

Study of Determinants Affecting Business Organization for Adopting E-Commerce in Indian SMES

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ABSTRACT

Because of advancement of software system, hardware and numerous pc based mostly application chunk of population adopting to technology based E-business. It has become imperative for small and medium enterprises to adopt e-commerce to own competitive benedictions. But it is understood that firms within the same trade implement e-business at completely different pace. This paper possible to specialize in why a number of the SME do and different cluster don't adopt e-commerce. Depiction on many previous analysis (environmental and organizational factors, Porter's techniques, technology acceptance) has led to see the impact of completely different predictors specifically Structural Readiness, Competitive Pressure, Perceived quality, Perceived client Acceptance on adaptation e-commerce by SMEs in Indian business atmosphere. A model is intended exploitation these predictors and was by trial and error tested using survey and interview knowledge from SMEs in India. The study yield proofs that Structural Readiness, Competitive Pressure, Perceived Relative advantage; Perceived Client Pressure was found to be emotive E-business adoption by Indian SMEs.

Keywords: Structural Readiness, Competitive Pressure, Perceived Relative advantage, client Pressure, SME, Organizational Attitude.

Introduction

Organization is encouraged to use new technology and fortified to seek new ways technology because of decreasing cost of to liaise with its customer and other supply

chain members. Ecommerce which is basically business done over internet/intranet using system based application to achieve supply chain processes, such as delivery shipment payment, order booking, and customer relationships. Ecommerce channels allow businesses to get to the client faster, with more speed, and more value (Budhwani, 2001). As stated Eurostat, Luxembourg, 2004, E-commerce as dealings conducted over (IP) networks or over other computer mediated net-works e.g. Electronic Data Interchange. Though e-business is making a clear inroad in Indian commerce but it is mainly being adopted by big business organization. Small and Medium enterprise (SME) assumes a significant role in the Indian economy with a 40% yield of the nation. Presently there are more than 11 million SME units in India that produce in excess of 8000 products. Also, there is about hardly any thousand service sector in SMEs. The majority of the nation's financial aspects depend for the most part on the role of SMEs in supporting the national economy in various nations. In any case, the development of the business of SME would rely upon what approaches management on the adaptation of e-business despite the quick changing scene of on-line rivalry, numerous essential issues with respect to the selection of e-business stay unsure. As per Beach (2004), the above

research brings up the issue of whether the organizations that effectively embraced EC applications did so in view of the impact of their vital objectives or from different factors.

There are numerous advantages and benefits by actualizing E-business and these benefits are not just for enormous firms; small and medium-sized enterprises (SMEs) can also benefit from e-business [1]. To become worldwide player markets, EC has gotten indispensable (Maguire et al., 2001, p.1) and incorporates activities, for example, electronic information exchange, having a Web webpage that is connected with key business procedures, and abilities to purchase on the web (European Commission, 1998; Watson et al., 2000; Reedy et al., 2000; Turban et al., 2000; and Fillies et al., 2004).

The objective of this paper is to comprehend why some Indian SMEs firms in the extraordinarily benefits industry have been delayed to grasp EC activities.

Literature Review

To know why Indian SME should adopt E-Commerce we need go through several works on adoption of technology. One of the pioneer works that has been carried out here is the Technology Acceptance model or TAM (Davis et al. 1989). TAM expresses

that in order adopt a technology, users evaluate its usefulness and simplicity with which it tends to be utilized Amit, R et al. mentioned that in e-business new worth can be made by the manners by which transactions are empowered.

Similarly there are many research paper have analyzed the utilization of new inventive technologies in SMEs (Berthon, P 1999 et al, Costello, G et al., 1998; Cragg and King, 1993; Flanagan, A.J., 2000, Dos Santos and Peffers, 1998; Fillis, 2004; Ramsey et al., 2003, 2004). John Child stated that working adequacy depends on the size of the operation, technology. Iacovou et al. contemplated factors impacting the reception of electronic data interchange (EDI) by seven SMEs in various enterprises; they included apparent advantages, Structural Readiness, and external pressure. G. Prem kumar, et al. has expressed the Adoption of new information technologies in the provincial small business will be dictated by a relative bit of leeway, top management support, organizational size, external pressure, and aggressive pressure.

In the perspective of Chong (2001), there is an expanding number of literature dedicated to the investigation of the technical and operational aspects of E Com, there is minimal experimental research on points

identifying with the variables that lead to the effective appropriation of this emerging technology development and business practice. Organizational-level components are the regularly considered predecessors of innovation adoption (Damanpour, F, 1991). With decreasing cost and advancement of internet technology IS integration is possible without developing strong non IS linkage (Wonyoung Lee et al.).

