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Service Idealism: The Sense Perception of Personality

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Abstract
The importance of service has been a central topic of study regarding consumer behavior and market research. Good services make customers optimistic; subsequently, measuring the pros and cons of consumer vis-a-vis service to form the degree of customer idealism. Service idealism indicates a particular service measured via the degree of optimistic based on personalities. Service idealism is associated with customer preference and influences customer decision toward service providers.

This research uses theory of psychological personality traits as the basis to investigate service idealism. Theoretically, certain factors affect diversification of service idealism. Existing researchers investigated certain related topics in service domain. However, what are the elements of service idealism? Hence, this study aims to explore three questions: (1) how to discover the components of services idealism?, (2) how to use personality psychology to model the conceptual model?, and (3) how to optimize the service to obtain the concept of services idealism.

Keywords
Service idealism, service quality, brand knowledge

INTRODUCTION
Service sector has experienced a significant growth recently since 1970. Services sector results in higher GDP for most countries around the world. Services are less tangible than goods which are extremely important to management that how the service is delivered and what is to be delivered. Services are interactive in order to relate closely with the customer. Close relationships between customer and service provider will accrue to the interest of firms (Bove and Johnson 2006).

The importance of service has been an essential topic of studies regarding consumer behavior and market research for decades. Building more intimate relationships with customers has emerged as a key strategy towards this end. For example, how consumers evaluate the quality of a service vis-a-vis their relationship with the firm? (Lages and Fernandes, 2005). Idealism is an individual difference variable that reflects the extent to which people hold generalized favorable expectancies for their future. The idealism for each person for various services is different due to personality differences. One service may be measured by how optimistic it is viewed through the lens of different personalities, which we call service idealism. Service idealism is subservient to different kinds of customer personality vis-a-vis the service perceived.

The purpose of this study is to investigate three research problems. Firstly, how to find components framework for services idealism? Secondly, How to use personality psychology as a theoretical foundation to research framework? Thirdly, How to find the optimal result of the services idealism? The final outcome of service idealism is a value to measure how a customer measure pros and cons of a particular service; in other words, the optimal value represents the customer has a grown optimist regarding of service.

LITERATURE
Service Quality
The importance of service has obtained a substantial amount of attention by many managers and academic scholars in a variety of fields. Service quality is a reflection of the degree and direction of discrepancy between consumers’ perceptions and expectations (Parasuraman, Zeithaml, and Berry, 1985). Parasuraman et al. (1985) postulated five dimensions of the service quality, well-known SERVQUAL model. The SERVQUAL instrument has been used to measure service quality in various service industries. Service quality has been seen as the result of comparing a customer’s expectations prior to receiving the service and the customer’s idealism with the service. Customer perceives services in terms of its quality (Zeithaml, 2000) and the prominence of quality is further manifested by the growing recognition that delivery of high quality services Thus, it is not surprising that service quality has become the forefront for planning strategy (Khamalah and Lingaraj, 2007) and predict customer optimistic in the service organizations.

Brand Awareness
Brand awareness is an important part of the brand equity existence in the consumers’ minds (Pappu, Quester and Cooksey, 2005) the brand is perceived as an integration of all the psychological elements that connects the customers to the product and the enterprise and it becomes one of the most important entities (assets) that the enterprise possesses for surviving in the competitive environment (Kotler and Armstrong, 2006). Brand awareness acts as a strong predictor of
consumer optimistic toward service in three ways: (1) A consumer is more likely to choose a product with higher brand awareness, regardless of quality and price (Macdonald and Sharp, 2000). (2) In a purchase process, brand awareness also helps the consumer to decide and speed up the decision process. (3) Brand awareness strongly influences the choice of the consumer in repeat purchase behavior. Brand awareness is the first step in communication with the customers’ experience. Customer experience influence brand awareness (Biedenbach and Marell, 2009). Brand awareness is important not only for differentiating between different alternatives, but also for developing a strong and positive brand image (Kuhn et al, 2008).

**Trust**

The majority of literature has emphasized the role of trust as being central to the success of building customer relationships Siao & Shen, 2003). Trust is often conceptualized and measured in different ways and therefore encompasses diverse aspects such as credibility, confidence, reliability, honesty, or benevolence (Grayson et al., 2008). (Chenet, 2010) find that trust can be used to drive service differentiation. Trust is established between the consumer and the service provider. Trust also plays a key role in customer buying decisions (Benamati & Serva, 2007; Riegelsberger et al, 2005). Prior research shows that trust plays a pivotal role in driving customer satisfaction (Lin and Wang, 2006) and repurchase intention (Weisberg et al., 2011).

**Willingness to Pay**

The willingness-to-pay (WTP) expresses the maximum amount a person is willing to pay, sacrifice or exchange in order to obtain a change in an attribute (Vermeulen et al. 2008). Zeithaml, Berry, and Parasuraman (1996) specified willingness to buy as a primary criterion variable for consumers’ perceptions of service quality. It is often argued that customers are willing to pay a premium for more customized services, because their needs and wants are better met (Broekhuizen and Alsem 2002). Customers’ willingness to pay might increase with the degree of customization. Service providers can therefore charge higher prices for more customized services.

