THE ADOPTION OF PUSH-PULL AND MOORING MODEL FOR SMALL INDUSTRY IN INDONESIA

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Customers' migration is very crucial to the firm due to its ability to influence the survival of the company. This research was conducted in order to understand the antecedents of customers' migration from the origin to the alternative service provider. It examined the relationship between push factors, pull factors, mooring factors, interaction between mooring factors and push factors, interaction between mooring factors and pull factors with intention to switch.

There are five hypotheses which were proposed in this research. Those hypotheses were examined with 150 respondents. The respondents were customers of beauty salons, representing small industry which was taken in convenient sampling. Data were analyzed using structural equation modeling methods using LISREL 8.8. Data showed that the three hypotheses were accepted.

The result showed that push effect, pull effect and mooring effect significantly influenced the intention to switch. On the other hand, the interaction of mooring effect and push effect and interaction of mooring effect and pull effect did not significantly influence the intention to switch either.

Implications of this research were that the company had to manage push effect, pull effect and mooring effect carefully in order to retain the customer. An important contribution of this research is that it includes emotional bonding as the additional variable for mooring effect. On the other hand, the relational commitment, the subjective norm, and the unfavorable attitude toward switching and infrequent seeking behavior were not included as the mooring effects.

Keywords: push, pull, mooring, intention to switch

Introduction

The phenomenon of customers' switching or migration is very important to be considered by companies. If it is managed well, than it will create a sustainable for companies both in manufactured or services industry. For instance lower operational cost, market share or companies' profitability (Reicheld & Sasser 1990; Rust & Zahorik 1993).

For companies, customer migration means loss of profit as well as higher cost because it has to recruit new members which needed more cost (Reicheld & Sasser 1990). To understand customers' migration is very crucial for companies. However, there is little attention from the scholars to study about it. Bansal, Taylor dan James (2005) conducted a research to describe variables which influence customer migration, especially in service industry. However, due to its complexity there is a research gap to be address in their model.
For small industry there is no comprehensive research about customer migration. Therefore, the writer wants to replicate and modify Bansal’s research to understand the customer migration path for small industry. Based on small Industry Act No. 9, year 1995 SMEs is defined as an economy activities which are done by individu or household with maximal equity is 200 million rupiah and sales per year less than 1 billion rupiah.

Bansal dan Taylor (2005) proposed “Push-Pull Mooring” (PPM Model) to describe customer migration in services industry. Pull factor (positive factor proposed by alternative service provider to pull the customers to switch from existing service provider) will pull customers to switch to alternative service providers. Push factor (negative factor from existing service provider will push customers to switch to alternative service providers). Mooring factor (factors which create barriers for customers if they want to switch from existing service providers to alternative service providers). This PPM model is perceived as a framework which describes customer migration. However, there are a lot of other variables which could be added into this model for the context of small industry. For instance, relational commitment done by service providers (Rohayati 2006); unfair pricing (Wu & Lee 2005); emotional bonding (Haryanto 2008). This research aimed to enrich PPM model for small industry.

Research Problems

Customer migration will occur if the service from alternative service provider is perceived better compared to existing service provider. It is very complex and involve many parties. Bansal et al. (2005) propose a model to describe it. However, due to many potential factors which are ignored by Bansal et al. This research wants to identify the appropriate model for customer migration in small industry.

Theoretical Framework, Hypothesis and Research Model

Migration

Migration is a movement from a person (migrant) in a period of time (Boyle, Halfacree & Robinson 1998). This movement is assumed to be significant, which means that a person has moved beyond administrative borders (Jackson 1986).

Researcher in human geography has differentiate the migration type. First, voluntary migrant who has freedom in migration probably with some informal barriers (Jackon 1986). Second, refugees who do not have any other options except migration (Boyle et al. 1986). This is triggered by war, chaos, or other force majeurs.

Analogy between migration and customer switching from one service provider to other service provider is very rational (Bansal et al. 2005). Migrant (consumer) migrate (switch) from one country (service provider) to other. They are free to choose in switching from service provider so they could be classified as voluntary migrant. Furthermore, sometime they have to switch with no choices. This could be classified as refugees.

Bansal et al. (2005) test the determinants of migration between different brand or service provider so it could be categorized as national migration. This research emphasize on national migration because it tries to acknowledge customer migration from one service provider to another.
There are three characteristics of customer migration, they are: (1) Customer as initiator (2) external companies as targets (3) local scope. There are three characteristics of migration which will be analysed in this research, they are: (1) It is initiated from customers, hence the company is impacted (2) It has external target for migration (3) It has a totally wide scope.

