



The Convergence Strategy in Small and Medium Sized Companies Exemplified by E-Business and T-Business Organisations

Jerzy A. Kisielnicki, School of Management Warsaw University
P +4822 5534003, F +4822 5534001, jkis@wspiz.edu.pl, kis@mail.wz.uw.edu.pl

ABSTRACT

This paper presents the convergence strategy with its influence on small and medium sized e-business and t-business companies' development. It is assumed that the convergence strategy combines traditional strategy with the use of IT. As we intended to prove, the convergence strategy is an effective one according to small e-business and t-business companies' workers and directors. Nevertheless, it may not be beneficial for many traditional companies which have stable positions on some local markets. However, medium sized companies should adopt it, if plan to compete and develop, what has been proved by Transsystem Inc.

INTRODUCTION

Modern company uses such development strategies, which allow it to have a competitive position on both home and world market. In different organisations nowadays it is connected with possibilities that are provided by the Information Technology and the Internet in particular. Among others, this fact is pointed out by J. Champy [2002] who presented foundations of the X re-engineering. This paper looks at the indicated issue analyzing the convergence strategy and its influence on company's development and position on the market. It is assumed that the convergence strategy combines the traditional strategy with the IT strategy.

The researches that I have conducted until now have shown that strategies connected with using only the IT do not always provide positive results and meet people's expectations. It is due to a number of factors, concerning ethics and trust towards the IT issues (these matters were considered by: Sutherland, Tan [2004], Kisielnicki [2002]). Therefore, obtaining a better position on a competitive market requires applying more of the convergence strategy. Consequently, researches published by Data Monitor [2003] concerning the convergence strategy in banking showed that only 14% of the Europe's population are reachable by the Internet, while the multi-channel strategy (convergence) can reach up to four times as many people. Banking was the first branch to totally switch to convergence strategy. Apparently, a lot of retail banks, which offered only the electronic services, decided to change their business strategy to the convergence strategy. This was because development of self-reliant e-banks demanded spending great amounts on marketing which contrasted with comparatively small number of opened accounts (Timmons [2000]). Also, researches carried by The Boston Consulting Group [2004] revealed that many companies from the e-business market want to supplement their commercial activity with traditional business.

Applying the convergence strategy to an organization means not only offering its services using several channels of distribution, but also introducing informational and technological bindings between them. Those bindings will be visible in the following analysis of Transsystem

Inc as an example of a firm which has been using the convergence strategy since year 2001.

SUBJECT MATTER AND DOMAIN OF THE PAPER

Literature broadly discusses transformations which happen in different organizations as a result of changes of the factors that influence them e.g.: changes of the environment, growing competitiveness, development of global markets and institutions and most of all constant technological progress. Obviously, only companies that can readjust themselves to new requirements and effectively introduce new technologies will be able to be competitive. Under specific configuration of external factors, it is dynamically changing competitive environment that forces companies to keep updating their goals and working methods. As far as domination over competition is concerned, important became such abilities as analyzing environmental changes, exploiting opportunities or creating long-term development projects.

This is why strategies of most of modern firms, although in different ways, are connected with IT. Conventionally, one can divide the area of business into two kinds of companies: those which work in the e-business area and those which are traditional and are called the t-business firms. Criterion that singles companies out is the role played in them by the Internet. E-business firm's activity is mostly related to the use of Internet, whereas t-business organizations use it only to communicate with banks or social insurance institutions, if use it at all. In the literature on the subject e.g. mobile-business or tele-business are distinguished. In this paper I use the simplified division m.a.

The study concentrates on analyzing strategies of chosen small and medium sized companies. Large organizations were not considered as their strategy most often includes both traditional and electronic activity.

Following two groups of organizations using activity-adapted strategies were analyzed:

- First group – small e-business and small t-business companies,
- Second group – medium e-business and medium t-business companies.

