E-Entrepreneurship: A Comparison among Industry Sectors

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Abstract

This research addresses the question about the potential growth of electronic marketplaces as an e-entrepreneurship model. We examine how electronic marketplaces are different among industry sectors from two major perspectives: the level of electronic marketplace usage and the level of e-readiness. An empirical study was conducted in USA and the results show that there is wider range of industry sectors that are ready and will be using electronic marketplaces in the future. These findings indicate a better chance for the growth of e-entrepreneurship as a solution for entrepreneurs in our current troubled economy.

Introduction

The constant and rapid growth of Internet technologies in the networked economy has inevitably had a significant influence on various possibilities for developing innovative business ideas. In addition, the financial crisis has forced businessmen to seek for a way to do business with higher efficiency and effectiveness and Internet technologies are the means for achieving these objectives. The term 'e-entrepreneurship' describes the act of establishing new companies specifically in the networked economy (Kollmann, 2006; Matlay, 2004). Nowadays, many business operations (procurement, supply chain management, inventory management) can be done online, saving companies a great deal of time and money. Among those opportunities, electronic marketplaces have been perceived as a business model that attracts more attention of entrepreneurs (Rao et al., 2007; Truong, 2008).

Electronic marketplaces work as inter-organizational information systems that allow business partners to exchange business information, communicate, and interact through an electronic platform (Malone et al., 1987; Bakos, 1991). Several electronic marketplaces have shown a significant success in their business such as Covisint, FreeMarket, WalMart Retail link. Nevertheless, the uncontrollable increase of the number of established electronic marketplaces together with some challenges of using these platforms has made client companies become hesitant to adopt them (Truong and Jitpaiboon, 2007). Despite their great benefits, risks such as leaking of business information, dealing with unknown business partners, together with high technical requirements and high financial investments have reduced the number of electronic marketplace adopters, thereby threatening the growth of electronic marketplaces in the near future.

Many research studies have been conducted in the context of electronic marketplaces but very little attention has been paid to the future of electronic marketplace from the entrepreneurship point of view. Electronic marketplaces have been evolving and overcoming their disadvantages, but they still do not have sufficient customers, especially some electronic marketplace platforms that require high investments. As the economy gets worse and many companies are looking for the way to cut costs, it is important to examine how different industry sectors react to the advent of electronic marketplaces. The survey conducted by European Commission (2007) and an older one conducted by Forester Research (2000) did indicate that some industry sectors (such as electronic or communication) accepted electronic marketplaces at higher rate than others. However, these surveys did not get into the bottom of the situation. they did not show what dimensions of electronic marketplaces are favorable or non-favorable to each industry sectors. It also did not show how ready companies in each sector were to adjusting to the era of electronic trading.

The purpose of this research is to analyze the chances of electronic marketplaces as a successful e-entrepreneurship model in the near future by examining the perception of companies in various industry sectors to the potential of electronic marketplaces. Major research questions are: 1) What are the differences among industry sectors in using electronic marketplaces; 2) How ready are companies in each industry sector to using electronic marketplaces. The answers for those research questions will provide us more knowledge about the future of electronic marketplaces from e- entrepreneurship point of view. This research also has some practical implications as it will enable entrepreneurs in different industry sectors to reevaluate the values of electronic marketplaces and decide whether they should open new e-business using this model and what types of electronic marketplaces will be suitable for them.

The research is constructed as follows. First, the background of electronic marketplaces, categories, and literature review of their benefits and challenges will be provided. Then, the research hypotheses will be proposed. Next, the research methodology will be described along with the data collection process. The results of the hypothesis testing will be shown with the discussions. Finally, the conclusions are discussed with research implications, limitation, and future research.

