Antworten der KMU auf neue Fragen
SMEs’ responses to new questions
Opportunities and pitfalls related to internet-based strategies in small and medium-sized firms – A system dynamics approach

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E-commerce is often perceived as a powerful lever to foster SMEs growth. However, both the literature and empirical evidence have been showing the perils hidden in superficial decision making by SME entrepreneurs. A System Dynamics (SD) approach is used in this paper to demonstrate how managing strategic assets accumulation and depletion processes, detecting inertial effects of decisions made in the past, and selectively acting on policy levers are likely to help entrepreneurs in understanding opportunities and pitfalls related to e-commerce strategies.

A feedback analysis of three case-studies selected from the literature and the main findings from a survey conducted by the authors on SMEs pursuing e-commerce strategies are discussed in the paper. Based on the insights developed through this analysis, the last section of the paper shows a generic SD model aimed to support entrepreneurs to better understand strategic assets accumulation and depletion processes in SMEs’ e-ventures.

Introduction

In the last decade, e-commerce has been used as an important lever to foster business growth. In fact, it has allowed firms to pursue global strategies, establish a direct relationship with end-consumers, shorten logistic channels and broaden potential markets.

Many successful stories spread out through the management literature (Drennan, Kennedy 1999, Easton 1999, Lowry et al. 1999, Tsai 1999) and the press have been encouraging a growing number of small-medium enterprises (SMEs) to start e-commerce ventures in order to increase sales turnover. However, not always such ventures have allowed SME entrepreneurs to achieve their intended results. In fact, different surveys have demonstrated a high mortality rate of small businesses web sites.

What are the causes of such phenomenon? What are the decision making processes underlying growth-oriented e-commerce strategies undertaken by SMEs? What are the main risks an SME entrepreneur faces, e.g., concerning production capacity adjustment, financial policies related to investments in web site development and maintenance, as well as to net working capital associated to sales growth? What competencies should be built by an SME to manage its web site and to maintain a stable image? How does an entrepreneur perceive the above variables? What policy levers does he/she use to pursue Internet-based growth strategies? How are delays and non-linearities perceived?

In order to explore the above issues, the authors started a research project based on the following stages:

1) Analysis of the management literature and investigation of related case-studies on the field through a feedback perspective, aimed to build qualitative System Dynamics (SD) models (Forrester 1961, Sterman 2000)

2) Design of a field survey, aimed to test the assumptions developed in the previous stage
development of a generic SD simulation model (1), based on the insights from stages 1 and 2.

4) Test of the generic SD model on the surveyed companies.

The research is still in progress: to date the generic SD model has been built and will be later applied to the firms participating to the survey.

This paper aims to outline the findings generated so far from the first three stages. In order to provide a general framework to our study, the main critical success factors of SMEs’ e-commerce strategies emerging from the relevant literature are initially outlined. Then, a qualitative feedback analysis of three case-studies from the literature is presented. Such an analysis aims to depict the main forces driving the building and draining processes associated with strategic assets (Amit, Schoemaker 1993, Dierickx, Cool 1989) (2) in e-commerce growth strategies. A base run of the generic SD simulation model, based on the qualitative analysis and the field survey, is finally discussed.

The main research findings and implications for further research are summarised.

One of the main issues emerging from our study is the difficulty of entrepreneurs to timely perceive limits to growth arising from the lack of strategic assets. Although this phenomenon can also be detected in larger enterprises, it is particularly critical in smaller firms. In fact, quite often SMEs face structural difficulties in pursuing Internet-based strategies, due to their own specific complexity features, such as (Bianchi, Bivona 2000):

- lack of professional management
- weak information and management control systems
- decision making processes mainly based on ‘flair for business’ and gut-feeling
- lack of equity and financial resources
- a weaker competitive position against larger firms.

Flaws in owner-entrepreneur’s mental models and the lack of a professional team and management control tools can be primary causes of weak decision making, leading to uncontrolled growth and unexpected crisis. For instance, delays in invoicing or deficiencies in handling growing volumes of data can be a primary cause of longer sales collection delays and higher costs (see cases 1 and 2 later discussed). Likewise, an increase in sales orders generated by aggressive commercial policies (e.g. web site promotional investments) can give rise to bottlenecks in production and shipping, leading to a gradual rise in delivery delays (see case 3). Such phenomena generate a slow and gradual depletion in business strategic assets (e.g. customer base and business image), which cannot be financially measured, owing to the weakness in conventional management control tools (Bianchi, Winch, Gray 1998).