**METHOD**

**Conceptualization Framework**

This study classifies three levels of the conceptual framework. Since services influence by several factors, this study assumes the factors that affect customers can be considered as the components of services idealism. According to the literature, this work discovered four components that affect customer preferences towards services, which are service quality, brand awareness, trust and willing to pay (Fig. 1). In addition, we utilize personality psychology as the theoretical foundation. Personality psychology is the set of psychological traits. Personality traits can be defined as self and interpersonal perception for an individual across situations over time (Matthews and Dreary, 1998), influence personal values and attitudes (Olver and Mooradian, 2003); predict cognition, emotion and mood affect, and behavioral (Pervin, 1996). Each customer has different preference based on own personality. Personality is also subject to change; particularly, certain studies analyzed the extent to which personality changes (Roberts, Walton, and Viechtbauer, 2006).

![Figure 1 Conceptual framework](image-url)
reliability, extraversion with responsiveness, and agreeableness with both empathy and assurance.

Personality can be useful in analyzing an individual consumer’s responses to certain awareness of brands. That is, the brand awareness is perceived as an integration of all the psychological elements and expressed as the power of the brand’s existence in the consumers’ minds (Pappu, Quester and Cooksey, 2005). Matzler et al. (2006) found that openness and extraversion have a positive influence on the loyalty to the brands and that the personality traits directly (openness) and indirectly (extraversion) influenced brand affects, which in turn drove attitudinal and purchase loyalty.

Consumers’ disposition to trust is an extremely strong determinant of their intention to trust and their ultimate behavior. It is deeply rooted in our personality (Sutherland and Tan, 2004) explicitly acknowledge the influence of personality in their multidimensional trust model: they proposed that extroversion and openness to experience lead to a higher disposition to trust and, conversely, that neuroticism and conscientiousness leads to a lower disposition to trust.

Willingness customer toward service is also important since customer personality is a key element to make decisions to purchase based on willingness to pay. When customers experience elevated states of satisfaction, they perceive a high outcome of an exchange and therefore are willing to pay more, this phenomenon is the personality psychology attribution. However, when the difference personality of customer in expected and perceived service quality, trust, and satisfaction significant intervening effects on post-purchase behavior intention and their willingness to pay.

Research Method

Genetic Algorithms

Genetic Algorithms (GA) is an adaptive heuristic search algorithm based on the evolutionary ideas of natural selection and genetics. GA is a part of evolutionary computing, which is randomized and exploit historical information to direct the search into the region of better performance within the search space. Naturally, competition among individuals for scanty resources results in the fittest individuals dominating over the weaker ones. The basic principles of GA were first laid down rigorously by Holland (Holland, 1975). Genetic algorithms mimic Charles Darwin’s principle of survival of the fittest” to solve complex optimization problems (Goldberg 1989). The main advantages of GA is the nature of the optimization model, which does not need to be known and interesting for complex problems or for users inexperienced in gradient-based optimization techniques. The optimization model and constraints will not to be continuous or even real values and they are readily available and easily implemented.

A genetic algorithm starts with a set of feasible solutions (population) and iteratively replaces the current population (number of individuals) by a new population. It requires a suitable encoding for the problem and a fitness function (a function that assigns fitness value to the individual). It is problem specific that represents a measure of the quality of each encoded solution (chromosome or individual). The fitness values of the progeny generated at each iteration was evaluated by the fitness function (regression equation; Anijdan et al. 2007; Singh et al. 2008).

In order to mimic the natural process of the survival of the fittest, the fitness function assigns to each member of the population a value reflecting their relative superiority or inferiority. Our objective is to maximize the optimal result of service idealism. The fitness function of the strings can be calculated as follows:

\[ f(SO) = \sum_{i=1}^{n} SQ(t) + BA(t) + T(t) + WTP (t) \]  
\[ f(SQ) = \frac{\left(\sum_{i=1}^{n} Pi\right) + \left(\sum_{i=1}^{m} Di\right)}{(P + D)} \]  
\[ f(BA) = \frac{\left(\sum_{i=1}^{n} Pi\right) + \left(\sum_{i=1}^{m} Di\right)}{(P + D)} \]  
\[ f(T) = \frac{\left(\sum_{i=1}^{n} Pi\right) + \left(\sum_{i=1}^{m} Di\right)}{(P + D)} \]  
\[ f(WTP) = \frac{\left(\sum_{i=1}^{n} Pi\right) + \left(\sum_{i=1}^{m} Di\right)}{(P + D)} \]

Where, SO service idealism, \(f_{SO}\) fitness function of service idealism. \(\sum_{i=1}^{n} SQ(t) + BA(t) + T(t) + WTP (t)\) is optimal result of four component of service idealism. (2, 3, 4, 5) is fitness function of the four components from services idealism (Table 1 and 2).
This research starts from the seed population generates (N) individuals. The population of this study use customer preference toward service as a basic which measure from their personality (P) and demographic (D). The optimizing process of service idealism is summarized in 6 steps: Firstly, an initial population of potential solutions is created through set customer personality and demographic variable. This is performed 100 times to form an initial population of solutions. The initial generation of candidate solutions SQ, BA, T and WTP contains 100 vectors which data from customer. Secondly, the fitness of each potential solution in the initial population is evaluated. The objective function (SO) is to maximize the optimal result of four components of services idealism. The results are formed by optimal value of four components (SQ + BA + T + WTP).