Regardless of the analysis of both groups of organizations, also the conditions that have to be fulfilled by a small firm to develop were researched.

The study concerns theoretical analysis of the matter and analysis of chosen firms' functioning. The criterion of distinguishing small and medium sized companies was connected with availability of the source data, which was evaluated in regard to the specific characteristics of each group of organizations. The research presented is a pilot project.

Figure 1. Typology of the effects of the convergence strategy

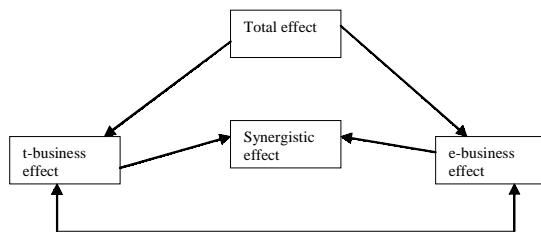
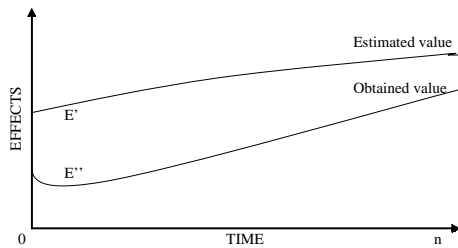


Figure 2. The effects in time



There may be various concepts and definitions of 'strategy'. Our task, however, is not to analyze and define 'strategy'. There are specialist monographs on this subject [A.J. Strickland, J.E. Gamble, A.A. Thompson –2005]. In the study it is assumed that strategy covers a period of 5 years.

As the convergence strategy, as once mentioned, we understand firm's activity combining traditional and electronic business. This strategy is based on a number of actions, which are called the convergent strategic management. The convergent strategic management is the type of actions that enable us to estimate firm's position in a turbulent environment and choose preferential actions which will determine both its effective development and strategic goals realization. Thus, we show the convergence strategy from the processive point of view. The effects of the convergence strategy's realization are consistent with the system approach. They are the sum of partial effects of e-business and t-business strategies and synergistic effect that derives from the co-operation of those strategies. Fig. 1 shows the all-in effect.

HYPOTHESES AND THEIR SUBSTANTIATION

Participating as an expert in the board of directors of one of the researched companies, I studied the reasons of their convergence strategy's failure to bring the expected effects (especially the e-business expenditures). Apparently, such a situation is a common one to appear in practice. Fig. 2 shows the situation when the reality departs from the expectations

Figure nr 2 shows two curves. The upper one illustrates the expectations of a board of directors or an owner of a company towards the effects of the convergence strategy. The lower curve presents the effects that are obtained in practice. The hypothetical curves were drawn on basis of our researches. Worth noticing is the fact that the lower curve shows a situation where the effects decline at the beginning. Only after some time the effects reach the level they had when the convergence strategy was first adopted. This is because at the very beginning there is a group of clients who are driven by chase for new solutions, which always appear when the convergence strategy is introduced. After some time comes an anticlimax, when the new solution becomes less attractive, and everything heads back to normal.

Size of the effects is defined by the area under the curve in the researched period of time, that is from $t=0$ to $t=n$ (where n means the end of the

analyzed period). When adopting a new strategy, board of directors expends the finances upon particular kind of activity. In the considered variant the expenses are connected with e-business, where certain effects are expected. However, as practice shows, effects are always lower than expected. Therefore, as depicted, at the beginning of the researched period the differences between obtained values E'' and expected values E' are considerable. As the time goes by, those differences decrease. What affects that fact is: education of clients (which prepares them to use new forms of services) and constant improvement of systems securing the transactions made. Nevertheless, the force that makes the curves recede from themselves that is make the expected effects differ from the obtained ones is, according to our hypothesis, the clients' distrust towards the use of IT. Published examples of frauds done with the use of IT and lack of fail-safe, 100% reliable technical solutions in the e-business undermine transformed firm's trustworthiness.