Introduction to Electronic Marketplaces

Electronic marketplaces can be defined as an inter-organizational platform that enables companies to exchange business information, and complete transactions thru the Internet (Bakos, 1991, Malone et al., 1987). Key players of electronic marketplaces are market makers, suppliers, and buyers. When customers use electronic marketplaces, all activities in the entire supply chain process including searching for trading partners, request for proposal, request for quotes, searching of products and prices, ordering and replenishment, transportation, payment, shipment and inventory tracking, exchange of information, and communication between trading partners will be done online. Accordingly, a significant amount of time and money will be saved through using this business model. Electronic marketplaces are important players in several industries because they promise to greatly improve economic efficiency, reduce margins between price and cost, and speed up complicated business deals. The services they provide will expand many customers' purchasing and selling abilities, and will make prices more dynamic and responsive to economic conditions (Feldman, 2000). Customers who expect to cut costs and increase the efficiency as well as effectiveness of their business performance are the ones who benefit most from adopting electronic marketplaces. This attracts the attention of entrepreneurs who are seeking a successful business model in this economic downturn.

Electronic marketplaces are not homogeneous and can be implemented in various forms which have distinctive advantages and disadvantages. Electronic marketplaces can be categorized into three major types (Le, 2005; Truong, 2008):

1. Third Party Exchange (3PX): This is a many-to-many electronic marketplace which plays the role of an independent organization that connects buyers and sellers thru their electronic trading platform. This type of electronic marketplaces usually does not require high start-up cost or high level of information technology readiness. However, it does not provide a high level of collaboration between business partners and the security issue and trust barrier is one of participants' main concerns (Le, 2005; Truong, 2008).
2. Industry Sponsored Market (ISM): This is a some-to-many electronic marketplace which established by dominant companies in a specific industry sector such as automotive, chemical, or electronic industries. Participants can benefit from the high level of collaboration with business partners thru ISM's secured and sophisticated network. On the other side, it is more expensive to set up and requires participants to meet certain technical requirements and pay high membership as well as trading fees.
3. Private Trading Network (PTN): This is a one-to-many electronic marketplace which usually is set up by a dominant buyer or seller. This marketplace helps connect this buyer/seller to all business partners and allow them to complete all trading online. This is the most secured and advanced network which provide the highest level of collaboration between the dominant company and business partners. However, this type of electronic marketplace is limited only to large companies with strong financial and technical resources.

Electronic Marketplaces and Their Role in the Economy

In order to examine the chance of success of electronic marketplaces, it is important to understand their role in the economy. In the current economic downturn, many industries experienced the difficulties in their business. In the most recent report in February 2009, Institute for Supply Management (ISM) surveyed eighteen manufacturing industries (Primary Metals; Wood Products; Electrical Equipment, Appliances & Components; Furniture & Related Products; Paper Products; Textile Mills; Fabricated Metal Products; Nonmetallic Mineral Products; Miscellaneous Manufacturing; Plastics & Rubber Products; Chemical Products; Machinery; Transportation Equipment; Computer & Electronic Products; Petroleum & Coal Products; Printing & Related Support Activities; Apparel, Leather & Allied Products; and Food, Beverage & Tobacco Products). None of them reported growth. Some typical responses from industries about this downturn include: "Customers across the board are being very cautious about ordering any stock." (Transportation Equipment); "Business is very slow, some of which is due to seasonality, and some is due to the state of the economy." (Chemical Products); "Asia previously was over 50 percent of our business and is now close to zero." (Machinery); "Still seeing frequent attempts at increases while everything is reacting to an economy that is retracting." (Food, Beverage & Tobacco Products); "Business slightly improved in February. May be the result of inventories finally coming into balance with lower demand." (Paper Products) (ISM Report, 2009).

Under these circumstances, electronic marketplaces may be one of the solutions for our troubled economy. The advent of electronic marketplaces apparently has changed the market in term of search, price discovery, and trade settlement (Lee and Clark, 1996). Some forms or electronic marketplaces such as electronic brokerage and electronic auction are considered as alternative market structure which has higher efficiency and lower transactional costs. Based open the Internet platform electronic marketplaces posses some substantial benefits for customers. Many studies have been done to establish and verify the value generation model for electronic marketplaces. Old studies used the economics theory to explain the capability of electronic marketplaces to reduce the trading costs, search costs, and increase the access to the trading partners' database. Some more recent studies have emphasized the benefits of electronic marketplaces from the supply chain collaboration perspective. Le (2002) has analyzed the pros and cons of those studies and recommended two dimensions for the value proposition of electronic marketplaces: market aggregation and supply chain collaboration. These dimensions have been empirically tested in the study by Rao et al. (2007). Market aggregation refers to usefulness of electronic marketplaces in overcoming market fragmentation, thus offering buyers more choices, more readily available information about product and suppliers, transparent prices, and lower transaction costs. Supply chain integration refers to the usefulness of the electronic marketplaces that enables market participants to build and deepen their business relationships for the purposes of improving individual business processes and overall supply chain performance.

