What factors drive corporate customer satisfaction with e-banking services

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WHAT FACTORS DRIVE CORPORATE CUSTOMER SATISFACTION WITH E-BANKING SERVICES

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Abstract

Due to the burgeoning development of electronic commerce (e-commerce), the broader applications of emerging service—Internet banking (e-banking) services have been introduced and provided by financial holding companies or banks at an accelerating rate in recent years since they can provide efficient, reliable, secure, and convenient financial services, such as online payment, deposit/loan, trading, and clearing/settlement, via electronic channels (e-channels, e.g., Internet and phone) for customers. E-banking services not only can create new competitive advantages, perhaps, but also can improve their relationships with customers for banks. Obviously, e-banking can offer better services required by corporations and individuals, it could be a strategic niche matter for banks or their customers. Conceivably, how to implement e-banking successfully is becoming a critical management issue. Unfortunately, research pays scarce attentions on what factors drive success of e-banking, particularly from corporate customers' perspective. For the reason, this paper attempts to explore what factors affect corporate customer satisfaction with e-banking (CCSEB) which is one surrogate variable of success of e-banking services. Based on a survey of 178 respondents collected from Taiwan companies, the results support that environmental, organizational, and globalization factors will affect customer satisfaction with e-banking significantly. Furthermore, there exist a reciprocal relationship between customer satisfaction and post-usage favorite behavior. We believe the results and findings proposed in this paper not only can offer in-depth insights for practitioners about how to implement e-banking successfully, but also can be further directions for researchers interested in designing related theories.

Keywords: Corporate e-banking service, Customer satisfaction, Post-usage favorite behavior
INTRODUCTION

During the recent years, the development of e-channels have dramatically changed the rules and operation in the banking industry (Gunasekaran & Love 1999). Meanwhile, the industry has moved instantly to deploy and offer new banking services via e-channels for customers (Gonzalez & Quesada & Picado & Eckelman 2004), and in consequence the e-banking services have boomed promptly (Aladwani 2001). Today, several financial institutions are endeavoring to emphasize customer-oriented services. For this sake, it is crucial to implement new banking services in order to develop and keep better relationships with customers (Gonzalez & Quesada & Picado & Eckelman 2004), especially corporate customers since they contribute major profits (Tyler & Stanley 1999; Zineldin 1995). In the banking industry, bank-corporate customer relationship remains a key issue as businesses devote to keeping a higher competitive advantage in the market (Kandampully & Duddy 1999). The relationship between banks and corporate customers is the most important factor in the success of new financial services (Fasingwood & Storey 1993). Hence, building up competitive predominance almost depends on customers’ satisfaction with banking. It is recognized that banks gaining higher customers’ satisfaction will have a conspicuous marketing ascendancy because the higher customer’s satisfaction is associated with greater revenues, increased cross-sell ratios, higher customer retention (Gonzalez & Quesada & Picado & Eckelman 2004; Nilsson & Johnson & Gustafsson 2001), and bigger market share (Bowen & Hedges 1993).

In this study, we examined vertical links between banks and corporate clients and the levels of bank incentives initially. The subsistent literature within marketing had an almost demand-side orientation; that is, it probed into traits of firms most likely to adopt innovations. However, supplier marketing schemes and incentives were sustaining in encouraging satisfaction. The economics literature was rich with ideas for proceeding further supply-side research (Gatignon & Robertson 1989). Internal organizational elements like innovative culture, technology readiness for corporate clients’ employees, and top management support for business were used to explore the relationship subsequently for solving problems pertained to resources limitation within SMEs. Eventually, few empirical studies had examined the influence of internationalization and corporate e-banking on firm performance (Annavarjula & Beldona 2000; Sung 2006). However, these studies had, on the whole, yielded mixed or conflicting results. The present research was an attempt to achieve an explicit knowledge of this relationship so as to be beneficial to build a bridge between academic insights and practical business applications.

DEVELOPMENT OF RESEARCH FRAMEWORK AND HYPOTHESES

2.1 Vertical coordination and incentives for bank-corporate client relationship

Corporate customers chose their banking relationship on a product by product case, moreover,
there was differentiation between the fundamental norms of bank selection with price (Athanassopoulos & Labroukos 1999). By and large, banks desired to establish, maintain, and enhance lasting long-term partnership relationships with corporate clients. Suggested that a differential strategy would be of great interest to banks with the most excellent ability to differentiate their product/service mix (Zineldin 1996). Corporate e-banking services were just right the best solution of cross-platform for product/service mix in the present day. With the incremental utilization of corporate e-banking services by enterprises, it started to change the nature of banks-corporate clients relationship (Jebbston & Moran 2003). In view of above-mentioned status, we had an idea that improving the poor coordination between banks and their corporate clients was through vertical coordination and banks' incentives for businesses from supply side factors (Gatignon & Robertson 1989). Vertical coordination meant that industries in suppliers and customers achieved a high level of vertical interdependence had a tendency towards coordination and connected relationships (Palmer 1983). Such coordination was correlated with better information flow and faster adoption (Kimberly 1978). General ways were of visiting customers and informing them about relevant information they needed. Supplier incentives were provided for the firms by banks to promote adoption of innovation like corporate e-banking (Gatignon & Robertson 1989). This factor could be deliberated upon supplementary to the vertical coordination. Besides, the supplier incentives usually were price-encourage adoption all the time including discounts, trial version of product/service without payment, or key client for priority of service. Such economic and financial incentives had become accepted instruments for the implementation for encouraging the widespread use of new technologies (Kocagil 1997), and important in multiplex information system domains containing e-business supply chain coordination (Ba & Stallaert & Whinston 2001). These two supply-side factors were identified to be particularly significant means in interpreting adoption and achieving early adoption of new technologies. Satisfaction with a new technology was significantly in connection with the adoption and degree of use of the new technology (Crum & Premkumar & Ramamurthy 1996; Lubbe 2007). As a result, there were two hypotheses presented below:

**H1.** The better vertical coordination between banks and their corporate clients, the more CCSEB.

**H2.** The more bank incentives for businesses, the more CCSEB.

### 2.2 The level of innovative culture of organization, technology readiness for corporate customers and top management support for business