PPM Model for Migration

The push-pull component of the PPM model of migration has a long history, dating back to the nineteenth century. Ravenstein's "Laws of Migration," presented to the Royal Statistical Society in 1885, laid the foundation for the push-pull model. In 1938, Herberle fully articulated the distinction between push and pull factors (Lewis 1982). It has been argued that this model, in a modified form, represents the most important theoretical contribution in the migration literature to the present day (Jackson 1986). According to the push-pull paradigm, there are factors at the origin that encourage (push) an individual to leave and factors at the destination that attract (pull) the individual toward it (Lewis 1982). This research has traditionally focused only on actual migrants—those who have switched, not those who have chosen not to switch. Accordingly, researchers centered their attention on identifying only negative factors at the origin (thus the label of "push" variables) and positive factors at the destination (hence the "pull" label).

Around the same time, researchers recognized that normative and psychosocial variables were important in migration decisions (Germani 1965). To account for these variables, Lee (1966) added the construct "intervening obstacles" to the push-pull model. According to his conceptualization, the migration decision is based on an evaluation of the push and pull factors; however, this evaluation is made within the context of an individual's own personal and social context. Migration decisions can be modified by such factors as family attachments, personal anxiety, or costs of the move. Jackson (1986) modified Lee's (1966) labeling of "intervening obstacles"; he argued that migration models should include "intervening variables," not obstacles, since these variables either facilitate or inhibit migration. In a similar vein, Longino (1992) introduced the notion of "moorings," which Moon (1995) then incorporated into a push-pull model of migration. Moorings refer to life-course, cultural, and spatial issues that act to facilitate or hamper the migration decision. Thus, moorings expand the notion of intervening variables; they include all personal, social, and cultural variables that moderate the decision whether or not to migrate. We adopt the "mooring" terminology for the present study.

Push Factors

Push factors are "the factors that motivate people to leave an origin" (Stimson & Minnery 1998) and "factors at the origin that are assumed to have a negative influence on the quality indicators of life" (Moon 1995). Push factors are generally perceptions of place variables—characteristics of the place of origin that influence the migration decision (Bogue 1977; Lee 1966). There is a conceptual correspondence between the construct of push factors from the migration literature and many evaluative drivers of service-switching intentions, such as satisfaction, quality, value, trust, commitment, and price perceptions. The term satisfaction is used extensively in the migration literature; migration research emphasizes satisfaction and dissatisfaction with factors at the origin (De Jong & Fawcett 1981). Wolpert's (1965) concept of "place utility" popularized the notion that migrants would leave when dissatisfied. In services research, the negative relationship between satisfaction with a service provider and switching intentions is well documented (e.g., Bansal & Taylor 1999b; Cronin et al. 2000).
The term *quality* is also common in migration research, where investigations of “quality of life” examine variables such as physical and economic factors associated with the origin (Boyle et al. 1998). In a service context, perceived quality exerts a direct and indirect influence on repurchase (e.g. Zeithaml, Berry, & Parasuraman 1996).

Value, the trade-off between quality and sacrifice (Zeithaml 1988), is proposed as a third push factor in switching decisions. Recent research suggests that value is a direct determinant of service switching (e.g., Sirdeshmukh, Singh, & Sabol 2002). In migration research, a person’s trust in his or her relations with others represents a push factor (Richmond 1988).

Trust, the consumer’s feeling that the seller will fulfill promises (Morgan & Hunt 1994), is an antecedent of consumers’ future behavioral intentions (e.g. Garbarino & Johnson 1999). Trust is also a strong predictor of commitment (Sharma & Patterson 2000), which leads, in turn, to repurchase intentions (Hennig-Thurau et al. 2001). Commitment defined as a consumer’s belief that an ongoing relationship is worth investing in (Sharma and Patterson 2000) and trust are thus posited as push variables.

Finally, since economic variables are critical in migration models (Bogue 1969), it is appropriate to consider pricing issues in models of service migration. Extant research suggests that consumers are more likely to switch if they perceive their current service provider’s prices to be high (e.g. Dabholkar & Walls 1999). In sum, many of the evaluative variables studied as predictors of service provider switching correspond to push effects expulsive forces at the origin that motivate service switching. Each of these variables, except high price perceptions, would have a negative relationship with switching intentions and behavior. When a consumer perceives low service quality and value, experiences low satisfaction with the service provider, has low trust and commitment to that service provider, and perceives the price to be high, he or she is more likely to feel pushed to switch. Put formally:

**Hypothesis 1:**

The lower the perceived service quality, satisfaction, trust, and commitment to the service provider and the higher the perceived prices, the higher the likelihood consumers will intend to switch service providers.