These value propositions of electronic marketplaces make them attractive business model for customers in many industries, especially in this difficult time when all companies are trying to improve their business performance through cost reduction and better interaction with business partners, domestic or international. This will become an excellent for entrepreneurs who seek to open a new business in the networked economy.

Yet entrepreneurs need to be aware of some barriers created by electronic marketplaces. Rao et al. (2007) proposed two major challenges of using electronic marketplaces for business trading: financial risks and trust barriers. Financial risks refer to costs including initial development investments and recurring operating expenses. Trust barriers refer to constraints due to the uncertainties in safeguarding sensitive business information and in dealing with unknown business partners. Although customers may be negatively affected by these challenges, the degrees of the challenges are not homogeneous and depend on the various factors such as electronic marketplace type, company's size, and company's e-readiness. An exploratory study on these issues will help shed the light on this issue.

Research Questions

Despite the importance of electronic marketplaces as an e-entrepreneurship model in the economy, no related empirical analysis has been found in the existing literature. The only empirical evidences we found are two survey conducted by Forrester Research (2000) and European Commission (2007) in e-business area. The Forrester Research (2000) reported eight industries that represent different levels of penetration for B2B e-business in general.

The sectors were electronic and other electrical products, and communication industries at the higher end, and food and kinked products, and printing and publishing industries at the lower end. But this outcome is very brief and out of date. In addition, the report addressed issues for e-business in general without breaking it down to different business models and did not reveal the impact of other factors such as company's size and e-readiness. In a more recent survey, the European Commission (2007) reported the number of companies ordering supply goods online from ten different industries (Food & beverages, Footwear, Pulp & paper, ICT manufacturing, Consumer electronics, Shipbuilding & repair, Construction, Tourism, Telecommunication, Hospital activities). The results showed manufacturing, electronics, and telecommunication sectors use electronic marketplaces at a higher extent while sectors such as food, footwear, and paper use electronic marketplaces in a much lower extent. Although those survey share common results, they also share similar shortcomings. First, both of them are industrial empirical survey, thus they are not created based upon a theoretical foundation as well as research framework. They just simply reported the percentage of companies in each industry sector responding to a certain question. The survey by Forrester Research is very outdated. The survey by European Commission is more recent and showed the e-readiness of industries at some levels. Nonetheless, these surveys do not differentiate among different types of electronic marketplaces.

Due to the lack of theory and evidence in the related research issues, we seek to conduct an exploratory research to examine the succeeding chances of electronic marketplaces as an e-entrepreneurship model in different industry sectors. Accordingly, instead of developing research hypotheses which require some strong literature support we raise several research questions based upon the related literature review and analysis of economic trend.

First, in order to analyze the potentials of electronic marketplaces in industry sectors, there is a need to examine how industry perceives the importance of electronic marketplaces and the extent to which electronic marketplaces are accepted by customers in industry sectors. Above surveys indicated that customers in industries such as electronic products and communication would accept electronic marketplaces at a higher level because their products are better suited for online transactions. On the other hand industries such as food, paper, and publishing are at the lower end in using electronic marketplaces due to their product uniqueness. For examples, the products in the food industry are more perishable and companies in this industry sector might have not been interested in online transactions. Although this argument might be true at that time, Internet technologies have developed a big step of improvement since then and e-commerce sales have grown significantly. Hence, it can be argued that the differences among industries are getting narrower in term of adopting electronic solutions for business processes. In addition, since each type of electronic marketplaces has distinctive benefits and challenges, the perception of companies in each industry sector toward using electronic marketplaces may not be the same. Large companies with strong financial and technical resources and with high expectation of the security and collaboration capabilities may prefer PTNs or ISMs (Rao et al., 2007; Truong, 2008). On the other side, 3PXs may be better suited for smaller companies since this type of electronic marketplaces does not require high start-up investment as well as technical requirements. These discussions lead to the following research question

Question 1: Are there significant differences in regard to electronic market usage among industry sectors?