The innovative culture implied that a climate that was forbearing of failure and within which information permissively flowed (Jarvenpaa & Staples 2000; Leonard & Sensiper 1998), what is more, it reflected the judgment that change and creativity were on their own initiative encouraged and rewarded as well as it highlighted learning, and rational risk-taking (Kim & Lee 1995; Koys & DeCotiis 1991). Innovativeness, as an element of culture, was precedent to organizational learning (Conrad 1999). Climbing global and intestine competition has reinforced the import of innovativeness for successful business performance (Nakahara 1997). Innovativeness, which was the totality of a company's venture and innovation actions could be facilitated the business accrue new abilities and amend its performance (Guth & Ginsberg 1990; Lumpkin & Dess 1996; Stopford & Baden-Fuller 1994). It could aid the company access new businesses and exploit new income in both intestine and international markets as well (Miller 1983; Zahra 1993). Innovativeness was contributory to improved profitability and evolvement (Covin & Slevin 1991; Zahra 1993). The existence of an innovative culture enhanced a firm's performance (Conrad 1999), collectively implicated, user satisfaction was significant related to performance (Gelderman 1998). An innovative culture was more advantageous to the successful execution of advanced technologies than more mechanistic organizations which were characterized by inflexibility and constraint (Zammuto & O'Connor 1992). Then, there was one hypothesis presented below:

...
H3. Innovative culture of organization was related positively to the likelihood of e-banking.

The technology-readiness structure mentioned that people’s aptitude for accepting and using new technologies for completing objectives in home life and at work (Parasuraman 2000). The structure could be seen as a holistic mindset being due to an intention of psychological preference and abhorrence that jointly determine an individual’s inclination to use new technologies. A fundamental outcome of technology’s growing role was the proportional bloom in self-service technologies that customers were required to interact with technology-based systems rather than company personnel (Bitner & Brown & Meuter 2000; Meuter & Ostrom & Roundtree & Bitter 2000). The growing affection of customers having to serve themselves through technology-based systems was close not only to service sectors but also to goods businesses (Parasuraman 2000). In a similar trend, practically all companies competed on the basis of customer service and service supplies, furthermore, got beyond industrial boundaries (Bitner & Brown & Meuter 2000). Although the positive and negative opinions about technology might exist simultaneously which were likely to vary across individuals, customers varied in the light of their beliefs/feelings about the diverse choices and that those beliefs/feelings were positively correlated with intentions to use (Dabholkar 1996). As indicated by the foresaid discussion, an integration of positive and negative opinions about technology constituted the facet of technology readiness. The positive opinions motivated individuals toward new technologies, albeit the negative ones might fight them down. Specific customer perspectives and incentives might heighten or diminish adoption of new technologies as well (Dabholkar 1994; Davis & Bagozzi & Warshaw 1989). In those situations, satisfactory problem solution would determine not only on the employees’ skills but also on their technology readiness (Parasuraman 2000). Employees who conceived it as high on both interpersonal skills and technology readiness were possibly to be much more efficient in tech-support roles than those who were scarce on either basis. The technology readiness, as such, could serve as a supplementary filtering measure, along with traditional individual-skills evaluation, in selecting staffs for tech-support positions (Parasuraman 2000). Whereupon, there was a hypothesis presented below:

H4: Employees within corporations with higher technology readiness were more satisfied with the corporate e-banking.

Top management support was a critical repeated element vital for energetic information systems implementation in both large and small enterprises (Cerveny & Sanders 1986; DeLone 1988; Ginzberg 1981; Yap & Solt & Raman 1992). Successful information system implementation appeared as adequate organizational resources were applied toward, first of all, inspiring and then supporting the implementation endeavors. Owing to their leadership function, top management would enable to warrant adequate allocation of resources and serve as a revolutionary agent to create a more advantageous circumstance for information system implementation. Top management had the authoritativenss to affect other employees of the company, and more possibly to meet with success in conquering organizational resistance to adopt the information system. Powerful top management assistance was expected to contribute to greater transformation effectiveness and thus better information system performance for the identical level of information system input (Thong & Yap & Raman 1996). Involved in information system projects might be much more crucial in a company where the CEO ordinarily made most critical decisions and was likely the only one who could take charge of information technology to business goal and strategy (Jarvenpaa & Ives 1991). An enthusiastic CEO was more possibly to support precious resources and adopt a wider-range insight to the advantages of information system implementation. As a result, there was a hypothesis presented below:
H5. The more support from top management, the more CCSEB.

2.3 The level of internationalization for businesses and dependable e-banking services

In the current setting for incrementally dynamic, sophisticated, and competitive world markets, internationalization was seen as being a key component in business strategy and in order to survive and grow (Annavarjula & Beldona 2000). It was perceived as a critical strategic selection for those companies that were seeking out a retainable competitive advantage (Gary & Prabhad 1986). A company in seeking multinational markets as one of the perspectives of business was a businesslike exploitation of components which were included cost, operations, employees, and stock value. Significant incentives in a business’s decision to aim for overseas manufacturing could be the opportunity of savings in human resource or transportation costs, or the stock of merchandise for cheaper raw materials. Internationalization indicated that the degree to which companies operated internationally by investing in assets and/or managing activities in overseas markets (Cantwell & Sanna-Randaccio 1993; Teece 1981). It was shown that global orientation consolidated a firm’s capacity to improve the corporate economic performance, that is, firms with a higher level of internationalization also associated with higher performance (Bausch & Krist 2007; Belso-Martinez 2006; Kafuros & Buckley & Sharp & Wang 2008; Kennedy & Lewis 2002; McDougall & Oviatt 1996; Rabi-Hellica 1996). A main conceptualization of firm performance would involve in placing importance on indicators of nonfinancial performance besides those of financial performance (Dess & Robinson 1984; Geringer & Hebert 1991; Venkatraman & Ramanujam 1986). We attempted to use a composite measure for internationalization that common performance (ratio of foreign sales to total sales), structural (ratio of foreign subsidiary companies to total subsidiary companies), and attitudinal (top management’s international experience) dimensions (Sullivan 1994). As earlier discussion, internationalization had a clear influence on firms’ performance. Likewise, the satisfaction was positively related to performance equally (Lai 2007). Thence, there was one hypothesis presented below:

H6. Likelihood of the level of internationalization for businesses would increase with CCSEB.