Based on the analyses of small and medium sized firms' strategies, the following work hypotheses were assumed:

- H1 The convergence strategy brings profound effects for small and medium companies but may not be attractive for some of them.
- H2 Medium sized t-business companies should adopt the convergence strategy, which brings significant changes. It allows them to develop and compete on the global market.
- H3 Information Technology is the factor which allows the change in firm's strategy into the convergence strategy and, therefore, leads to an increase in firm's competitiveness.

The hypotheses were substantiated in a multi-stage procedure.

In the first stage firms from e-business and t-business were chosen. Then, a survey was prepared to characterize their economic position and their place on the world market.

In the next stage, using the survey, present and expected future positions of the firms were estimated and evaluated (the estimation being in fact a measure of directors' optimism). Obviously, the companies' directors and owners who are said to be the most competent persons for such a judgment calculated the positions. Questions about firm's potential and future position on the market concerned the situation when it introduced the convergence strategy. What is more, at this stage of research, based on direct interviews with the directors, we made strategic analyses of the companies. Also, the convergence strategy's adoption was analyzed using the SWOT method.

Finally, the Transsystem Inc analysis was presented, being an example of a company using the convergence strategy.

Profile of the Researches and the Results

The expected effects of the convergence strategy introduced to small and medium sized companies were researched in 2004-2005. The researches were conducted as a part of postgraduate studies, MBA and as supplementary classes to knowledge management and strategic management subjects. Participants of those studies are owners and board of directors' members of different type of firms. Chosen owners and board of directors' members were presented the assumption data and the methods used in the research. Before conducting the research we also discussed methods of economic condition's evaluation and the convergence strategy's basic principles. There were 114 respondents from the group of 127 surveyed, their working branches being: wholesale firms, firms offering various financial services, shops, tourist offices and building and production companies.

In the initial stage of research the respondents were asked two questions:

1. Taking into consideration the economic standards of your firm, your opinion and knowledge about the competition, how would you evaluate your firm in 1 to 10 scale?
2. How would your previous answer change in five years from now if the convergence strategy was adopted to your firm (1-10 scale)?

Chart 1.

Content	Number of answers	Present evaluation of the company (1-10 scale, weighted mean)	Evaluation expected after adopting the convergence strategy (1-10 scale, weighted mean)	Difference between present and expected evaluation
Small firm (t-business)	42	5,5 (2,0 - 7,0)	6,2 (2,0 - 8,0)	0,7
Small firm (e-business)	25	7,1 (4,0 - 9,0)	8,6 (4,0 - 10,0)	1,5
Medium firm (t-business)	31	6,2 (4,0 - 10,0)	8,9 (5,0 - 10,0)	2,7
Medium firm (e-business)	16	6,5 (4,0 - 9,0)	8,6 (5,0 - 9,0)	2,1

Comment: In the brackets there is the range between the highest and the lowest mark given in each category. Source: Private research

Chart 1 shows synthesis of the survey.

Most of the respondents had a large dose of optimism and thought that the convergence strategy's adoption would improve their situation on the market. Nevertheless, a more precise analysis proves that the optimism differs between small and medium companies' owners.

The least optimistic evaluation of the convergence strategy belongs to the respondents from small traditional firms. Most of them function on local markets where their position is quite good and stable. The analysis of individual answers in this group (first line in the chart) shows that as much as 40% of the respondents thought the convergence strategy would not be profitable for their firms, if not bring them economic losses. As presented in chart 2, this condition can be attributed to the fact the respondents believe that additional spendings on the IT would not pay off. Regarding small and medium e-business companies, only a few researched said the convergence strategy would worsen their firm's position or not change it at all. Such answers, however, were not given in the group of medium t-business companies.

Supplementing the conducted survey was a discussion concerning strengths, weaknesses, opportunities and threats to the use of the convergence strategy. Both the discussion and the researches concerned each of the companies, which allowed us to use the SWOT strategic analysis. Also, each of the four researched groups was analyzed according to the same factors.