Thirdly, the selection of the fittest members of the population to parent is examined by next generation of solutions. The member of the initial population with highest return is passed over to the next generation without any changes and is known as elite. In this study, one vector out of the value is kept without changing and passed to the next generation. Roulette wheel selection is used to choose parents with a strong selective pressure and they are passed through the crossover and mutation operators, which are represented by steps 4 and 5 respectively.

Fourthly, the offspring created through crossover and mutation become part of the next generation. The offspring are formed by recombining the first part of one parent and the last part of the other parent at a particular position. Fifthly, the
mutation rate is set at 2%. The mutation introduces random variation in the solutions. The mutation operator is useful in avoiding premature convergence to a local optimum. Sixthly, the fitness of objective function is evaluated for each member of the generation. The iterations are repeated for 50 generations of solutions. Finally, the optimal ranking and holding period are chosen based on the evaluation of the objective function, when the service idealism has maximum return.

DATA ANALYSIS

This research uses the data from a run of service idealism, between 0.0 and 1.0 for each of the genes and to prepare for service idealism analysis. In addition, we modify customer personality and demographic with the four component of service idealism to be each chromosome evaluation the current value of every gene and the final fitness function score. The output of one run’s of the modified optimization for 10 populations on each component by 100 generations. We perform an analysis of service idealism and optimal gene type based on best chromosome and best fitness value. The results from the genetic algorithm optimization during customer personality and the service idealism are also reported in Table 3. During the optimal selection from the population, the highest fitness function brings the optimal result to analysis customer optimistic toward service. This study uses the dining restaurant service domain with 10 customers to describe their optimistic toward service.

<table>
<thead>
<tr>
<th>chromosome</th>
<th>input value</th>
<th>fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0968</td>
<td>0.8051</td>
</tr>
<tr>
<td>2</td>
<td>0.6452</td>
<td>0.7876</td>
</tr>
<tr>
<td>3</td>
<td>0.0323</td>
<td>0.8322</td>
</tr>
<tr>
<td>4</td>
<td>0.5806</td>
<td>0.8447</td>
</tr>
<tr>
<td>5</td>
<td>0.6452</td>
<td>0.8493</td>
</tr>
<tr>
<td>6</td>
<td>0.6129</td>
<td>0.8493</td>
</tr>
<tr>
<td>7</td>
<td>0.5806</td>
<td>0.8546</td>
</tr>
<tr>
<td>8</td>
<td>0.3871</td>
<td>0.8507</td>
</tr>
<tr>
<td>9</td>
<td>0.9032</td>
<td>0.8722</td>
</tr>
<tr>
<td>10</td>
<td>0.7097</td>
<td>0.8654</td>
</tr>
</tbody>
</table>

Table 3 Result of the first generation

<table>
<thead>
<tr>
<th>chromosome</th>
<th>input value</th>
<th>fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.9032</td>
<td>0.8722</td>
</tr>
</tbody>
</table>

Table 4 an example of optimal chromosome

The finding reveals customer with conscientiousness and extraversion personality; in particular, reliability, responsiveness and assurance are the most important constructs of service quality. Reliability, responsiveness and assurance dimensions are the largest influence on the overall service quality. The age of population in generally, between 20-30 years
old with lower income. For brand awareness, word of mouth and experience become the reason why customers have extraversion and conscientiousness personality are the most important factors to them toward services. Trust shows that satisfaction and experience construct will influence customer more optimist to service providers. Moreover, when the service provider give the satisfy that expected by customer, customer willingness to pay for service will increase. Conversely, experiences also serve as an important construct to predict customer willingness to pay for a service.

CONCLUSION
In this study, five personalities of customer are adapted to measure service idealism in dining restaurant service. By administering the modified four components of service idealism, dining restaurant service can receive the respondents’ opinion of how they view the customer optimistic toward their service, identify where problems are, and get the point to resolve them. The results indicate that customer which conscientiousness and extraversion as a result of principal components by applying GA to dining services. The four components of service idealism were 1) service quality, 2) brand awareness, 3) trust, and 4) willingness to pay. The findings also indicate that the customer personality and demographic have a positive impact on overall customer optimistic toward service.

Moreover, the results show several managerial implications. Firstly, the results support the findings of previous researches, which indicate that customer perception of service idealism. Secondly, it identifies the component of service idealism and the relationship among personality psychology. That is, managers can examine the components of service idealism in order to improve customer perceptions in different domains; for example, dining restaurant, salon, and e-service.

The present study also has some limitations. Firstly, the study is limited in one location studied and is not representative of all dining restaurants in Taiwan. Secondly, we only test the limited data of population. Thirdly, the selected fitness function may change for future research. Consequently, more related attributes can be added to the services idealism for examination to make the study more general and applicable in the real world applications.

REFERENCES