Most enterprises have been affected by e-banking in one way or another (Gunasekaran & Love 1999; Ng & Pan & Wilson 1998). Nowhere had the participation of electronic commerce been more outward than in the banking industry. The security concern was probably one of the most challenging subject confronting organizations interested in conducting business over the Internet (Aladwani 2001). Customer-orientation, ease of use and diversification of products/services were treated as greatly significant in the top five of critical success factors among Korean, Japanese, and USA firms (Sung 2006). Speed, privacy and security also occupied preceding fifteen critical success factors. Those six foresaid factors had very strong force on firm performance. As mentioned earlier, user satisfaction was significant related to performance (Gelderman 1998; Lai 2007). Accordingly, we assumed that the corporate e-banking had more possession of dependable services of Internet-based technologies, the customers would raise their satisfaction with it. Here was the hypothesis presented below:

H7: The greater level of dependable e-banking services, the more likely CCSEB.

As mentioned earlier, there were three primary categories and they would affect subsequent user satisfaction and post-usage favorite behavior jointly or extraordinarily. User satisfaction and usage were compactly interrelated as true in the main conceptions of the D&M model (DeLone & McLean 1992). Positive experience with use would result in higher user satisfaction, similarly, augmentative user satisfaction would result in augmentative use (DeLone & McLean 2003). In virtue of the user satisfaction and post-usage favorite behavior would happen. It was
supposed that the information system was to be proceeded if the users or top management of the system were positive, thus affecting and consolidating subsequent user satisfaction and post-usage favorite behavior and vice versa. Afterward we proposed that there was a supposition presented below:

H8. Post-usage favorite behavior was two-way associated positively with the likelihood of user satisfaction to each other

3. RESEARCH METHODOLOGY

The research framework conducted for this study was first used as the criterion for a literature review and the generation of the initiative appliance. This application was pre-tested, modified, and used to capture data in a cross-industrial survey of corporate e-banking services. Sample gathered in this study were used to further refine the application in following analysis. The questionnaire was based on the prior researches. Four major sections could be identified in the questionnaire; the first two sections (questions 1 to 6) captured the cognition of vertical coordination with principal bank and incentives for businesses in each company (Gatignon & Robertson 1989), while the second three sections (questions 7 to 17) determined the present situation of the organization (Bock & Zmud & Kim & Lee 2005; Jones & Jimmerson & Griffiths 2005; Parasaruraman 2000; Rangarajan & Chonko & Jones & Roberts 2004; Thong & Yap & Raman 1996; Thong & Yap 1995). The third two sections (Q18-Q26) were designed to explore the perception of the company that contributed to greater user satisfaction and the fourth two sections (Q27-Q30) were designed to identify the perceived corporate e-banking services by the company (Aladwani 2001; Annavarjula & Beldona 2000; Mirani & Lederer 1998; Sung 2006).

A Likert type of scale was used, 1 to 5, with 5 being most significant and 1 the least (Ghosh & Liang & Meng & Chan 2001).

Interviewees in the pilot test were requested to first completely fill in a questionnaire and then to afford an open-ended comments on the contents, readability, and format, as well as to detect any other potential problems. The pilot test was adopted through a series of face-to-face in-depth interviews with five financial/accounting managers/officers who have used the corporate e-banking services in their companies. A cross-industrial survey of corporate e-banking services users was used for sample collection. A questionnaire was developed for this end. Respondents were asked to reply to the questions in the context of experience in corporate e-banking services.

The questionnaire was mailed to 200 participants who are employed in financial/ accounting divisions of chosen companies. After a reminder mailing to nonrespondents, a total of 178 valid responses were received with the rate of response was 89%.

4. THE EMPIRICAL FINDINGS

4.1 Measurement of reliability

The application of the reliability and validity determines the instrumental analysis of research. Describing the application of the reliability and its calculation was prior (Torkzadeh & Doll 1991). Reliability mentioned that the scores of a set of measurements were consistent and could be estimated by the internal consistency of the items with Cronbach’s α (Klenke 1992). The improved 30-item instrument had a reliability of 0.9368 and the reliability of each factor in Cronbach’s α was surpassed the common minimum threshold of proposed value of 0.7 (minimum = 0.81), indicating a acceptable reliability of the instrument.

4.2 Measurement of validity

In this study, we adopted correlation matrix analysis to inspect construct validity of the improved instrument (Doll & Torkzadeh 1988; Hu & Chan & Sheng & Tan 1999). Construct validity states clearly whether the results derived from the measurements were accorded with the theories behind the instrument was planned or not. Construct validity could be decided by...
adopting item-to-total correlation analysis (Doll & Torkzadeh 1988; Ives & Olson & Baroudi 1983; Mitchell 1985). That is, consequently, the reason we adopted through this measurement. Convergent validity was validated by determining whether connections among the scales of the same factor were greater than zero and fully larger to implement discriminant validity analysis (Aladwani & Palvia 2002). After analysis of correlation, the smallest within-factor correlations of every factor were: vertical coordination = 0.54; incentives for businesses = 0.69; innovative culture = 0.41; technology readiness = 0.53; top management support = 0.77; internationalization = 0.71; dependable e-banking services = 0.40; user satisfaction = 0.71; post-usage favorite behavior = 0.78. They were significantly greater than zero and larger sufficiently to implement discriminant validity analysis. Discriminant validity was estimated by computing the times of number which an item correlates greater with other factors than with those of its own factor (Aladwani & Palvia 2002). This number ought to be less than 50% of the underlying comparisons for conforming to the criterion (Campbell & Fiske 1959). The correlation matrix showed ten paradoxes for underlying 786 comparisons, indicating acceptable discriminant validity.

4.3 Structural equation modeling

In this stage, the analysis was implemented by adopting structural equation modeling (SEM) of the CALIS procedure of SAS 8.01 program, offering calculations of parameters and examinations of fit close to LISREL. The seven conventional goodness-of-fit indexes were classified in Table 1. Although some indexes did not fit in with the criterion such as GFI and AGFI, most of them were approached it considerably. The research model, therefore, expressed an acceptable fit in with the questionnaires.