**Pull Effects**

Pull factors are “positive factors drawing prospective migrants to the destination” (Moon 1995) and “attributes of distant places that make them appealing” (Dorigo & Tobler 1983). Similar to the push factors, these are place attributes, not characteristics associated with the migrant himself or herself. According to the push-pull paradigm, attractive factors at the destination pull the migrant to this destination. The only existing variable from the service switching literature that conforms to this conceptualization is alternative attractiveness. Alternative attractiveness - the positive characteristics of competing service providers - positively influences consumers’ intentions to switch (e.g. Jones, Mothersbaugh, & Beatty 2000). Thus,

**Hypothesis 2:**

The higher the alternative attractiveness of competing service providers, the higher the likelihood consumers will intend to switch service providers.
Mooring Effects

The simplicity of a push-pull model of migration does not capture the complexity of migration decisions. As Boyle et al. (1998) stated, “Any simple comparison between push and pull factors is complicated by the presence of intervening opportunities-obstacles such as family obligations at the origin or the high cost of moving, which may prevent migration occurring” (p. 64). Thus, even when push and pull factors are strong, an individual may not migrate. This is due to situational or contextual constraints (Lee 1966); these constraints are usually person specific, but they can operate similarly for a large number of people (Gardner 1981). Variables from the service and brand switching literature that fit this conceptualization of mooring effects include switching costs, subjective norms (social influences), attitudes toward switching, past behaviors, and variety-seeking tendencies. Constraints to migration include the time and moving costs associated with the move (Gardner 1981; Lee 1966). Traditionally, financial costs were the primary costs studied; however, other costs such as the emotional cost of leaving loved ones behind (e.g. Sell & De Jong 1978), time, effort, and ability have also been considered (De Jong & Gardner 1981). Service researchers study comparable variables: financial, time, effort, and ability switching costs have been shown to affect the switching decision (e.g. Bolton, Kannan & Bramlett 2000; Jones et al. 2000).

It has also been argued that migrants’ attitudes toward migration influence the migration decision (Desbarats 1983). According to this argument, a person holding a favorable attitude toward migrating will be more likely to migrate. Similarly, attitude toward switching has been associated with consumers’ switching intentions (Bansal & Taylor 1999b 2002). Normative concerns also constrain or facilitate migration behaviors (Gardner 1981). Desbarats (1983) argued that “subjective norms” should be included in models of migration decisions; subjective norms refer to a person’s perception of the social pressures placed on him or her to engage in a certain behavior (Ajzen & Fishbein 1980). Inclusion of normative concerns in service-switching research is limited. Recent research suggests that subjective norms influence consumers’ attitude toward switching and their switching intentions (Bansal & Taylor 1999b). Likewise, broader cultural norms have been found to moderate the relationship between service quality and service switching (Liu, Furrer, & Sudharshan 2001). Personal factors have also received attention as possible facilitators or inhibitors of migration (Gardner 1981; Lee 1966). From a list of personal factors studied in a service-switching context (e.g. Keaveney & Parthasarathy 2001), we draw on the constructs of past behavior and propensity for variety seeking as possible mooring variables. Individuals’ preferences are in part influenced by their consumption history (Lattin & McAlister 1985) as well as their propensity for variety seeking (e.g. Lattin & McAlister 1985); although studied only in product contexts to date, these constructs would also be relevant in service settings. This relevance in a service setting parallels an interest in the migration literature. Jackson (1986) pointed out that while push and pull factors may appear to be the same for a group of people, migration decisions might differ due to a family’s tradition of moving or staying. Although not explicitly called variety seeking in the migration literature, multiple moves and the composition of choice sets have received increased attention (Greenwood, Mueser, Plane & Schlottmann 1991).

Therefore, one could speculate that service provider switching intentions will be positively related to a consumer’s past switching behavior and his or her propensity to seek variety in service experiences. This is consistent with recent research suggesting that consumers’ past switching behaviors influence their subsequent behavioral intentions (Ganesh, Arnold, & Reynolds 2000). Thus, the migration literature parallels much of the service-switching literature suggesting variables such as switching costs, subjective norms, attitudes toward switching, past behavior, and variety seeking as possible antecedent variables. According to the arguments above, we can hypothesize the following:
Hypothesis 3:

The likelihood that consumers will intend to switch service providers is lower when switching costs are higher, consumers' propensity to seek variety is lower, consumers' attitudes and subjective norms toward switching are less favorable, and the consumer has not switched often in the past.