Synthetic results of the analyses are presented in chart 2. Moreover, the chart shows only those factors, which were submitted by more than 50% of the respondents. Therefore, the SWOT analysis is a simplified and qualitative one. It aims at emphasizing the most important factors of the strategy. Sequence of the factors in the chart follows their importance.

Answers concerning the factors influencing the convergence strategy were all similar. Certain differences occurred as far as opinions of the small t-business firms are concerned. Mostly, respondents from that group believe that change of strategy would be unprofitable. Such opinions confirm the results in chart 1. However, they agree that in order to transform into a medium company they should somehow change their strategy. Most often, directors of small companies (about 70%) are skeptical about investments in the convergence strategy, as their results might come after a couple of years. In regard for this paper's size, the analysis of the convergence strategy in small companies, which should be deepened, was only signalized.

TRANSSYSTEM INC AS AN EXAMPLE OF A COMPANY USING THE CONVERGENCE STRATEGY.

Analysis of the Transsystem Inc is a supplement for the previous research. This company maintains the convergence strategy since year 2001, which was the cause of the firm's success. Transsystem Inc is a medium sized Polish producer of technological transport systems for the motor industry.

Chart 2.

Simplified SWOT analysis

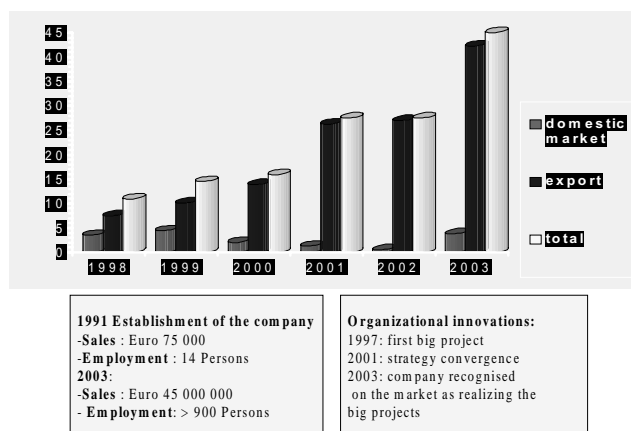
Potential strengths of the convergence strategy	Potential weaknesses of the convergence strategy
<ol style="list-style-type: none"> 1. Economic results' improvement 2. Strengthening firm's position on the market 3. Improvement of firm's managing system, use of newest techniques including the MIS. 4. Improvement of the marketing. 5. Improvement of organization's image. 	<ol style="list-style-type: none"> 1. High expenditures connected with IT use. 2. Need for suitable IT. 3. Dependence on IT. 4. Need for qualified management and workers 5. Fail in re-adjusting the management 6. Clients' distrust towards transactions made with use of the Internet.
Potential opportunities for the convergence strategy's realization	Potential threats for the convergence strategy's realization
<ol style="list-style-type: none"> 1. Reaching new markets, clients and suppliers. 2. Gaining leader's position on the market. 3. Possibility of international co-operation and transforming the company into a global organization. 4. Improving the offer of services and taking up complementary services or production. 5. Economization of the investments. 	<ol style="list-style-type: none"> 1. Possibility that hackers and some criminal groups appear. 2. Computer hardware breakdowns. 3. Internet's speed being insufficient for company's requirements 4. Change in client's needs or fashion 5. Appearance of competition

Source: Private study

The firm's success manifested itself, amongst others, in 2001 (the year when company transformation was realized) in an increase in sales of over 80% of which 96% was directed towards export markets; the creation of over 500 new jobs and the renewal of production, management and IT infrastructures. It was achieved at the same period when unemployment in Poland rose to approx. 17% and financial troubles in other companies were easy to notice. The growth, started by this project, continued: over 50 projects were realized in 2003 in 20 countries throughout the world on five continents and in automotive factories of nearly every manufacturer, with a continued rise in turnover by a further 80%.