<table>
<thead>
<tr>
<th>Goodness-of-fit measure</th>
<th>Recommended value</th>
<th>Model statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/degree of freedom</td>
<td>≤3.00</td>
<td>3.36</td>
</tr>
<tr>
<td>Goodness-of-fit index (GFI)</td>
<td>≥0.90</td>
<td>0.87</td>
</tr>
<tr>
<td>Adjusted Goodness-of-fit (AGFI)</td>
<td>≥0.80</td>
<td>0.79</td>
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<tr>
<td>Normalized fit index (NFI)</td>
<td>≥0.90</td>
<td>0.88</td>
</tr>
<tr>
<td>Non-normalized fit index</td>
<td>≥0.90</td>
<td>0.87</td>
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<tr>
<td>Comparative fit index (CFI)</td>
<td>≥0.90</td>
<td>0.91</td>
</tr>
<tr>
<td>Root mean square residual (RMSR)</td>
<td>≥0.10</td>
<td>0.17</td>
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</table>

Table 1. Goodness-of-fit measures of the research model

After that, three SEM models involving seven independent variables and two dependent variables were determined to inspect our hypotheses. In these research models, we classified the parallel independent variables in one model for approaching the attribution of each independent variable closer. For example, vertical coordination and incentives for businesses were seen the factors as external ones. All of the independent variables had significant positive relationships on user satisfaction, moreover, user satisfaction and post-usage favorite behavior were interplayed positively as well. The path coefficients of each factor on user satisfaction were: vertical coordination = 0.08; incentives for businesses = 0.11; innovative culture = 0.11; technology readiness = 0.19; top management support = 0.09; internationalization = 0.07; dependable e-banking services = 0.55 at $P ≦ 0.05$ respectively. These results were assisted all the hypotheses we assumed.

5 DISCUSSION AND CONCLUSIONS

This paper had exploited corporate customers’ perspectives on Taiwan corporate e-banking services and had discussed the factors impacting on corporate customer satisfaction with e-banking. Within the factors of what the research had examined, it showed some of the
fundamental factors that affected corporate customers’ perspectives on corporate e-banking services in Taiwan. At the moment, dependable e-banking service was still the conspicuous determinant of satisfaction — customers who detect better dependable e-banking services were more likely to perceive higher satisfaction about corporate e-banking services. The degree of technology readiness for employees also stood out as a principal factor to corporate bank customers. This finding was consistent with prior research about information system success, in which repeat usage, ease of navigation, and reliability of systems quality are regarded as elements of a successful information system dimension (DeLone & McLean 1992, 2003).

At this time of development of corporate e-banking services in Taiwan, it seems that a great deal of corporate customers have embraced it. As mentioned in the preliminary interviews with financial/accounting managers/officers, there are still some substitutions to reduce the applications of corporate e-banking services such as at-home service or on-call service. What the Taiwanese banks need to conduct is to review their corporate customers and classify them according to the company’s nature like the level of internationalization or the degree of innovative organizational culture for avoiding consuming of scarce resources. Besides, banks need to promote it more actively with top management of each firm in explaining the benefits to earn their more consolidated support for enhancing the satisfaction and usage of corporate e-banking services as well. Similarly, banks are able to improve the satisfaction and post-usage favorite behavior of corporate e-banking services with incentives such as cheaper charge for account transfer. Visiting customers regularly and informing them about relevant information they need also could be instrumental for establishing the closer vertical coordination. Most Taiwanese corporate e-banking service providers nowadays adopt a series of security facilitators of preservation, but a common concern still consists in less confidence in security and privacy mechanism on it. They need to offer knowledge to their customers about bank purpose to guard security of the network so as to form a higher level of trust of the web system. The web-based service channel must be well integrated into others so that customers could easily make contact with people who are trained to solve problems effectively, and banks must adopt strong customer orientations.

Overall, corporate customers were fairly positive about the satisfaction and post-usage favorite behavior with corporate e-banking services. Generally, as long as the satisfaction becomes higher the post-usage favorite behavior would follow, and vice versa. Corporate e-banking channel might be able to indirectly push greater customer loyalty through, which is critical in the ever more rival banking industry. The analysis results also demonstrated that it was going to take some work to fully comprehend the potential. There are still considerably numerous tasks that need to be conducted to realize corporate customer response to corporate e-banking service channels well.

References
third dimension in information systems design - the case for incentive alignment.
Information Systems Research, 12 (3), 225-239.
internationalization-performance relationship: Evidence from meta-analysis.
Management International Review, 47 (3), 319-347.
export intensity? Evidence for Spanish SMEs' internationalization process.
European Planning Studies, 14 (6), 791-810.
service encounters. Journal of the Academy of Marketing Science, 28 (1),
138-149.
intention formation in knowledge sharing: Examining the roles of extrinsic
motivators, social-psychological forces, and organizational climate. MIS
Quarterly, 29 (1), 87-111.
Review of World Economics, 129 (2), 275-299.
carrier adoption, use, and satisfaction with EDI. Transportation Journal, 35 (4),
44-57.
models of mental comparison processes. Journal of Consumer Research, 21 (1),
100-118.
options: An investigation of alternative models of service quality. International
technology: A comparison of two theoretical models. Management Science, 35
(8), 982-1003.
MIS Quarterly, 12 (1), 51-61.
the dependent variable. Information Systems Research, 3 (1), 60-95.
absence of objective measures: The case of the privately-held firm and

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Kennelly, J. J. and Lewis, E. E. (2002). Degree of internationalization and corporate


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**Correlations (Questionnaire)**

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**Figure 2. Analysis of ... [176]**
4.3. Structural equation modeling

In this stage, the analysis was implemented by adopting structural equation modeling (SEM) of the CALIS procedure of SAS 8.01 program, offering calculations of...
corporate
customer

: An investigation of Taiwan small-and-medium enterprises (SMEs)

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Due to the burgeoning development of electronic commerce (e-commerce), the broader applications of emerging service—Internet banking (e-banking) services have been introduced and provided by financial holding companies or banks at an accelerating rate since they can provide efficient, reliable, securable, and convenient financial services, such as online payment, deposit/loan, trading, and clearing/settlement, via electronic channels (e-channels, e.g., Internet and phone) for customers. E-banking services not only can create new competitive advantages improving bank-corporate relationship with more convenience, perhaps, but also can improve their relationships with customers for banks. Obviously, e-banking can offer better services required by corporations and individuals, it could be a strategic niche no matter for banks or their customers. Conceivably, how to implement e-banking successfully is becoming a critical management issue. Unfortunately, research pays scarce attentions on what factors drive success of e-banking are still rare, particularly from corporate customers’ perspective (corporate customer represented as customer hereinafter). For the reason, this paper attempts to explore what factors affect customer satisfaction with e-banking (CSEB) which is one surrogate variable of success of e-banking services. Based on a survey of 178 respondents collected from Taiwan companies, the results support that environmental, organizational, and user interface factors will affect
customer satisfaction with e-banking significantly.