The results of those surveys also revealed another side of the issue: whether companies in an industry sector are ready to adopt an electronic solution such as electronic marketplaces. According to Forester Research (2000), industries such as paper, publishing, and food were considered a lower end compared to others (electronic, electrical, communication) in regard to their ability to use and exploit features and benefits of electronic marketplaces. The survey was conducted at the time when very few large companies actually conducted business transactions online. Again, time has changed with the substantial improvement of Internet technologies which provide higher level of easiness and usefulness. Hence, it is easier for any companies to use electronic solutions which are available globally. European Commission report shows that there are no differences among industry sectors in term of broadband Internet access and remote access to company network (2007).

Although it is true that the companies which are more ready to networked economy will more likely to adopt electronic marketplaces (Truong, 2008), it doesn't necessarily mean that some industries are more ready than others. The results of this research will help in revealing the differences among industries in regard to this matter. Companies' e-readiness in networked economy has been studied in current research which measured e-readiness by

three major dimensions: IT usage for business transactions, Internet usage for business transaction, and IS usage for enhancing SCM 9truong, 2008). These discussions lead to the second research question

Question 2: Are there significant differences in regard to the level of e-readiness among industry sectors?

Research Methodologies

Data Collection: Web-Based Survey

In order to answer the research questions, a large-scale survey was conducted. . In our study with focus on electronic marketplaces, we concentrate on these eight major industry sectors as suggested by Forrester Research: Food, Paper, Printing & Publishing, Rubber and Plastic, Fabricated Metal, Electronics, Transportation, and Communication. Item-classification for e-market benefits and challenges were generated through the literature on the Internet adoption, e-procurement, and e-market. These proposed measurement scales were then used in the large-scale survey instrument. The data for this study was collected through a Web-based survey in the United States. A mailing list was provided by The Institute for Supply Management, and the survey received 359 responses.

Profile of Respondents

Survey respondents include vice presidents for materials (6 per cent), directors of procurement (13 per cent), purchasing managers (74 per cent) and "others" (7 per cent). It is apparent from their job titles that they are qualified to answer the survey questions. Their organizations range widely in size, as measured by their annual sales, number of employees or purchasing budget. However, respondents from larger organizations are proportionally better represented: 37 per cent from organizations with $1 billion or more in annual sales versus 6 per cent with less than $10 million, 20 per cent from those with more than ten thousand employees compared to 11 per cent with fewer than 100, and 43 per cent from organizations with over $100 million in purchasing budget versus 5 per cent below $1 million (Table 1). Figure 1 shows the number of responses in each industry sector, with the highest responses fall in the electronics industry, followed by communication and food industries.

Table 1. Profile of respondents

1. Job Title	**Percentage**	**2. Annual Sales**	**Percentage**
Vice president of materials	6 %	Under $10 million	6 %
Director of procurement	13 %	$10 million to $ 100 million	26 %
Purchasing manager	74 %	$100 million to < $1 billion	31 %
Others	7 %	Over $1 billion	37 %
3. Number of Employees	**Percentage**	**4. Purchasing Budget**	**Percentage**
Up to 100	11 %	Under $1 million	5 %
101 to 250	12 %	$1 million to < $10 million	12 %
251 to 1,000	29 %	$10 million to <$25 million	17 %
1,001 to 10,000	28 %	$25 million to <$100	23 %
Over 10,000	20 %	Over $100 million	43 %