The effect of broadening management skills project on the turnover in Transsystem is shown in Figure 3. The three moments of rapid growth coincide with the acquisition and utilization of the skills in managing individual large projects in 1997; skills to manage many projects, already after company transformation in 2001; and recognizing these

Figure 3. History and development of Transsystem Ltd. Company turnover in EURO



Source: Company materials

competences of Transsystem by the company's customers in 2003, respectively.

Switching from traditional development strategy to the convergence strategy allowed the company to apply project-oriented management. The new strategy is visible in Transsystem's present organization (now, there is a controlling committee and a project management office with the board of directors' plenipotentiary for the projects issues), new methods of projects' realization, new standards of directorship's and project teams' work. Figure 4 presents an organizational schedule of Transsystem S.A. after the transformation (project management office's tasks included). Worth noticing is the fact that the traditional and e-business tasks are not separated in the organizational structure. The traditional and the IT using cells are integrated completely.

Very important is the role of IT which uses the Intranet and the Internet. In the Intranet's structure there is the management informing system – MIS. In Transsystem, the MIS was installed on the base of data warehouse and is the infrastructure for the convergence strategy.

Apart from presenting complete data concerning the company and allowing communication in the network neighborhood, the MIS can also present information about different projects and processes. It is a vital instrument, as it supports the firm's directorship in such projects as: analyses comparing the accounting periods, economic value added – EVA, portfolio analyses, trends' analyses, evaluating projects by scaling, resources planning, costs' account analyses, ROI or cash flow.

At the level of individual project, the MIS allows analysis of profitability, deadlines, costs and budget variance. In addition, the Internet allows communication between the clients and the firm, both sides being involved in the firms' projects and business processes.

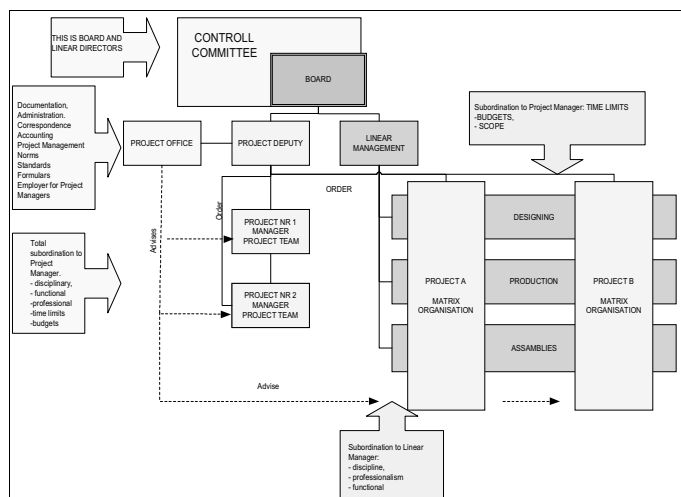
Not only did the convergence strategy improve the company's economic measures but also turned it into a project orientated one.

In consequence of the convergence strategy's introduction, the company's structure became more flexible, the workers' entrepreneurship and self-reliance and the money claims' management all improved. Moreover, the company's growth barrier was defeated, as it acquired tools, which helped to manage numerous tasks at the same time. Both suppliers and clients could from then on join the projects' realization processes.

Realizing a strategic goal which was strengthening the firm's competitive position effected in:

- The firm becoming a leader in the field of provided services on the Polish domestic market (more than 40% of market share).
- Almost 30% of shareholders being key foreign clients.

Figure 4. Organizational chart of Transsystem Inc company



Source: Company materials

It is important for the organization to preserve the adopted transformations without losing the flexibility needed for other crucial changes. On the one hand, the new organizational structure has got appropriate formal standards which include the TQM. On the other, however, the company needs to maintain the entrepreneurship favoring organizational culture. The IT infrastructure based on the Internet, the Intranet and the MIS is an inevitable tool of the convergence strategy's use and monitoring.