Despite this, there have been very few academic investigations into the novel service channel and determinants that transformed the Internet-based technology into a successful one as well as into the dimensions that determined the corporate customer’s satisfaction and post-usage behavior with corporate e-banking, particularly SMEs. Since research on corporate customer satisfaction and reuse has been highly correlative to the success of new financial services in the banking industries. This study developed three categories of seven crucial determinants that considered all external environments such as vertical coordination and incentives, internal organization like innovative culture and technology-readiness, and globalization/Internet-based issues as well as subsequent user satisfaction and post-usage behavior based on the framework of structural equation modeling. The satisfaction at corporate e-banking for SMEs adopted a survey using the data from 178 financial/accounting managers/officers in those enterprises throughout Taiwan. We first established convergent validity, discriminant validity, and reliability of the constructs. Structural equation modeling techniques were then used to explore the relationship among those determinants above and user satisfaction and post-usage behavior. It was shown that identified dimensions accounted for a significant impact on user satisfaction.

Furthermore, there exist a reciprocal relationship between a significant portion of the variation in . We believe the results and findings proposed in this paper not only can offer in-depth insights for practitioners about how to implement e-banking successfully, but also can be further directions for researchers interested in designing related theories.

The knowledge of SMEs’ perception in the corporate e-banking provided banks a hopeful starting point for establishing a successful management for their e-businesses of corporate e-banking.

**Keywords:** corporate e-banking services
Within the last years, the Internet has brought consequential changes in the rules of
operation of the banking industry (Gunasekaran et al. 1999). Explicitly, the industry has moved instantly to exploit the new communication/transaction channels provided by the Internet to improve their front-end Internet applications (Gonzalez et al. 2004). In consequence, the number of e-banking has increased promptly (Aladwani 2001). Nowadays, various financial services institutions are endeavoring to become customer focused. A critical element of improved customer focus is the implementation of instruments that provided development of better relations between banks and their customers (Gonzalez et al. 2004), especially corporate customers due to the most major profit opportunities for banks (Tyler et al. 1999; Zineldin 1995). Across all industries, bank-corporate relationship remained a key issue as businesses endeavored to hold a comparative advantage in the marketplace (Kandampully et al. 1999). Because financial services, particularly banks, contest in the marketplace with generally indistinctive products (Stafford 1996), bank-corporate relationship became the major competitive efficient instrument for the bank (Zineldin 1996). The relationship between banks and corporate customers is the most important factor in the success of new financial services (Easingwood et al. 1993). There is an atmosphere of confidence and satisfaction in bank-corporate relationship (Zineldin 1995). Similarly, a competitive predominance in banking derived almost exclusively from customer’s satisfaction. Generally speaking, it is recognized that banks that exceed in customer’s satisfaction have a conspicuous marketing ascendancy because improved degree of customer’s satisfaction associated with greater gains, increased cross-sell ratios, higher customer retention (Gonzalez et al. 2004; Nilsson et al. 2001), and an expanded market share (Bowen et al. 1993).

As discussed above, providing satisfied services and products to customers is prerequisite for success and survival in today’s competitive banking environment (Nilsson et al. 2001; Wang et al. 2003). A successful corporate e-banking advances a bank’s reputation, enhances its customer retention, attracts new customers, and improves its financial performance and profitability (Julian et al. 1994; Zeithaml et al. 1996), simultaneously, provides a firm with conveniences, promptitude, strong technical supporting (Ibbotson et al. 2003). Despite its significance to both banking industry and industrial sectors, limited research has been made a thorough inquiry that considered customer’s satisfaction of SMEs and corporate e-banking together — even though considerable research has been conducted on large corporations (Tyler et al. 1999) and individual (Cunningham et al. 2005; Karjaluoto et al. 2002; Kolodinsky et al. 2004; Liao et al. 2002; Sohail et al. 2003), considered separately. It is our objective to identify practitioners and researchers how structural equation modeling (SEM) could be used as a planning process that linked together customer’s satisfaction of SMEs and corporate e-banking in the banking industry.

In this study, we examined vertical links between banks and corporate clients and the levels of bank incentives initially. The subsistent literature within marketing had an almost specially demand-side orientation; that is, it probed into traits of firms most likely to adopt innovations. However, supplier marketing schemes and incentives were sustaining in encouraging satisfaction. The economics literature was rich with ideas for proceeding further supply-side research (Gatignon et al. 1989). Internal organizational elements like innovative culture, technology readiness for corporate clients’ employees, and top management support for business were used to explore the relationship subsequently for solving problems pertained to resources limitation within SMEs.
Eventually, few empirical studies had examined the influence of internationalization and corporate e-banking on firm performance. However, these studies had, on the whole, yielded mixed or conflicting results. The present research was an attempt to achieve an explicit knowledge of this relationship so as to be beneficial to build a bridge between academic insights and practical business applications (Annavarjula et al. 2000; Sung 2006).

The goal of this article was to bring a more comprehensive blueprint of the nature of satisfaction with corporate e-banking channels of bank’s corporate clients and help address some of these gaps in the existing body of literature. In this content the present study was devised to go into details and analyze the determinants influencing the satisfaction and post-usage behavior empirically.
This study was aimed at the factors of corporate e-banking to build up the research framework which were from three aspects, that is, external environmental factors including bank-company vertical coordination and incentives for corporate clients, internal organizational factors containing innovative culture of organization, the degree of technology readiness for corporate clients’ employees and top management support for business in turn, the factors concerning globalization/Internet comprising the level of internationalization and the features of corporate e-banking ultimately. This article began with the dimensions in sequence and the orders were as follow.