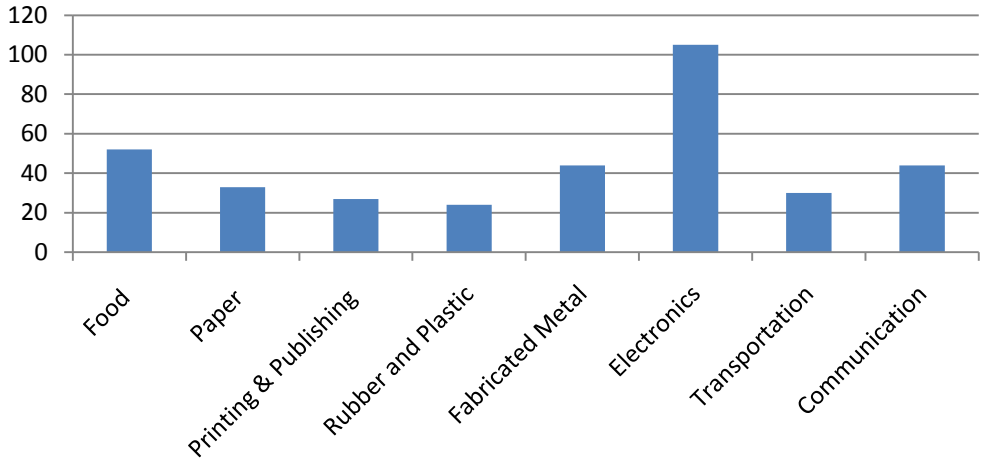

Figure 1: Reponses by Industry Sectors

Measurement instruments

Research questions involve two major measurement instruments: electronic marketplace usage and e-readiness. The level of electronic marketplace usage can be measured by a single item which evaluates the current level of usage using 5-point Likert scale. In order to examine the usage from various perspectives, we measure the usage level of three types of electronic marketplaces: 3PXs, ISMs, and PTNs. As for the level of e-readiness, we use the measurement instruments developed by Truong (2008). These instruments measure e-readiness from three dimensions: information technology usage, Internet usage, and information system usage for supply chain management. These instruments have been tested by the factor analysis.

Results and Discussions

Electronic Marketplace Usage by Industry sector

Table 2 shows the descriptive statistics of electronic marketplace usage by industry sector. Mean and standard deviation are calculated for each type of electronic marketplace. Figure 2 shows the mean of electronic marketplace usage in graphic form (bar chart). Finally, MANOVA test was conducted to examine the significance of differences among industries. Dependent variables are level of 3PX usage, ISM usage, and PTN usage. The independent variable is industry with eight different sectors. Table 3 shows the contrast test results for MANOVA test along with the significance level.

Overall, the average level of usage is not very high (the mean values in Table 2), indicating the hesitation of companies in industries toward using electronic marketplace. However, the high standard deviation shows a high variation in the level of usage among companies. Across industries, it can be seen that industries which have a higher level of electronic marketplace usage include paper, electronic, transportation, and communication. However, the differences are not significant (Table 3). Only three significant differences can be found are: Food vs. Paper, Printing & Publishing vs. Rubber & Plastic, and Rubber & Plastic vs. Fabricated Metal; all falls in the PTN usage. Although other contrast tests resulted in insignificant differences, we still can observe some variation visually from the bar chart in Figure 2. It appears that two industries with lower level of electronic marketplace are Food and Rubber & Plastic. Industries that were considered low-end in Forester Research (2000) (Paper and Printing & Publishing) show great improvement and their usage level is as almost the same as other so-called high-end industries such as Electronics.

We also can see that PNTs have been used at a higher level compared to 3PXs and ISMs. These results confirm the beneficial characteristics of PTNs and indicate the potential domination of this type of electronic marketplace in the near future.