The Moderating Role of Mooring Effects

The benefits of applying the PPM model to a service context go beyond its ability to structure a long list of predictor variables into theoretically defined effect categories. In migration research, the mooring variables moderate the relationships between the push and pull factors and the actual migration decisions (Lee 1966). By extension, it is thus expected that even if push and pull factors are strong (e.g., low quality at the current service provider and attractive alternative service providers available), a consumer may remain with the current service provider when mooring variables are strong (e.g., high costs of switching or significant others do not want him or her to switch). In addition to their direct effect on switching intentions (i.e., Hypothesis 3), mooring variables thus also moderate the relationship between push factors and switching intentions, and between pull factors and switching intentions. Although most prior service-switching studies have focused on direct effects, recent research suggests that moderators can play a role. For instance, moderators of the relationship between service satisfaction and repurchase intentions include variety-seeking (Homburg & Giering 2001) and switching barriers (Jones et al. 2000). Furthermore, cultural dimensions moderate the service quality-switching intention relationship (Liu et al. 2001). Extending this research by applying the PPM model in a service context, the following hypotheses are derived:

Hypothesis 4:

Mooring variables moderate the relationship between push variables and intention to switch service providers. Specifically, the stronger the mooring variables, the weaker is the relationship between push variables and intentions to switch.

Hypothesis 5:

Mooring variables moderate the relationship between pull variables and intention to switch service providers. Specifically, the stronger the mooring variables, the weaker is the relationship between pull variables and intentions to switch.

Integrating all the expected relationships discussed above results in the PPM migration model illustrated in Figure 1. Push, pull, and mooring variables all affect switching intentions and, indirectly, switching behavior. The intentions-behavior link is well established in marketing and psychology literatures; thus, a formal hypothesis is not presented here.

Push and pull effects have a positive relationship with switching intentions—one is more likely to switch if pushed or pulled away. However, even with strong push and pull effects, a consumer may not switch. This is because there is a set of mooring effects that may constrain the switching decision, acting as a moderator of the push-pull relationship with switching intentions. Mooring effects also have a direct, negative relationship with switching intentions—the more a consumer feels "moored" to the service provider, the less likely he or she is to switch. Because it considers moderating relationships, the PPM migration
model should explain switching intentions more accurately than a simple examination of the predictors' direct effects. In this study, the PPM is compared empirically to a direct-effects model where each independent variable is modeled as having a direct effect on switching intentions; this is done to illustrate the usefulness of the PPM model beyond its comprehensive nature alone.

**Intention to Switch**

Intention is defined as the subjective possibility of a person to conduct a certain action (Brown 1998). This is developed when a person makes plan about their future behavior. Shoham and Dalakas (2003) stated that intention is a basic unit in the network plan when a person conducts cognitive action which is future oriented. Intention is based on the future action. Furthermore, they explain that there are three constructs regarding to the intention, they are: (1) Intention as a hope (2) Intention as a plan (3) Intention as a want.

Construct intention as an expectation is the most commonly used and popular in research (Rook 1987). This refers to the individual assessment regarding to the subjective possibilities that will determine his/her future behavior. Basically, measurement of intention to switch involved attitude and subjective norm based on behavioral intention theory (Dittmar & Drury 1998). Behavioral intention usually is predicted based on multiattribut model (Dittmar & Drury 1998). Darley & Lim (1986) conducted a research using technology acceptance model (TAM) as multiattribut model to predict intention to switch on technology based on its utility. Dittmar & Drury (1998) defined attitude to switch as a positive or negative feeling to the next target behavior. Hence, Dittmar & Drury stated that intention to switch depends on the strength of conducting specific action.

**Conceptual Model**

This research aimed to analyze push, pull and mooring factors in influencing intention to switch. Figure 1 shows that push factor is a weighted average from perception of quality, satisfaction, value, trust, commitment, and high price perception from existing service provider. Pull factor is a weighted average from alternative attractiveness offered by alternative service provider. Mooring factor is a weighted average from unfavorable attitude toward switching, infrequent prior switching behavior, emotional bonding, commitment relational, subjective norm, and low variety seeking.

**Research Methods**

**Population and Sampling**

Population of this research is all customers of beauty salon Yovie at Salatiga, Central Java Indonesia. The sampling methods used in this research is convenience sampling with 150 respondents. In this research, We were sitting in the salon everyday and distributed questionaires to customers.