Place research framework here (3 major factors driving corporate customer satisfaction)

Large companies escaped from dependence on a single bank (Zineldin 1995), furthermore,
those who were generally more beneficial for banks than SMEs revealed relatively more willingness to embrace technological tools of communication and did not seem to rely on personal interaction with their principal bank (O'Donnell et al. 2002). However, this situation was not suitable for SMEs because they may not communicate with their principal bank through remote interaction such as internet banking. The traditionally poor relationship between banks and their corporate clients of SMEs, accordingly, had been well shown throughout the years (Binks et al. 1997).
Field Code Changed

There were scholars who laid emphasis on the organizational variables of climate and culture as they were in connection with learning organizations (Slater et al. 1995). Other scholars asserted that organizational characteristics were supposed to be correspondent with the essence of the climate which the organization was trying to create (Schneider et al. 1993). Organizational climate was a considerably persistent trait of an organization, which differentiated it from other organizations. It involved members in aggregative opinions about their organization with aspect of dimensions like autonomy, support, and innovation. Organizational culture dominated acceptive behaviors and built up the way problems were satisfied (Rangarajan et al. 2004).
soon as a culture was founded, it was painful to alter. Culture created a particular climate of operations in an organization (McNabb et al. 1995). Entrepreneurship was an element of culture characterized by risk forbearance, proactivity, hospitality to innovation, resistance to bureaucracy and so on (Kanter 1989; Naman et al. 1993; Sykes et al. 1989).

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Businesses that were ready for change were informative to advancement of sales. Organization readiness for change was a situation influenced by all sorts of organizational precedent variables such as culture and climate (Rangarajan et al. 2004). It was sustaining to estimate the organization’s readiness for change to lead change endeavors (Armenakis et al. 1993). Readiness for change contained an appreciation of the diversities that existed as well as the effect of the proponed change objectives (Pond et al. 1984). Employees responded to what was occurring in their environments and made postulations about the change process. These postulations and anticipations were constituted an employee’s cognition of an organization’s readiness for change (Rangarajan et al. 2004). Comprehending cognition of an organization’s readiness for change was needed to catch on change process. In this process, employees would make images of the organization’s readiness for change, which might be suggestive of the organization’s capability to smoothly make change (Armenakis et al. 1993). For this reason, cognition of an organization’s readiness for change was in the name of a critical factor in interpreting organizational resistance (Eby et al. 2000), further, individuals’ cognition of an organization’s readiness for change might be formed by the cognition of other factors (Griffin 1997). Those such as supple policies and steps, logistics and systems support, and confidence in management served as better forecasters
for realizing organizational readiness for change (Eby et al. 2000). There was testimony to
suggest that employees who noticed strong human relations merit in their company exposed
higher degrees of readiness for change. In the bargain, readiness for change mediated the
relationship between reshaping abilities and information system usage. Their findings also
showed that readiness for change elaborated a positive fundamental influence on employees'
satisfaction with the information system (Jones et al. 2005).

Companies were beginning with technology to predigest the processes which they market to and
serve customers, in want of a down-the-line appreciation of customers' technology readiness. The
technology readiness was a multiple-item scale with psychometric character that bankers could
use to derive an in-depth understanding from the readiness of their customers to accept and
interact with technology, particularly computer/Internet-based technology. The technology
readiness could be used to appraise the technology readiness of corporate customers and receive a
better understanding of their technology readiness for making the right decisions based on
designing, executing, and managing the employee-technology relationship. The technology
readiness was unusually considerable for corporate customers to whom employees might call for
aid as there were problems with the computer/Internet-based technology interface.
A great deal of early studies that had applied a single-item measure like proportion of foreign sales to total sales (FSTS) or proportion of foreign assets to total assets (FATA) to evaluate the level of internationalization. A single-item measure may explain response, nonetheless, be short of validity and incur fake conclusions (Sullivan 1994). In addition, the percentage of foreign sales to total sales as a measurement of internationalization was risky that a company’s foreign sales in the course of study might be factitiously overestimated or underestimated by some factors such as a random concussion in exchange rates or accounting methods where were varied like return on investment (ROI), return on assets (ROA), or return on sales (ROS) may lack consistency (Annavarjula et al. 2000). There was still a little criticism for those conventional performance measures such as ROA,ROI, and ROS which had been suffered from as much confined in domain (Chakravarthy 1986). Hence, we discovered that although single-item measures were inappropriate, only diffusion of all kinds of measures did not push through a far-reaching study as well. This is because most of the forementioned measures did not fulfill the issue of internationalization yet. Thus, formulating performance measures in the light of the aim of the multinational businesses had already been a pressing need. From a customer perspective, speed and easiness were also crucial determinants of adoption intentions (Daniel 1999; Liao et al. 1999; Mols 1998; Sathy 1999). Few scholars mentioned numerous issues relevant to post-developing a site for e-banking objectives such as security concerns and privacy of customer information (Nath et al. 1998).
Intention to use might be a worthwhile substitutive measure in some settings and it was an attitude, yet post-use was a behavior. Nonetheless, attitudes, and their contact with behavior, were notoriously crucial to measure; and many scholars may select to stay with use (DeLone et al. 2003).
Figure 1. Research Model for Assessing Satisfaction of Businesses

- Factors of external environment
  - Vertical coordination
  - Incentives for businesses

- Factors of internal organization
  - Innovative culture
  - Technology readiness
  - Top management support

- Factors of globalization/Internet
  - Internationalization
  - Features of e-banking

methodology, preliminary interview and sample collection
In the light of the results of preliminary interviews, we identified that somewhat of reasons might diminish the applications of corporate e-banking. For instance, most banks provide other service channels such as at-home service or on-call service for improving the convenience than corporate e-banking. A manager, moreover, was concerned that the amount of money between firms are so extensive all the time to exchange through corporate e-banking on account of less confidence in security and privacy mechanism on it. Similarly, connecting with extranet is required for using corporate e-banking yet affected by virus throughout extranet. They would rather fall in and wait for in the bank in person than trade with corporate e-banking. This is because that corporate e-banking is a kind of self-service which implied that taking greater risk of making mistakes might occur as using corporate e-banking by employees. Instead of receiving the costs made by them, they prefer shifting the costs to banks. On the one hand, we found out other reasons related to vertical coordination and incentives for businesses with banks as well. Bankers, for example, promote for corporate e-banking with their corporate clients negatively to familiarize themselves with the usage of corporate e-banking. There seems, in the meanwhile, to be something about misunderstanding on corporate e-banking like the absence of receipt by request of the business partners. One executive, on the other hand, clarified that bank would remail the receipt after every trading through corporate e-banking in few days. He also indicated that the more restrained the auditing processes are the greater user satisfaction with corporate e-banking is. Double check is oftentimes adopted by businesses from editing a trading, verifying and, to approving it step by step. The mechanism could reduce the incidence of mistakes made by staffs for diminishing the risk of trading as well. He was of the opinion that the firms on business partners are more stable the satisfaction of corporate e-banking would be higher. After the interviews with participants, this procedure came to an end of confirmation with 30 peculiar
Here was the distribution of those companies which respondents worked in as follows:

**Table 1. Profile of Companies and Respondents Represented in Sample**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Companies</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>66</td>
<td>37.1</td>
</tr>
<tr>
<td>Construction</td>
<td>17</td>
<td>9.5</td>
</tr>
<tr>
<td>Commerce</td>
<td>32</td>
<td>18.0</td>
</tr>
<tr>
<td>Transportation</td>
<td>11</td>
<td>6.2</td>
</tr>
<tr>
<td>Service</td>
<td>37</td>
<td>20.8</td>
</tr>
<tr>
<td>Others</td>
<td>15</td>
<td>8.4</td>
</tr>
<tr>
<td>Number of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>14</td>
<td>7.9</td>
</tr>
<tr>
<td>5-19</td>
<td>43</td>
<td>24.2</td>
</tr>
<tr>
<td>20-49</td>
<td>38</td>
<td>21.3</td>
</tr>
<tr>
<td>50-99</td>
<td>12</td>
<td>6.7</td>
</tr>
<tr>
<td>&gt;100</td>
<td>71</td>
<td>39.9</td>
</tr>
<tr>
<td>Capital (NT$ Million)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>32</td>
<td>18.0</td>
</tr>
<tr>
<td>5-30</td>
<td>61</td>
<td>34.3</td>
</tr>
<tr>
<td>30-60</td>
<td>25</td>
<td>14.0</td>
</tr>
<tr>
<td>60-100</td>
<td>5</td>
<td>2.8</td>
</tr>
<tr>
<td>&gt;100</td>
<td>55</td>
<td>30.9</td>
</tr>
<tr>
<td>Number of staffs of accounting/financial division</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>90</td>
<td>50.5</td>
</tr>
<tr>
<td>6-9</td>
<td>32</td>
<td>18.0</td>
</tr>
<tr>
<td>10-29</td>
<td>35</td>
<td>19.7</td>
</tr>
<tr>
<td>&gt;30</td>
<td>21</td>
<td>11.8</td>
</tr>
<tr>
<td>e-banking experience (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>43</td>
<td>24.2</td>
</tr>
<tr>
<td>2-5</td>
<td>101</td>
<td>56.7</td>
</tr>
<tr>
<td>6-10</td>
<td>21</td>
<td>11.8</td>
</tr>
<tr>
<td>11-15</td>
<td>11</td>
<td>6.2</td>
</tr>
<tr>
<td>&gt;16</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>Service application (multichoice)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookkeeping</td>
<td>97</td>
<td>54.5</td>
</tr>
<tr>
<td>Loan</td>
<td>51</td>
<td>28.7</td>
</tr>
<tr>
<td>Factoring</td>
<td>34</td>
<td>19.1</td>
</tr>
<tr>
<td>Searching</td>
<td>131</td>
<td>73.6</td>
</tr>
<tr>
<td>Foreign exchange/trading</td>
<td>45</td>
<td>25.3</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taipei</td>
<td>38</td>
<td>21.3</td>
</tr>
<tr>
<td>Taoyuan</td>
<td>52</td>
<td>29.2</td>
</tr>
<tr>
<td>Hsinchu</td>
<td>22</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>Taichung</td>
<td>27</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>----</td>
</tr>
<tr>
<td>Tainan</td>
<td></td>
<td>39</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>178</td>
</tr>
</tbody>
</table>
In the next place, a principal component factor analysis was implemented and nine constructs were specified and extracted in the model. There were, accordingly, no cross-loading items and summed up 82.1 percent of variance was explained. Simultaneously, items would tend to measure the same construct which showed significantly and definitely greater factor loadings on a single construct than on others, recommending the felicitous convergent and discriminant validity. The observation of reliability and convergent/discriminant validity proposed the apposite measurements adopted in this study.

Table 2. Factor Analysis Results: Principal Component Extraction (only 2 digits here)
4.3. Structural equation modeling

In this stage, the analysis was implemented by adopting structural equation modeling (SEM) of the CALIS procedure of SAS 8.01 program, offering calculations of parameters and examinations of fit close to LISREL. The seven conventional goodness-of-fit indexes were classified in. Although some indexes did not fit in with the criterion such as GFI and AGFI, most of them were approached it considerably. The research model, therefore, expressed an acceptable fit in with the questionnaires.
After that, three SEM models involving seven independent variables and two dependent variables were determined to inspect our hypotheses. In these research models, we classified the parallel independent variables in one model for approaching the attribution of each independent variable closer. For example, vertical coordination and incentives for businesses were seen the factors as external ones. As the results demonstrated in the three following figures, all of the independent variables had significant positive relationships on user satisfaction, moreover, user satisfaction and post-usage behavior were interplayed positively as well. The path coefficients of each factor on user satisfaction were: vertical coordination = 0.08; incentives for businesses = 0.11; innovative culture = 0.11; technology readiness = 0.19; top management support = 0.09; internationalization = 0.07; features of e-banking = 0.55 at \( P \leq 0.05 \) respectively. These results were assisted all the hypotheses we assumed.

### Table 3. Goodness-of-fit Measures of the Research Model

<table>
<thead>
<tr>
<th>Goodness-of-fit measure</th>
<th>Recommended value</th>
<th>Model statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/degree of freedom</td>
<td>≤3.00</td>
<td>3.36</td>
</tr>
<tr>
<td>Goodness-of-fit index (GFI)</td>
<td>≥0.90</td>
<td>0.87</td>
</tr>
<tr>
<td>Adjusted Goodness-of-fit (AGFI)</td>
<td>≥0.80</td>
<td>0.79</td>
</tr>
<tr>
<td>Normalized fit index</td>
<td>≥0.90</td>
<td>0.88</td>
</tr>
<tr>
<td>Non-normalized fit index</td>
<td>≥0.90</td>
<td>0.87</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>≥0.90</td>
<td>0.91</td>
</tr>
<tr>
<td>Root mean square residual (RMSR)</td>
<td>≥0.10</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Figure 3. Model A Testing Results (place with editable figures)
5. Discussion and Conclusions

This paper had exploited corporate customers’ perspectives on Taiwan corporate e-banking service especially SMEs and had discussed the factors impacting on the satisfaction of corporate e-banking. Within the factors of what the research had examined, it showed some of the fundamental factors that affected corporate customers’ perspectives on corporate e-banking in Taiwan. At the moment, features of e-banking was still the conspicuous determinant of satisfaction — customers who detect better features of e-banking were more likely to perceive higher satisfaction about corporate e-banking. The degree of technology readiness for employees also stood out as a principal factor to corporate bank customers. This finding was consistent with prior research about information system success, in which repeat usage, ease of navigation, and reliability of systems quality are regarded as elements of a successful information system dimension (DeLone et al. 1992; DeLone et al. 2003).

