The Uncanny Valley of Relationship Marketing

Introduction

The "uncanny" is a Freudian concept of an instance in which something can be simultaneously familiar and foreign, a condition that produces a feeling of strange discomfort (Freud, 1919). Because the uncanny is familiar yet strange, it often creates cognitive dissonance within the individual due to the paradoxical nature of being attracted to, yet simultaneously repulsed by an object. This cognitive dissonance often leads to an outright rejection of the object, as one would rather reject than rationalize. Essentially, the uncanny is what reminds us unconsciously of our own id, the forbidden and thus repressed impulses perceived as a threatening force by our super-ego, which itself suffers oedipal guilt as it fears symbolic castration as punishment for deviating from societal norms (Freud, 1919).

Based on this theory, Masahiro Mori, a Japanese roboticist, proposed the "uncanny valley theory" in 1970. He intended originally to provide an insight into human psychological reaction to robotic design. Mori's (1970) original paper begins with the idea that the relationship between how human a robot looks and how positively people will regard its appearance is positive. The main concept is that this positive relationship becomes temporarily negative for robots that appear very human but are not totally so. Mori's article advanced the hypothesis that as robots become more humanlike, they appear increasingly familiar until a point is reached at which subtle imperfections in appearance make them look eerie. This observation led Mori to conclude that robot builders should not attempt to make their creations overly lifelike in appearance and motion. The uncanny valley theory states basically that the closer the robot comes to actually being human, the more bizarre their appearance-based nuances will seem. Mori (1970) observed that as robots are built in more humanlike form, they appear increasingly familiar, thus possibly leading one to suppose that this trend would continue until robots become indistinguishable from human beings. However, Mori argued that near-humanlike robots would appear strange or frightening, causing humans to become empathetic toward the advancement of robots. This response would persist until robots reach the evolutionary state of being "almost human," at which point humans will become repulsed by them. Mori used the description "uncanny valley" to designate the area of repulsive response motivated by a robot whose appearance and movement falls somewhere between "barely-human" and "fully human." According to Mori, movement amplifies the relationship between human likeness and familiarity (Figure 1).
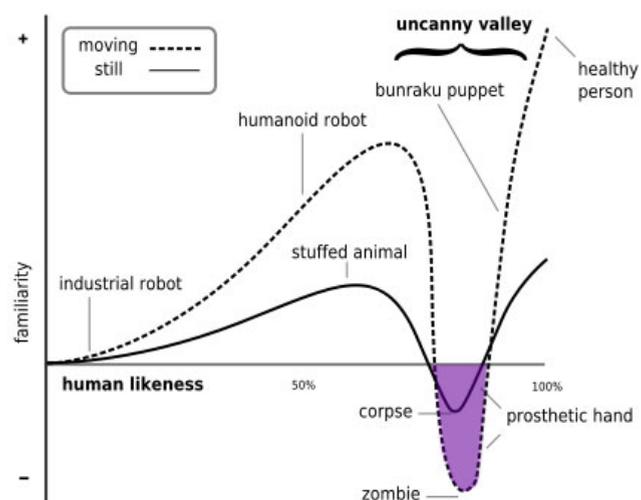

Figure 1: The Uncanny Valley (Mori, 1970)

A robot situated within the uncanny valley is no longer judged according to the standards of a robot doing a passable job at pretending to be human; instead, it is judged by the standards of a human doing a terrible job at acting like a normal person (Bryant, 2005).

Mori (1970) argues that human beings represent the final goal of robotics, which is why roboticists seek to build humanlike robots. For example, a robot's arms may be composed of a metal cylinder with many bolts, but to achieve a more humanlike appearance, engineers paint the metal in skin tones. These cosmetic efforts cause an increase in our sense of the robot's familiarity. Mori states that people may have felt sympathy for handicapped people who used a prosthetic arm or leg to replace a missing limb. But prosthetic hands, for example, have improved greatly, and we can no longer distinguish them immediately from a real hand. Some prosthetic hands attempt to simulate veins, muscles, tendons, fingernails, and even fingerprints, and their color resembles that of human pigmentation. Thus, it is possible that the prosthetic arm has achieved a degree of human verisimilitude on par with false teeth. But this kind of prosthetic hand becomes too real and when we notice that it is a prosthesis, we experience a sense of oddity. Thus, if we shake the hand, we are surprised by its lack of soft tissue and cool temperature. In this case, the sense of familiarity vanishes. In mathematical terms, strangeness can be represented by negative familiarity; therefore, the prosthetic hand is at the bottom of the valley. In this case, while the appearance is quite humanlike, the familiarity is negative; thus, the uncanny valley.