SD modelling can support decision makers in understanding the dynamics of such resources, as a result of a learning process through which it is possible to better frame the relevant system and question the consistency of mental models (Morecroft 1994, Sterman 1994).

Case 1: Ask The Builder

In December 1995 a professional builder and remodeller, Tim Carter, started to dream the idea to open a web site to supply customers professional advice, tips and resources
related to home improvement. For this reason, he decided to launch *Ask The Builder* (Easton 1999, chapter 1), a micro-firm financed through a line of credit he established on his house.

Some years before starting the firm, in order to contact new customers, Carter used to advertise his professional advice through newspaper columns. However, he felt that a larger potential market, and quicker and direct contact with the public could have been reached through the Web.

Although two main products were sold through the web site, the main source of income for the company was related to revenues from banners sold to building companies.

A first problem faced in the start-up stage was related to the web site design and set up. Because of the lack of available financial and human resources, Carter decided to ask for the support of two consultants. This allowed him to develop new skills in web site design and maintenance, so that later he was able to give up home improvement consulting services.

Different media were used to advertise *Ask The Builder* web site, in particular through newspaper articles and frequent Carter’s appearances in print and on TV. In a few months, the number of web site visitors started to exponentially grow up to 12 000 pages viewed per month. Carter feels that the success of his site is not related to the number of visits, but is due to the personal contact he has been establishing with clients. He receives on average more than 50 messages per day. This is a very time consuming activity for Carter, who strongly believes that customised and detailed responses are a powerful lever to foster customer loyalty. Most of the queries received by Carter are highly detailed communications requiring careful replies.

When *Ask The Builder* was started, Carter used to check his mailbox, on average, once a day. Two years later, due to web site traffic increase and banner advertising requests, he was forced to check e-mails every 90 minutes.

Such a phenomenon may disclose a potential problem, as Carter – being supported by only part-time staff – was finding it more and more difficult to manage time. This could be a threat for the company in the future, provided that prompt and customised reply is a critical success factor. An implication of this is that further growth in activity volumes could be sustainable in the future only through the acquisition and training of human resources able to fulfil the same tasks actually performed by Carter.

*What are the driving forces of business growth? What symptoms will allow the entrepreneur to promptly discern limits to growth?*

If we analyse the firm as a system of strategic assets, i.e. as a coherent body of production factors providing the basis of competitive advantage, we can describe business growth through feedback loops affecting resource dynamics over time. Each strategic asset, depicted as a stock, is likely to change over time as it is influenced by flows. Such flows are originated by business policies aimed to deploy a given endowment of currently available resources. For instance, the acquisition of new customers (stock variable) depends on the allocation of human resources time available (stock variable).

According to the SD methodology, it is possible to depict main feedback loops fostering and tackling *Ask The Builder’s* growth, as in figure 1.
The outer loop captures the growth process pursued by the company. Web site set up and promotion investments allow Carter to provide clients a satisfactory service. The initial customer base generates a word-of-mouth effect leading to a further increase in business customers. The higher customers level fosters the sale of banners, which increase cash flows that can be reinvested in further web site improvements.

However, in the medium term, the above increase in customer base will affect business service. In fact, the higher number of queries Carter has daily to deal with, gradually reduces the average time devoted to each customer. Although this phenomenon is currently insignificant and is not perceived either by clients or by Carter, it is likely to generate a limit to growth and subsequent collapse, as it would reduce the customer acquisition rate and, consequently, the customer base (figure 2).

*How will the firm be able to face the above limits to growth? What strategic assets will the company have to build in order to counterbalance such limits?*

The main strategic asset tackling growth is related to skilled human resources. The acquisition of such resources is tied to the availability of other resources, such as financial assets and entrepreneur’s time to deal with customer queries (figure 3). Even though in this case, financial resources are not a significant problem, provided that banner revenues are a major source of cash flows, entrepreneurial time is the scarce resource that will be likely to limit further growth. As a matter of fact, in the short term, a progressive allocation of Carter’s time to train new employees will reduce even more the time he will devote to handle customer queries, that will decrease the level of service. However, in the longer run, new trained staff will be able to support Carter to overcome the above limit to growth, through service improvement leading to further development of the business (figure 4).

