.



The acknowledgment of this trend is particularly discernible among consumers, especially within contemporary market economies, who exhibit an appetite for experiencing diverse simulated realities and interpreting human history through the lens of socially constructed narratives. The postmodern ethos even promotes the active exploration of various modes of being, eschewing conformity or allegiance to a singular paradigm. This disposition unambiguously paves the way for an expansion of fragmentation, giving rise to fragmented moments of experience and existence throughout an individual's lifetime (Firat and Schultz, 1997).

While we momentarily contemplate the foregoing as an ostensibly inexorable trend in contemporary society, we shall now enumerate several theoretically envisaged—and undesirable—consequences.

### **Prospected Consequences of Marketing Schema Fragmentation**

When engaging in discussions surrounding the brand or pricing strategy of the Tokyo Disney Resort (TDR), instructors of university classes hold a common assumption that students should possess a foundational knowledge of TDR, regardless of whether they had physically been to the resort. However, conveying the intricacies of the variable pricing system is a more intricate task when dealing with students who can only conceptualize TDR's high-demand and low-demand seasons. In attempting to



provide a comprehensive explanation about TDR's strategy, one might encounter requests for data on visitor statistics during peak and off-peak periods or a detailed breakdown of variations in waiting times for rides. It is worth noting that these details are tangential to the core principles of brand and pricing theory.

So, what precisely do we immerse ourselves in when delivering lectures based on the premise of marketing schema? This question prompts us to contemplate our pedagogical approach through the lens of concepts such as segmentation, fragmentation, filter bubbles, and echo chambers.

Students ensconced within the confines of a filter bubble have their perspectives further circumscribed by the pervasive influence of social networking services (SNS). Within these virtual domains, these students interact with individuals who share similar tastes, thoughts, and opinions, receiving positive reinforcement for their inclinations. This affirmation often leads them to misinterpret their viewpoints as reflective of broader societal norms. Moreover, the amplification of these shared sentiments occurs as individuals propagate them to others.

According to a survey conducted in February 2021 by the NTT DOCOMO Mobile Society Research Institute, which encompassed 8,837 respondents aged 15 to 79 across Japan, 60% of those in their 10s and 20s identified "Social Networking Sites" as their primary source of information. Meanwhile, 50% of respondents in their 30s and 40s favored "web/apps," and 50% in their 50s and 70s remained loyal to 'TV' as their preferred medium



of information.

These statistics reveal a noteworthy transformation among students in their 10s and 20s, a demographic frequently encountered in educational institutions. These individuals have progressively transitioned from traditional TV media to the digital realms of Web and apps and, subsequently, toward the omnipresence of SNS in recent years. It is within these digital mediums that they often find themselves ensnared within filter bubbles or become susceptible to the emergence of echo chamber phenomena.

### **Conclusion and Proposed Research Agenda in the Future**

Can we, as educators, confidently assume a shared marketing schema among our students today? Such an assumption has become notably more challenging. It is no longer feasible to deliver lectures grounded in the presumption that students possess knowledge about commercials featured on highly rated TV programs, as a considerable number of these now consume content exclusively on their smartphones. Similarly, advertisements located within trains often go unnoticed, as passengers are invariably engrossed in their smartphones. Even advertisements and vending machines strategically positioned between the nearest train station's ticket gate and the classroom are beyond the purview of our students.



In days gone by, students possessed what might be termed “common knowledge.” For instance, they were aware that Kao was a manufacturer of daily essentials. Furthermore, some could readily enumerate

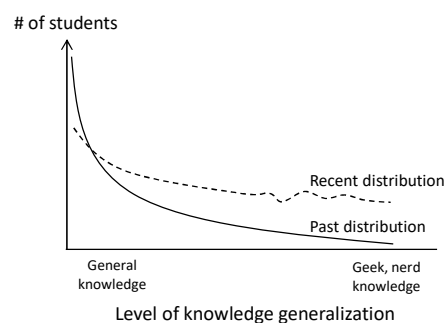


Figure 1. Range of marketing schema

Kao’s brands, including names like Attack, Nivea,

Babu, Humming, Biore, Magic Rin, Merit, and Laurier. Kao’s status as an official sponsor for attractions like TDL’s “Splash Mountain” and “Toy Story Mania!” might have been

recognized by students. Certain students could even recall the existence of less prominent

brands like “SPOT JELLY Navel Sesame Pack.” A select few possessed the knowledge that

Kao had its historical roots as a soap manufacturer and was formerly known as ‘Kao Soap.’

Furthermore, a subset of students held insights into Kao’s historical connection to marathon

running, including the fact that Hisanari Takaoka, a former Japanese marathon record holder,

was once a member of the company’s track and field team.

On the contrary, with the evolution of students’ marketing schema, we encounter students who lack even the most basic understanding of companies like Kao. We may also come across a students who possess intricate and niche knowledge previously confined to a small circle. Figure 1 provides examples of these situations. The solid and dashed lines in our analysis do not signify an increase or decrease in the student population; instead, they delineate variations in the distribution of students’ marketing schema. In this context, the line



between what constitutes common knowledge and what qualifies as specialized insight has blurred. In the past, our pedagogical approach was rooted in the dissemination of broadly accessible information. However, in the contemporary landscape, such a strategy is no longer tenable. Consequently, educators find themselves unable to rely on the content that is easily accessible via smartphones. We are now confronted with a pedagogical challenge that requires an innovative and resourceful approach.



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