CLOSING COMMENTS

As we intended to prove, the convergence strategy is an effective one according to small e-business and t-business companies' workers and directors. Nevertheless, it may not be beneficial for many traditional companies which have stable positions on some local markets. The most expected effects of this strategy are: gaining new clients and improving the economic rates. The costs connected with adopting the convergence strategy and starting e-business activity in particular are the main small firms' apprehensions.

As far as the convergence strategy's results for medium companies are concerned, it is unambiguous that they should adopt it, if plan to compete and develop. The example of Transsystem S.A. proves it. As the experience and the theoretical analyses have showed, only successful introduction of the IT allows the introduction of the convergence strategy, therefore, competitiveness growth and debut on world markets.

REFERENCES

- J.A. Champy: (2002), X-Engineering the Corporation. Reinventing Your Business in the Digital Age. Warner Books Inc. N-Y
- Data Monitor. (2003): eBanking Strategies in Europe; www.datamonitor.com
- J.A. Kisielnicki, .. ed. (2002): Modern Organizations in Virtual Communities, IRM Press, Hershey, London
- J. A. Kisielnicki, S. Sroka (2005): Company Transformation as a Precondition for Becoming a Player on the Global Market, The Application of Re-engineering and X-engineering approaches in Transsystem S.A. Co in: Managing Modern Organization with Information Technology, Idea Group Pub. San Diego
- F.Pigini; P.Faverio; J.Moro; G. Buonanno; (2004) Information and Communication Technologies and Small – Medium Enterprise in Innovations Through Information Technology, Idea Group Pub., New Orleans
- P. Sutherland; F.B. Tan ,(2004): The Nature of Consumer, Trust in B2C Electronic Commerce: A Multi Dimensional Conceptualism in Innovations Through Information Technology, Idea Group Pub., New Orleans
- A. J. Strickland, John E. Gamble, Arthur A. Thompson; (2005); Strategy: Winning in the Market place., 2nd Edition , Irwin Professional Pub , 2005
- H.Timmons (2000): Online Banks Can't Go It Alone, Business Week, 31st July

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/proceeding-paper/convergence-strategy-small-medium-sized/32714

Related Content

Discovery, Analysis, and Retrieval of Multimodal Environmental Information

Anastasia Moumtzidou, Stefanos Vrochidis and Ioannis Kompatsiaris (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 4528-4542).

www.irma-international.org/chapter/discovery-analysis-and-retrieval-of-multimodal-environmental-information/112895

Fuzzy Logic Approach in Risk Assessment

Çetin Karahan, Esra Ayça Güzeldereli and Aslhan Tüfekci (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 6789-6805).

www.irma-international.org/chapter/fuzzy-logic-approach-in-risk-assessment/184375

Introducing ITIL Framework in Small Enterprises: Tailoring ITSM Practices to the Size of Company

Abir El Yamami, Khalifa Mansouri, Mohammed Qbadou and El Hossein Illoussamen (2019). *International Journal of Information Technologies and Systems Approach* (pp. 1-19).

www.irma-international.org/article/introducing-til-framework-in-small-enterprises/218855

Harnessing Information and Communication Technologies for Diffusing Connected Government Applications in Developing Countries: Concept, Problems and Recommendations

E. Ruhode and V. Owei (2012). *Knowledge and Technology Adoption, Diffusion, and Transfer: International Perspectives* (pp. 1-20).

www.irma-international.org/chapter/harnessing-information-communication-technologies-diffusing/66931

A Fuzzy Multicriteria Decision-Making Approach to Crime Linkage

Soumendra Goala and Palash Dutta (2018). *International Journal of Information Technologies and Systems Approach* (pp. 31-50).

www.irma-international.org/article/a-fuzzy-multicriteria-decision-making-approach-to-crime-linkage/204602