![Figure 1: Main feedback loops fostering and tackling Ask The Builder’s growth](image-url)
From the above analysis, it is possible to argue that SME entrepreneurs ought to:
· Develop an attitude to perceive weak signals of change (Ansoff 1975) affecting the dynamics of strategic assets
· Acquire a mind-set oriented to figure out short and long term effects arising from adopted policies. They must be aware that the attainment of satisfactory results in the long run can be often achieved by only worsening short term results, and vice-versa
· Adopt a feedback view of strategic assets, in order to assess sustainable business growth policies.
Developing an attitude to timely perceive weak signals of strategic change is crucial for SMEs’ survival and growth. In fact, as remarked in the introduction, owner-entrepreneurs are not usually supported by a professional management; this forces them to simultaneously deal with current and strategic issues.

The above attitude is particularly significant when strategic surprise may arise from the bundle of current activities, rather than specific long term projects. In fact, monitoring strategic relevance of current events often implies major difficulties in detecting in advance weak signals of change, as they are usually hidden in a wider range of daily occurrences in which decision makers are fully involved.

Case 2: Coastal Tool & Supply

In October 1995, Robert and Karen Ludgin started Coastal Tool & Supply (Easton 1999, chapter 3), an e-commerce company selling tools like drills, saws, routers, sanders, polishers, rotary and demolition hammers and others for home improvement.

To start the company web site, they hired Todd Mogren, a 36 years old with a computer background in database management and a love of home hardware. Although the business owners are Robert and Karen, Todd can be considered the entrepreneur, as he is in charge of the most significant decisions impacting on the company’s growth.

The business mission is to provide clients a wide product scope at a competitive price and online assistance. Consequently, when Coastal Tool & Supply’s web site was designed, Todd focused on two major goals, i.e.: a friendly interface and a standard layout and a fast and easy purchasing process.

Todd’s slogan is Three-Clicks-to-Buy: as a business policy any customer should be able to add-to-cart within three mouse clicks. This makes more comfortable the selling process, likewise in real shops. As the number of items at the site continuously grows, Todd always checks to see whether the Three-Clicks-to-Buy holds true. This is a very crucial aspect for the business growth management.

The quality of business offer is also enriched by a service package, such as: free counselling to clients on the kind of tool to choose according to specific needs, and a wide and diversified database including past answers to client queries.

From 1996 to 1997, such an offer allowed the firm to increase its sales revenues by 474% and in 1998 to earn a profit higher than US$ 1.5 million. However, the business start-up was not easy; in fact, the first order was received only after six months from the web site opening. Surprisingly, the slow start did not worry Todd. As a matter of a fact, he was aware of the huge potential market that the Internet would have allowed the firm to reach.

On the contrary, he was astonished by the enormous workload generated by sales orders management (3). This activity does not only imply an administrative and physical order handling, but also concerns a personal contact with each customer. This is a very critical task, provided that each visitor receiving a satisfactory reply to his query will certainly send a purchase order (4).

In order to increase the web site traffic, the company has been acting on other policy levers aimed to build up two important strategic assets:
1. a network of reciprocal links with other companies operating in similar industries, and

2. an electronic mailing list, including about 20000 addresses, to which a monthly newsletter is sent.

Through the mailing list, the company has increased customer loyalty as a consequence of a higher perceived service quality. Another effect generated by the mailing list is related to the revenues provided by newsletter banners sold.

A side effect of the growing number of items embodied in the web site (about 4000) is the increase in inventory. In this regard, Mogren is not concerned about the higher financial costs related to inventories or available warehousing space; he is worried, instead, by the time needed to handle the volume of items offered in the web site.

An analysis of the opportunities and pitfalls related to Coastal Tool and Supply’s e-commerce strategies can be supported by a feedback view of building and draining processes affecting its strategic assets.

A reinforcing loop underlying business growth can be related to the accumulation of new items in the product portfolio of the firm. In fact, an increase in the scope of items sold leads to a higher average order per client. As a consequence, both cash flows and – other things being equal – bank balance increase. An improvement in the company liquidity fosters a further increase in the scope of items sold (figure 5).

![Figure 5: Effects of an item increase policy on business growth](image)

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Figure 6 depicts other reinforcing loops fostering business growth, which are related to commercial policies aimed at increasing the number of visitors, perceived web site quality and to foster customer loyalty.

The progressive growth in Todd’s personal contacts with web site owners selling similar products, generates a higher new company visitors rate. The stock of company visitors (i.e. people interested to buy company items) is another strategic asset critical to business growth. In fact, visitors influence business performance in two different ways:

1. they generate a critical mass of traffic which makes the company’s web site more attractive for new reciprocal links with other sites,
they give rise to a higher volume of queries, leading to a larger database. This increases the site’s perceived quality, generates new customers and enlarges the customer base. A higher customer base fosters, through word-of-mouth, an increase in web site visitors, leading to further growth.