According to Hafta Magazine (2006), Mori may not even have realized the implications of his work when he gave us the term. In that article, several examples have been put forward to explain different uncanny valley applications. It argues that to a large extent, the uncanny valley explains why an emotive "Shrek" is more agreeable to us than other animated films which include photorealistic characters that somehow sound eerie. Another example is the lifestyle of people living in a foreign country. In the adaptation process to a new culture, native residents' reactions to foreigners are somewhat mimicked by the uncanny valley. At first, when the foreigner acts significantly different from native residents, he or she will be praised for trying to fit in (e.g., the top of the first curve). When the foreigner has adapted completely to the native culture, he will indeed fit in. Before then, however, there is an awkward period in which the native people expect the foreigner to act like them, but the foreigner is not yet completely able to do so (the uncanny valley).

The theory of the uncanny valley has gained new significance in the last few decades with a resurgence of interest being expressed in literary and cultural theory (e.g., Kristeva, 1991; Castle, 1995; Grenville, 2002; Tie, 2004), robotics (e.g., Mori, 1970; Ramey, 2005), technology studies (e.g., Johnson, 1999; Weight, 2006), education (e.g., Carrington, 2005), and virtual worlds (e.g., Bayne, 2008).

The Uncanny Valley of Relationship Marketing

More than two decades have passed since the first mention of the relationship marketing concept by Berry (1983) who states that relationship marketing concerns attracting, developing, and retaining customer relationships. Relationship marketing is a form of marketing that puts particular emphasis on building a longer-term, more intimate bond between an organisation and its individual customers. Firms believe that an ongoing and customized relationship with a customer is so important that maximum efforts at maintaining it are warranted (Palmatier, et al., 2006).

Relationship Marketing is the consistent application of up to date knowledge of individual customers to product and service design, which is communicated interactively in order to develop a continuous mutually beneficial and long term relationship. In this regard, Davies (2007) argues that one of the most persistent interactive marketing memes is the idea that

ultimately, marketing will be so relevant and well targeted that firms will cease focusing on advertising and impart instead pure and delightful information. This idea has been reignited by the advertising plans of various social networks, employing what they know about their users to facilitate more effective targeting. This is similar to the ideal stage in the uncanny valley theory, which is having a complete human robot. In order for this super-target advertising idea to work, companies need to know a lot about the individual to whom they are speaking. They must know his or her interests, what the person does, what she or he buys, and what the individual likes and does not like. Yet it is difficult to accomplish the time-consuming and disciplined analysis and documentation necessary to create a truly personalized approach. In reality, it is easier for companies simply to purchase some ads and bulk data regarding their customers. The willingness and ability of consumers to engage in relational marketing will lead to greater marketing productivity, unless either consumers or marketers abuse the mutual interdependence and cooperation.

While most of the studies on relation marketing tackle industrial and B2B issues, in his very well-known and recognized article, published in Journal of Academy of Marketing Science, Sheth and Parvatiyar have addressed the importance of studies on relationship marketing in the consumer markets (Sheth & Parvatiyar, 1995). Additionally, a larger proportion of the current literature sees RM as a still young phenomenon when it comes to database marketing, regional marketing, and of course email marketing in recent years. Sheth and Parvatiyar (1994, p.261) proposed a number of propositions of which one of the most interesting ones is: "the greater the sociological orientation of a consumer, the greater is his or her propensity to reduce choice and engage in relationships. However, there will be a greater potential for revolt by consumers when such norms are excessively emphasized".

With the onset of advanced IT, and in particular database, solutions the relationship marketing orientation has come into its own. This advance in database technology and amount of information provided has coincided with improvements in manufacturing and logistics to enable companies to offer personalised solutions to each customer but also it can result in a catastrophe if companies don't use them properly (Sheth & Parvatlyar, 1995).

If a company sends you an interesting personal letter in which it is clear that the firm knows what you are about and is offering you something relevant, you can recognize the company's informed status and consider it beneficial. In contrast, you are apprehensive about pseudo personalized messages that are based on filling in the blanks. This represents a central point in the debate between better demographic targeting and increased intent-based relevance. Ads provide the greatest utility when placed in locations where customers seek relevant information, such as in searches. However, during your online search for an apartment, a Web-based ad may pop up that includes all of your personal info and targets beer to you—regardless of how much you may like beer.