Table 2: Descriptive Statistics of Electronic Marketplace Usage by Industry sector

	3PX Usage		ISM Usage		PTN Usage	
Industry	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Food	1.39	.759	1.31	.619	1.41	.788
Paper	1.70	1.119	1.50	.861	1.97	1.351
Printing & Publishing	1.33	.565	1.21	.415	1.75	1.225
Rubber and Plastic	1.14	.351	1.18	.501	1.14	.351
Fabricated Metal	1.50	1.038	1.38	.705	1.68	1.207
Electronics	1.65	1.195	1.61	1.104	1.67	1.164
Transportation	1.70	1.103	1.70	.953	1.81	1.302
Communication	1.81	1.383	1.60	1.149	1.79	1.116

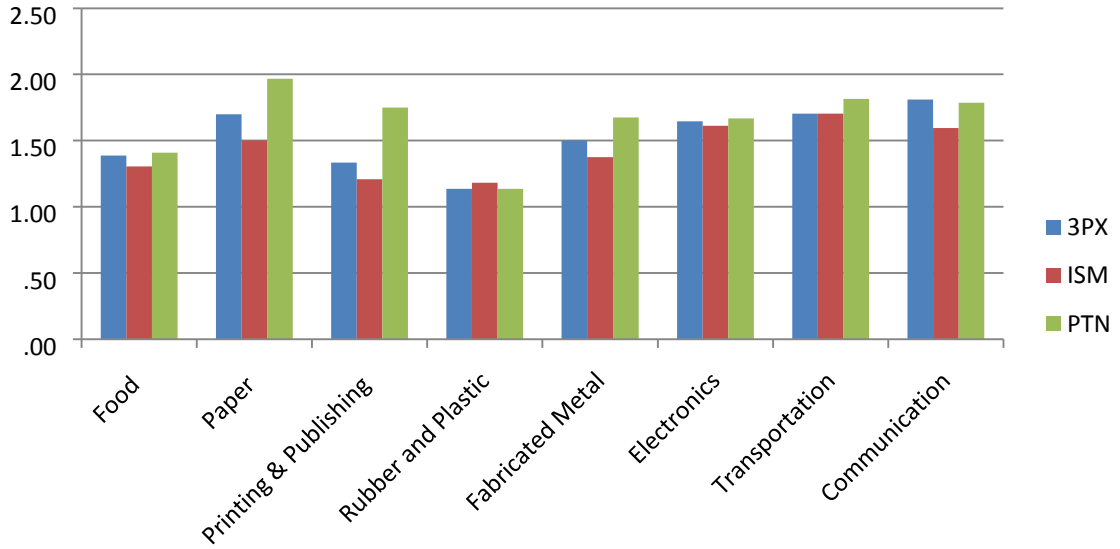

Figure 2: Electronic Marketplace Usage by Industry sector

Table 3: MANOVA Results for the Electronic Market Usage across Industries

		Dependent Variable		
Contrast		3PX usage	ISM usage	PTN usage
Food vs. Paper	Contrast Estimate	-.312	-.194	-.559
	Sig	.204	.353	.031**
Paper vs. Printing & Publishing	Contrast Estimate	.367	.292	.217
	Sig	.207	.237	.478
Printing & Publishing vs. Rubber & Plastic	Contrast Estimate	.197	.027	.614
	Sig	.529	.921	.063*
Rubber & Plastic vs. Fabricated Metal	Contrast Estimate	-.364	-.193	-.539
	Sig	.196	.419	.070*
Fabricated Metal vs. Electronics	Contrast Estimate	-.145	-.238	.008
	Sig	.469	.163	.968

Electronics vs. Transportation	Contrast Estimate	-.145	-.238	.008
	Sig	.469	.163	.968
Transportation vs. Communication	Contrast Estimate	-.106	.108	.029
	Sig	.685	.625	.916

** significant at p<0.05
* significant at p<0.1

E-readiness by Industry sector

Table 4 shows the descriptive statistics of e-readiness by industry sector. Mean and standard deviation are calculated for each type of electronic marketplace. Figure 3 shows the mean of e-readiness in graphic form (bar chart). Finally, MANOVA test was conducted to examine the significance of differences among industries. Dependent variables are level of IT usage, Internet usage for transactions, and information systems usage for SCM. The independent variable is industry with eight different sectors. Table 5 shows the contrast test results for MANOVA test along with the significance level.