The data was collected within one month (September-October 2009) with total respondent 151. Malhorta (2004) stated that this is an adequate number for survey.

According to research problems, this research will use Structural Equation Modelling with Software LISREL 8.80.
Figure 1
Conceptual Framework

Data Analyses

After testing the data using LISREL 8.8 show the t number to be used in hypothesis testing. The significance level is 0.05 or 5 percent. Figure 2 shows the path diagram of the result.

Description figure 2:

- **Ku** = Quality
- **Ke** = Satisfaction
- **N** = Value
- **Kp** = Trust
- **Ko** = Commitment
- **H** = Price
The Adoption of Push-pull and Mooring Model (O. Listyarin, J.O. Haryanto & B.C. Siahaan)

Pdrg = Push
Pnbat = Mooring
IE = Emotional Bonding
BP = Switching Cost
STM = Attitude Toward Switching
PgpT = Interaction between push and mooring
PkPt = Interaction between pull and mooring
Ptrik = Pull
IB = Intention Behavior
BeIn = Behavior Intention Toward Switching

Figure 2
Path Diagram Analysis
Table 1 shows the parameter used in this research to test the hypothesis:

**Tabel 1**
**Model Testing**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis Statement</th>
<th>Sig.</th>
<th>Accepted or Not Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>The lower the perceived service quality, satisfaction, trust, and commitment to the service provider and the higher the perceived prices, the higher the likelihood consumers will intend to switch service providers. The higher the alternative attractiveness of competing service providers, the higher the likelihood consumers will intend to switch service providers.</td>
<td>-3.44</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>The likelihood that consumers will intend to switch service providers is lower when switching costs are higher, consumers' propensity to seek variety is lower, consumers' attitudes and subjective norms toward switching are less favorable, and the consumer has not switched often in the past. Mooring variables moderate the relationship between push variables and intention to switch service providers. Specifically, the stronger the mooring variables, the weaker is the relationship between push variables and intentions to switch.</td>
<td>-2.00</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>Mooring variables moderate the relationship between push variables and intention to switch service providers. Specifically, the stronger the mooring variables, the weaker is the relationship between push variables and intentions to switch.</td>
<td>5.76</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4</td>
<td>Mooring variables moderate the relationship between pull variables and intention to switch service providers. Specifically, the stronger the mooring variables, the weaker is the relationship between pull variables and intentions to switch.</td>
<td>1.04</td>
<td>Not accepted</td>
</tr>
<tr>
<td>H5</td>
<td>Mooring variables moderate the relationship between pull variables and intention to switch service providers. Specifically, the stronger the mooring variables, the weaker is the relationship between pull variables and intentions to switch.</td>
<td>0.66</td>
<td>Not accepted</td>
</tr>
</tbody>
</table>

**Discussion**

From the explanation above, there are some points to be acknowledged, they are:

1. Push factor significantly influences intention to switch. Majority of respondents are in the range of 20-30 years old and they go to Salon intensively (>2x per month). These characteristics have made them very sensitive toward services given from the existing service provider. If there is any unperformed service from existing service provider than they will switch to alternative service provider. The data shows that negative factors from existing service provider will push customers toward alternative service provider.

2. The results show that pull factor influence intention to switch significantly. If alternative service provider proposes better services than customers will switch to them. It shows that for small industry, they could be categorized as switcher with limited loyalty. In the context of salon industry, customers will move easily toward alternative service provider if they perceive that they will get better services.

3. Mooring factor significantly influence intention to switch. It is obvious that mooring factor will create barriers for consumers to switch to other service providers. Therefore, it is necessary for existing
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service provider to build mooring factor in order to reduce the consumer migration. Service provider needs to develop high switching cost or subjective norm in order to create barriers for consumers.

Conclusion

From the explanation above, it could be identified that push factor (perception about quality, satisfaction, commitment, value, and price significantly influences intention to switch. Pull factor (alternative attractiveness) also influences intention to switch. Furthermore, mooring factor (unfavorable attitude toward switching, emotional bonding and switching cost) significantly influences intention to switch. On the other hand, mooring factor does not moderate the relationship between push factors as well as pull factors toward intention to switch.

Emotional bonding is an additional factor included mooring factor for small industry. On the other hand, commitment relational, subjective norm, unfavorable attitude toward switching and low variety seeking do not include in the mooring factor for small industry. For unfair pricing which previously predicted as push factor than the result show that it is not included as push factor.

References