At this stage, the more companies know about their customers and personalize their marketing to them, the more the customers wonder about how the company knows so much about them, why they are being addressed in such a familiar manner, and why the company seems to get everything slightly wrong. At this point, we might find ourselves responding more favourably to the brands and advertisers that can master the compelling generalization and the universal truth. Based on the uncanny valley theory and the above discussions, the current research is suggesting two propositions from a business to consumer point of view.

Proposition One - (Quality based)

The more companies try to show their customers that "what" they know about their personal information, the more it scares customers (Figure 2). Figure 2 shows that when customers start the relationship with a company, they would be glad to see companies are trying to make

relationships with them and they will appreciate companies who are personalizing and customizing their goods and/or services to meet their individual needs.
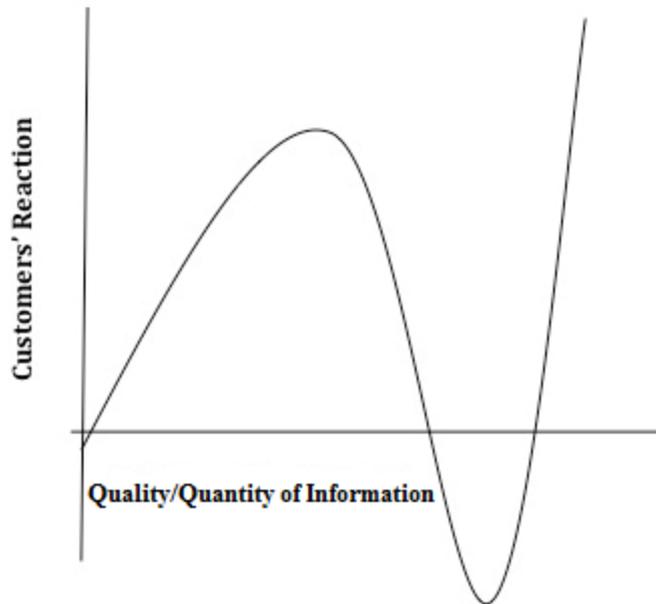
Figure 2: The Uncanny Valley of Relationship Marketing

They don't react negatively if companies are using a certain type of their personal information such as products or services purchased, time of purchase, method of purchase, purchase history, requests for service or complaints for doing so. However at a certain point of time, if companies strive to collect and use their sensitive personal information such as race, ethnic origin, sexual orientation, political opinions, religious beliefs, or that concerns an individual's health then it will suddenly have an extremely unpleasant impression on them. Therefore companies plunge into a kind of marketing relationship-uncanny valley where the more desperately they try to demonstrate to their customers that what they know about them, the more customers avoid them.

Proposition Two - (Quantity based)

The more "personal" information firms utilize and the more companies try to show their customers that "how much" they know about them, the more it alarms customers (Figure 2).
Most of customers have no idea how much of their personal information is being collected and recorded in the digital age. Almost all search engines save search histories. Some popular e-mail services read words in message texts and covert them into links to advertisers. Many companies are getting advantage of social networking sites where the entire point is to share information. The amount of personal information being used by the companies worries customers. Therefore the more companies try to show their customers that they know what they do, where they go, what they buy, what they read and watch, the more it alarms customers; thus, relationship marketing falls into the uncanny valley.

Conclusion and Managerial Implications

This article identifies an area of relevance and interest to both marketing scholars and practitioners by applying the uncanny valley theory to the marketing concept in order to gain

a better understanding of consumers' reactions to companies' relationship marketing strategies.

According to the uncanny valley theory, you will be uncomfortable if you meet someone you do not know much about but whom you feel knows a great deal about you. Therefore, if companies are interested in using potential customers' personal information for marketing purposes, they should first ensure that the customers know enough about them and their brand. As a result, the use of personal information is not recommended for companies that have unfamiliar brands and by extension, this approach is not suitable as a branding strategy. Therefore, we may argue that using customers' personal information is much more effective for retaining customers rather than finding new ones.

We warn companies that their extreme dependence on technology and excessively personalized information can alienate customers, thus pushing them into a void called "the uncanny valley." The more companies try to show their customers that they know their personal information, the more they get it wrong, a situation that produces extremely unpleasant impressions among customers. Companies should be very careful about demonstrating to their customers what and how much they know about their customers, as patrons are indeed sensitive about their personal information both from a quality and quantity perspective. To push this research to the next level, this paper suggests that operationalization and empirical testing will be required and further empirical research should be conducted in order to support its references to the uncanny valley theory.

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