Perceived Relative advantage

Perceived Relative preferred position discloses the client's discernment to the degree that the framework will improve the client's work environment execution. The significance of perceived Relative favorable position has been broadly perceived in the field of e-administration and e-banking (Lemuria Carter & France Bélanger 2005, Guriting and Ndubisi, 2006; Jaruwachirathanakul and Fink, 2005; Polatoglu and Ekin, 2001; Liao and Cheung, 2002). As indicated by them, the relative advantage is the subjective probability that utilizing the technology would improve the manner in which a client could finish their activity.

Pikkarainen et al. (2004) utilized technology acceptance model in Finland and they deduced that apparent Relative advantage as a determinant of real behavior which

invigorated the client of the financial support of utilization more modern and easy to use e-banking and it gives them more noteworthy self-sufficiency in performing banking transactions, in cataloging on financial advice, and in buying other financial products.

A rational adoption decision in an organization would include assessing the upsides of the new innovation. These communication technologies give numerous advantages to the adopters as far as decreased turnaround time, better customer service, diminished expenses, and opportune data accessible for decision making.

Research question 1: Does perceived Relative advantage have positive effect on E-commerce adoption?

Hypothesis 1: Perceived Relative advantage has positive effect on E-commerce.

Clients Pressure

Customer necessities would make an organization move towards the adoption of E-commerce. Ateş et al. (2011), for example, recommend that customers pressure lead organizations towards responsive and proactive ventures important to decrease the negative externalities delivered along with the supply chain. However, a few researchers fail in

distinguishing huge connections between customer pressure and organizations' development of ecological initiative projects and supply chain oriented practices (Buyse and Verbeke, 2003; Zhu et al., 2007). This exploration gives further bits of knowledge into the job that customer pressure has in driving usage E-business in an organization.

Research question 2: Does client's pressure have positive effect on E-commerce adaptation?

Hypothesis 2: Clients Pressure has positive effect on E-commerce adaptation.

Competitive Pressure

Competitive pressure, characterized as the pressure that emerges from the danger of losing competitive advantage, forces firms to look for options in contrast to their present methodologies Abrahamson, E., and Bartner, L. R. What's more, founded on the key writing and MIS research, Croteau and Li (2003), Steinfield et al. (2002), Foster et al. (2000) accepted that focused weight from a given industry influenced the pace of EC reception.

Research question 3: Does Competitive pressure have positive effect on E-commerce adaptation?

Hypothesis 3: Competitive pressure has positive effect on E-commerce adaptation.

Structural Readiness

Structural readiness was estimated by including two things about the financial and technological assets that the organization may have access as well as elements managing the similarity and consistency of online business with company's culture, values, and preferred work practices (existing innovation framework; and top management's enthusiasm to embrace web-based business). Such items were discovered pertinent in other research [R.C. Beatty et al., W.W. Chin, A. Gopal, G. Premkumar, M. Potter, J.Y.L. Thong].

Research question 4: Does Structural Readiness have positive effect on E-commerce adaptation?

Hypothesis 4: Structural Readiness has positive effect on E-commerce.

Organizational attitude

Mental conditions of the management, created through understanding, which is constantly prepared to apply a functioning impact on a management's reaction to any conditions or conditions to which they have been coordinated. Numerous empirical research identified with the dispersion of technological innovations has expanded the utilization of the technology acceptance model to incorporate attitudes as defined by

the Theory of Reasoned Action (Davis et al., 1989; Jayawardhena and Foley, 2000). TAM model clarifies the usability and perceived Relative favorable advantage as the main considerations impacting mentalities toward use, which, thus, influenced goals to utilize. In the electronic commerce context, management's frame of mind is various as far as recognitions with respect to apparent Relative advantage, its technical readiness, customer pressure, and competitive pressure. Understanding the determinants of authoritative mentality, it is contended that this frame of mind has a solid, direct, and constructive outcome on hierarchical goals to really utilize the new technology or system. With this thought, the specialists expect that customer organizational influences the acceptance of electronic commerce.

Research question 5: Does organizational attitude have positive effect on adaptation of e-commerce

Hypothesis 5: Organizational attitude has positive effect on organizational adaptation of e-commerce

Research methodology**Measurement**

The factors distinguished in the research model were estimated utilizing multi-thing

pointers that meant to catch the underlying theoretical domain of the build. The vast majority of the things were estimated utilizing a five-point Likert-type scale running from strongly disagree to strongly agree. A solitary thing was utilized to decide whether the respondents embraced every single one of the four communications technologies Ð online data access, e-mail, Internet access, and EDI. Data have been

collected from 150 set of questionnaires distributed, 76 clients responded to the survey resulted in 72% response rate. However, after data screening and data cleaning process, only 89 responses can be used for further analysis. Among the respondents 72.39% respondents were male and 27.61% were female and the average age of the respondents was 36 years.