A minor balancing loop may impact on web site visitors. In fact, an increase in new customers caused by higher perceived site quality reduces the pool of visitors, if the inflow of new web site visitors is lower than the outflow.

The draining effect generated by the balancing loop can become more significant if the positive loop associated to the word-of-mouth phenomenon is weakened by a lower perceived web site quality, due to better services provided by competitors. In fact, this can give rise to a higher customers lost rate, which reduces the customer base.

In order to tackle such threats, Todd fosters customer loyalty inducing clients to subscribe the mailing list. The larger the number of addresses stored is, the stronger the effect of the newsletter on customer loyalty will be.

The dynamics generated by the feedback loops commented above are depicted in fig. 7.

What pitfalls can be related to Coastal Tool & Supply future growth?

Further growth could be tackled by other strategic assets, such as, for instance, time devoted by company personnel per company item and business liquidity.

In fact, the more items are offered the more will be the time needed to update the company web site. If the firm will not increase its endowment of human resources, the average time devoted to give advice on each item will decrease. As a consequence of this, the perceived site quality will drop, leading to a reduction in the flow of new customers and – other things being equal – in sales revenues and cash flows (lower balancing loop in figure 8).

Another limit to growth could arise from the higher financial needs due to the inventory increase that a broader product portfolio would imply. Both the inventory increase and the related higher financial costs would reduce cash flows, thereby dampening business growth (upper balancing loop in figure 8).
Figure 7: Limits to growth and further expansion generated by perceived web site quality and customer loyalty

Figure 8: Balancing loops tackling further growth

Figure 9: Limits to growth generated by time devoted per company item and business liquidity

Figure 9 portrays the behaviours associated to the limits to growth commented above. Because of the several delays (e.g., related to perceived site quality or word-of-mouth effects) affecting the dynamics of the strategic assets, the above described system is characterised by inertial effects. Provided that the current stock levels are the result of concurrent effects produced by past decisions, the above dynamics could be considered as counterintuitive and difficult to understand in the light of static and linear decision makers’ mental models (Sterman 1994).
Case 3: Movity

In November 1995, Angelo and Maria Di Francesco and Carlo Brighi started Movity, a firm producing highly innovative electric vehicles. The product was designed to be light, noiseless and environmental-friendly. Initially Movity produced two and three-wheel scooters (superMono and Mandy) and a larger model, equipped with a small chair (Walky). The product was sold to airports, railway stations and other firms which needed to quickly and cheaply move people or goods from one place to another. Based on the quality/price ratio, the product was positioned in a medium-high market segment.

Carlo was in charge of commercial activities, Angelo and Maria were respectively devoted to product design and purchasing/production. Carlo acted as the entrepreneur, the other two partners did not devote much time to strategic decision making, and the firm did not rely on a professional management.

In order to overcome the lack of sensitivity of the domestic market towards business environmental responsibility, the firm started an internationalisation process and opened a web site. The entrepreneur began travelling all over the world to contact potential end-consumers and distributors. The web site opening not only contributed to increase the company visibility, but also provided new customers from Internet ‘surfers’.

In 1997, the firm signed an important commercial agreement with Zap Power System. This allowed it to significantly increase sales revenues, from US$ 35 000 in 1995 to US$ 400 000 in 1996. Staff employed in the production area also increased from 4 to 25 people.

As the factory was relatively small, Angelo and Maria tried to rationalise available space, both in production and inventory processes. While component parts were received from outside suppliers, the scooters were designed and assembled inside the factory.

The entrepreneur’s goal was to become a first-in-class competitor in the world, to increase sales volumes in order to saturate available production capacity. To reach this goal, he was inclined to accept any new order from different countries, although it might have required a higher product customisation aimed to fulfil the various law prescriptions. About the 95% of production was sold abroad, mainly to Japan, USA, Singapore, Malaysia and different European countries.

In the middle of 1997, perhaps nobody could have imagined that the firm would have gone bankrupt!

How can one explain that such a high growing business would have collapsed?

The main cause of business failure was the lack of standardisation in sales orders accepted by the entrepreneur, who did not care for production capacity constraints. Consequently, although he was prone to guarantee clients a reliable delivery delay, he was forced to postpone the shipment of products sold because of unmanageable production problems.