The results of this section will help us explain the differences observed in the previous section. As discussed before, a key factor that affects companies in adopting electronic marketplaces is the technical requirements of the electronic platform. If a company is more e-ready, it will be more likely to use and exploit the benefits of electronic marketplaces. Overall, companies in electronics, transportation, and communication sectors have more experience in using IT, Internet, and information systems in facilitating their business transactions. We also can see that for most sectors, the level of Internet usage is lower than others. This is understandable because Internet users experience many difficulties with security and stability issues. On the other hand, the use of IT such as EDI, RFP systems, which have been in the market for a longer time, is preferred because they provide users with more secure and stable transactions (Truong and Jitpaiboon, 2008). These results of European Commission report (2007) confirm this conclusion. Additionally, most of companies in those industry sectors have been dealing with supply chain management (SCM) performance which, in turn, affects their business performance. Information systems have been used for a longer time to support SCM performance. This explains the higher usage level of information systems for SCM.

Finally, even though we see some differences in term of e-readiness, these differences are not very significant and clearly among industry sectors. It appears that the only significant contrast is fabricated metal vs. electronics. It is worth noticed that industry sectors considered low-end such as Food, Paper, Printing & Publishing, and Rubber and Plastic show a decent level of e-readiness compared to high-end sectors such as electronics and communication. These findings point out that most of industry sectors have recognized the importance of using electronic tools in their business transaction. This shows a potential growth of electronic marketplace usage in the future.

Table 4: Level of E-Readiness by industry sector

	IT usage		Internet usage		Information systems usage for SCM	
Industry sector	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Food	2.6538	.94632	2.1875	.85014	3.0529	1.12278
Paper	2.5964	.92023	2.1328	.90247	2.6563	1.09388
Printing & Publishing	2.6759	.89016	2.4815	.81431	2.8426	.85527
Rubber and Plastic	3.0521	1.31045	2.4653	1.00839	3.0417	1.20836
Fabricated Metal	2.7837	1.00153	2.5020	1.06599	2.6091	1.11492
Electronics	3.0866	1.17382	2.3576	1.10804	3.1383	1.28245
Transportation	3.2472	.98199	2.4306	1.11333	3.3611	1.08528