At this time of development of corporate e-banking in Taiwan, it seems that a great deal of corporate customers have embraced it. As mentioned in the preliminary interviews with financial/accounting managers/officers, there are still some substitutions to reduce the applications of e-banking such as at-home service or on-call service. What the Taiwanese banks need to conduct is to review their corporate customers and classify them according to the company’s nature like the level of internationalization or the degree of innovative organizational culture for avoiding consuming of scarce resources. Besides, banks need to promote it more actively with top management of each firm in
explaining the benefits to earn their more consolidated support for enhancing the satisfaction and usage of corporate e-banking as well. Similarly, banks are able to improve the satisfaction and post-usage behavior of corporate e-banking with incentives such as cheaper charge for account transfer. Visiting customers regularly and informing them about relevant information they need also could be instrumental for establishing the vertical coordination. Most Taiwanese corporate e-banking service providers nowadays adopt a series of security facilitators of preservation, but a common concern still consists in less confidence in security and privacy mechanism on it. They need to offer knowledge to their customers about bank purpose to guard security of the network so as to form a higher level of trust of the web system. The web-based service channel must be well integrated into others so that customers could easily make contact with people who are trained to solve problems effectively, and banks must adopt strong customer orientations.

Overall, corporate customers were fairly positive about the satisfaction and post-usage behavior of corporate e-banking. Generally, as long as the satisfaction becomes higher the post-usage behavior would follow, and vice versa. For SMEs, determining the satisfaction and post-usage behavior of corporate e-banking is even themselves. Suppose that a company does not reach a higher level of internationalization, innovative organizational culture, and technology readiness for employees, the satisfaction and post-usage behavior for corporate e-banking might stay in a low percentage in the light of this study.

Future research might involve other issues about corporate e-banking such as trust. Trust is a critical issue in satisfaction and usage, but trust comes primitively from the interpersonal relationships in Taiwan, so one theme that needs concern is how web-based service channels could make contact with interpersonal services. Further research ought to also explore the influence of usage of corporate e-banking on the wider domains of the corporate customer interaction with the bank. Acquiring the benefits from usage of corporate e-banking might be conducive to create better relationships between bank and corporate customer, or might result in higher switching costs. Through these, corporate e-banking channel might be able to indirectly push greater customer loyalty through, which is critical in the ever more rival banking industry. The analysis results also demonstrated that it was going to take some work to fully comprehend the potential. There are still considerably numerous tasks that need to be conducted to realize corporate customer response to corporate e-banking service channels well.

References


Daniel, E. "Provision of Electronic Banking in the UK and the Republic of Ireland,"


Lubbe, B. "The Effect of Internet Apprehension and Website Satisfaction on Air Travellers' Adoption of an Airline's Website," *Journal of Air Transport Management* (13:2) 2007, pp 75-80.


Palmer, D. "Broken Ties: Interlocking Directorates and Intercorporate Coordination,"


Venkatraman, N., and Ramanujam, V. "Measurement of Business Performance in


### Appendix

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Coordination</td>
<td></td>
</tr>
<tr>
<td>VC1. My job banks with the principal bank highly closely.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>VC2. As long as the principal bank promotes new services/products, it would inform my company actively as soon as possible.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>VC3. The staffs of the principal bank visit my company regularly.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Incentives</td>
<td></td>
</tr>
<tr>
<td>INC1. As long as the principal bank promotes new services/products, it would introduce those to my company actively as soon as possible.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>INC2. As long as the principal bank promotes new services/products, it would provide trial ones for my company actively as soon as possible.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>INC3. As long as the principal bank promotes new services/products, it would offer givebacks for my company actively as soon as possible.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Innovative Culture</td>
<td></td>
</tr>
<tr>
<td>INV1. I have an open communication with my executives or colleagues.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>INV2. My company gives me a lot of autonomous space on my job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>INV3. My company encourages suggesting ideas for new opportunities.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>INV4. My company encourages finding new methods to perform a task.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>INV5. My company puts much value on taking risks even if that turns out to be a failure.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Technology Readiness</td>
<td></td>
</tr>
<tr>
<td>TR1. I like the idea of doing business via computers.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>TR2. I find computers easy to use.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>TR3. I could usually figure out new high-tech products/services without help from others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Top Management Support</td>
<td></td>
</tr>
<tr>
<td>TS1. Top management attends the meetings of promotion of corporate e-banking.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
TS2. Top management expresses opinions about corporate e-banking. 1 2 3 4 5
TS3. Top management monitors the actual state of corporate e-banking using. 1 2 3 4 5

Internationalization
INT1. Most products/services of my company mainly are sold abroad. 1 2 3 4 5
INT2. My company establishes plants, branches, or subsidiaries abroad. 1 2 3 4 5
INT3. Top managers of my company go abroad frequently or meet foreign clients regularly. 1 2 3 4 5

Features of e-Banking
F1. Corporate e-banking meets my demand for the service. 1 2 3 4 5
F2. Corporate e-banking provides more diverse services/products. 1 2 3 4 5
F3. Corporate e-banking provides more highly secured services. 1 2 3 4 5
F4. Corporate e-banking ensures my company’s information privacy. 1 2 3 4 5
F5. Corporate e-banking provides easier service to me. 1 2 3 4 5
F6. Corporate e-banking provides faster service to me. 1 2 3 4 5

User Satisfaction
US1. In sum, I am satisfied with corporate e-banking. 1 2 3 4 5
US2. In sum, I am of the opinion that corporate e-banking is successful. 1 2 3 4 5

Post-usage Behavior
PB1. After using corporate e-banking, I would use it again afterward. 1 2 3 4 5
PB2. After using corporate e-banking, I would introduce it to others. 1 2 3 4 5