Table 1 Summary of theoretical models

Model	Hypothetical Model
Model 1	Paths from Competitive pressure, Structural Readiness, Perceived Client Acceptance, perceived Relative advantage to E-Com adoption.
Model 2	Paths from Competitive pressure, Structural Readiness,, Perceived Client Acceptance, perceived Relative advantage to organization attitude, and organization attitude to E-Com adoption

Data Analysis

Table 2 Constructs and their reliabilities, mean and s.d

Construct	No. Of Items	Alpha	M	SD	N
Perceived Relative advantage	5	0.70	4.15	0.88	134
Competitive Pressure	4	0.72	4.4	1.02	134
Structural Readiness	3	0.77	4.3	0.96	134
Perceived Client Acceptance	4	0.76	4.6	0.97	134
Organization attitude	3	0.74	4.3	0.90	134
E-Com adoption	3	0.75	4.6	1.14	134

Table 3 Correlation matrix for perceived Relative advantage, Competitive Pressure Client Pressure, Structural Readiness E-Com adoption

Construct	RELAD	COMPR	SREADI	PCUSAC	ORGAT	ECADP
RELAD	----	0.20 *	0.28**	0.15*	0.31**	0.24*

COMPR		----	0.31*	0.29**	0.28*	0.26**
SREADI			-----	0.24**	0.25**	0.23**
PCUSAC				----	0.27**	0.29*
ORGAT					----	0.38**
ECADP						----

Note: *p < .05, **p < .01

Confirmatory factor analyses

For judging the model fit of the two suggested model the Comparative Fit Index (CFI), Goodness of Fit Index (GFI; Hair et al., 2003), Normed Fit Index (NFI), and Root Mean Square Error of Approximation (RMSEA; Steiger, 1990) were used.

Joreskog and Sorbom, 1993; Kline, 1998) model fit was assessed by several indices. The accepted thresholds for these indices χ^2/df ratio should be less than 3; the values of GFI, NFI, RFI, and CFI should be greater than 0.90; and RMSEA is recommended to be up to 0.05, and acceptable up to 0.08 (Gefen et al., 2000).

Table 4: Summary of Model fitment Assessment

	χ^2	df	χ^2/df	CFI	NFI	GFI	RMSEA
RECOMMENDED FIT CRITERIA	P>.05		Between 3 & 1	Over 0.90	Over 0.90	Over 0.90	<0.10
MODEL 1	167.4 P>.000	4	41.4	0.552	0.564	0.91	0.510
MODEL 2	3.2 P>.02	2	1.6	0.92	0.96	0.95	0.056

Table 4 signifies the results of measurement models to test the hypothesis with regard to model paths. The initial model with values of χ^2/df , NFI, CFI, RMSE are more than suggested value, therefore it did not support the fitness of the model. This model was then compared with final model where values of the above parameters are within suggested values and the data fits the model

well. The other results also supported the fitness.

Considering the pattern of significance for the parameter estimates within the Model 1, all the paths were found to be significant in hypothesized directions. In case of model 2, perceived Relative advantage, perceived

ease of use, and security and privacy were found to be significantly and positively related to client adaptation. No significant relationships were found between perceived

ease of use and client adaptation. All the other variables were significantly related to client adaptation as hypothesized direction.

TABLE 5. Path Coefficient (β) of the model

Path		Estimated β	P	Support
RELAD	ORGAT	0.551	0.001	YES
CLPRES	ORGAT	0.254	0.002	YES
SREADI	ORGAT	0.544	0.005	YES
CUPRES	ORGAT	0.422	0.000	YES
RELAD	ECADP	0.451	0.001	YES
CLPRES	ECADP	0.564	0.004	YES
SREADI	ECADP	0.454	0.02	YES
CUPRES	ECADP	0.432	0.011	YES
ORGATT	ECADP	0.522	0.025	YES

Path Analysis

Since significance for all predictor estimates within the Model $P < 0.05$, all the paths were found to be significant in hypothesized directions. In the hypothesized model Perceived Relative advantage, Competitive Pressure, Structural Readiness, and Client Pressure were found to be significantly and positively related to E-Com adoption.

Discussion

The current study established a conceptual framework that considers Competitive pressure, Structural Readiness, Perceived Client Pressure, perceived Relative advantage to Ecom adoption in by SMES in India. In general, the results supported most of the considered hypothesized relationships. The findings of this study have implications for developing usable e-commerce by the Indian SMES. Considering the facts benefits that SMEs can receive it is of supreme importance to ensure that Indian SMEs will actually use

them. In order to achieve this goal, attention must be given in designing Structural Readiness,, Perceived Client Pressure, perceived Relative advantage Competitive pressure. Facts of the factors that influence adoption will enable Indian SMEs to develop online E-commerce services that meet the business needs. The study also places of interest the importance of conducting research with a broad diversity of respondents. The findings of this study suggest that in order to attract more Indian SMEs towards E-commerce, it is not going to be sufficient to merely introduce an ecommerce system. But they need to develop the belief of Relative advantage of the system as well. Moreover, it is of prime importance for Indian SMEs to make organization ready so that they readily adopt E-commerce. They also must adopt e-commerce in accordance to client pressure and as well as existing competitive pressure in the market environment.

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