Communication	3.3236	1.09112	2.7539	1.15927	3.2868	1.36668

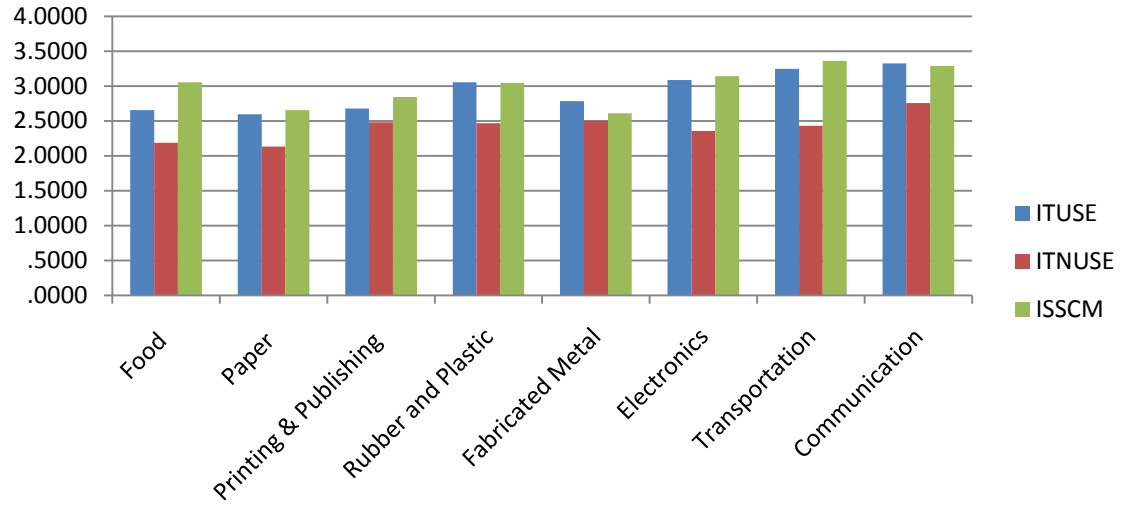

Figure 3: Level of E-Readiness by Industry sector

Table 5: MANOVA Results for the E-readiness across Industry sector

Contrast		Dependent Variable		
		IT usage	Internet usage	Information systems usage for SCM
Food vs. Paper	Contrast Estimate	.057	.055	.397
	Sig	.810	.814	.138
Paper vs. Printing & Publishing	Contrast Estimate	-.080	-.349	-.186
	Sig	.775	.197	.548
Printing & Publishing vs. Rubber & Plastic	Contrast Estimate	-.376	.016	-.199
	Sig	.209	.955	.550
Rubber & Plastic vs. Fabricated Metal	Contrast Estimate	.268	-.037	.433
	Sig	.326	.889	.155
Fabricated Metal vs. Electronics	Contrast Estimate	-.303	.144	-.529
	Sig	.121	.445	.015**
Electronics vs. Transportation	Contrast Estimate	-.161	-.073	-.223
	Sig	.468	.733	.366
Transportation vs. Communication	Contrast Estimate	-.076	-.323	.074
	Sig	.763	.188	.792

** significant at $p<0.05$
* significant at $p<0.1$

Potential Growth of Electronic Marketplaces

As more companies become e-ready, there will be a higher chance that they will use electronic marketplaces (Truong, 2008) and use them at a higher extent. The potential growth of electronic marketplaces as an e-entrepreneurship model can be seen clearly as we consider the size and years in business of companies in various industry sectors. Since high-end industry sectors have already attracted sufficient customers to e-entrepreneurship,

we will focus more on low-end sectors. Table 6 shows the average of company size (in term of number of employees) in a scale 1 to 5 and years in business. It can be seen that in low-end sectors such as paper and printing, the average company size is as big as high-end sectors (electronics, communication). The larger the company size, the larger the volume of their online transactions. Hence, if they start using electronic marketplaces more for their transactions, it will generate more revenues for e-entrepreneurs.

Additionally, paper and printing sectors have companies that have most number of years in business. This number implies that those companies have established strong reputation and relationships with business partners. When these companies adopt electronic marketplaces for their business, they will attract their partners to go the same direction which will bring more customers to e-entrepreneurs. Thus, the potential growth of electronic marketplaces in these sectors should not be underestimated and e-entrepreneurs should pay more attention to companies in those sectors in the future.

Table 6: Company size and years in business

Industry sector	Average size (in the scale 1 to 5)	Number of years in business
Food	3.0	47.8
Paper	3.5	78.1
Printing & Publishing	3.5	70.4
Rubber and Plastic	2.8	41.0
Fabricated Metal	2.2	45.6
Electronics	3.5	43.1
Transportation	3.4	48.6
Communication	4.0	36.7

Conclusions

This research addresses the question about the potential growth of electronic marketplaces as an e-entrepreneurship model. We examine how electronic marketplaces are different among industry sectors from two major perspectives: the level of electronic marketplace usage and the level of e-readiness. Our findings have some major contributions to the literature. Differing from previous studies, this research found that the differences among industry sectors are not very significant. Compared to some high-end industry sectors such as electronics, transportation, and communications, other sectors such as paper which were considered low-end also show some growth in the e-readiness and the interest in using electronic marketplaces for their business transactions. Thus, the success of electronic marketplaces comes from a wider range of industry sectors. These findings will help researchers in shaping the future development of e-entrepreneurship through electronic marketplace solutions. The results also confirm the important role of PTNs as the dominant type of electronic marketplaces.

Practitioners will also benefit from this research since they can use these results to start up successful e-entrepreneurship model in the form of electronic marketplaces. As the Internet technologies become more popular, more affordable, and easier to use, more companies in most of industry sectors will move toward using this e-entrepreneurship model which enables them to enhance their performance and improve the effectiveness and efficiency of their business processes. These are vital factors to the success of companies in our current troubled economy.

This research still has some limitations. First, it is exploratory study so no research model and hypotheses are developed. Second, the results are limited to US companies due to the limit of this survey. Third, the research is limited to only eight industry sectors and needs to be expanded to get more generalized results. Future research should focus on key success factors for e-entrepreneurship model and a cross-country survey should be conducted.

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