The gradual rise in delivery delays generated two main side effects:
1. financial shortages, due to delayed invoicing and sales collection, and
2. eroding business image, which in turn affected product demand.

In spite of the above difficulties, Carlo was confident to honour business commitments, even though payments to suppliers and shipments would have been slightly postponed.

Unfortunately, it happened that the slow and progressive erosion in business image negatively affected the relationships with suppliers, customers and banks, leading to a deep insolvency state.

The above depicted phenomena generated an unbearable burden that finally Carlo was not able to sustain. His autonomy in managing the company – initially perceived by him as a strength – became a primary factor of loneliness.

Figures 10, 11 and 12 depict the main feedback loops underlying Movity’s growth and decline processes.

Figure 10 shows how an increase in business contacts, resulting from promotional efforts and initial web site investments, increases sales orders as well as – and other things being equal – shipments and cash flows. Higher bank balances allow the company to improve web site quality and to increase business contacts. This improves image and leads to new contacts and further growth.

In a longer time horizon, the progressive growth in business contacts generates a higher internationalisation level of the company. This phenomenon, matched with uncontrolled commercial policies, reduces sales orders standardisation, which increases delivery delays. Consequently, shipments and cash flows decrease, and generate a lack of financial resources to self-finance web site improvement (balancing loop in figure 11).

From the above analysis it is possible to argue that, in order to prevent crisis and effectively manage growth, the entrepreneur ought to timely perceive weak signals of change. In the Movity case-study both the business control system’s sensitivity and the entrepreneur’s mental models were not able to detect warning signals related to the above phenomena.

Figure 12 illustrates feedback loops leading to Movity failure.

![Figure 10: Movity's growth processes](image-url)
Lack of prompt perception of the balancing loop tackling growth, related to delivery delay effects, leads the company to strengthen investments in web site and promotional activities, aimed to foster a further expansion of business volumes. Such a policy increases, on the one hand, sales orders and cash flows. However, on the other hand, it also gradually leads to a further rise of delivery delays recognised by the market. When such delays cannot be tolerated anymore by clients, business image declines. This reduces business contacts and sales orders, and leads to financial crisis.

The feedback loops discussed above provide a system structure from which the dynamics portrayed in figure 13 originate.

What can an entrepreneur learn from the three case-studies analysed above? In order to properly manage SMEs growth and decline processes in e-commerce ventures, it is necessary to:

- Develop an attitude to promptly perceive weak signals of changes affecting the dynamics of strategic assets (e.g. decreasing time to handle customer queries, rising competitors investments in web site quality, declining product standardisation)
- Frame short vs. long-term effects generated by adopted policies (e.g. effects of customer base dynamics on human resource policy, rising financial needs caused by increasing company items)
- Detect reinforcing and balancing loops affecting strategic assets’ dynamics, in order to strengthen those enhancing growth and weaken those limiting it (e.g. positive loop in figure 5 and negative loops in figure 8)
- Understand that the dynamics of strategic assets is difficult to perceive and affect, mainly due to their intangible nature and inertial effects generated by delays and non-linearities.

Figure 11: Limits to growth generated by an increase in delivery delay
Overview of a survey conducted on SMEs pursuing e-commerce strategies and related summary results

In order to test the assumptions emerging from the case-study analysis, we conducted a survey of 200 SMEs, mainly operating in Italy in various industries, ranging from food to handcraft, fashion to services, etc. Companies have been selected from databases available in portal web sites and entrepreneurs’ associations of different provinces. Provided that the survey has been focused on businesses selling their own products or services through the Internet, portals have not been included in the sample.
Two different questionnaires (5) aimed to both detect decision makers’ perceptions about key management areas and recurring problems associated with SME’s e-commerce ventures were sent by e-mail to the surveyed companies in two sequential steps. Forty companies from different industries replied to the first questionnaire. Only eight of them returned the second questionnaire. Data from these companies have not only been gathered through the questionnaires, but also through on-site and phone interviews with entrepreneurs and other business decision makers.

Although the selected sample is not statistically representative, it allowed us to get more insights on how the e-commerce phenomenon is faced by small business entrepreneurs and collaborators.

About 70% of interviewed entrepreneurs started their e-commerce venture to support their own existing activities, mainly focused on domestic markets and traditional distribution channels. Most of them perceive that e-commerce can better support their own companies to undertake globalisation strategies without incurring prohibitive investments for SMEs. Many of them also complain about the lack of proper resources (e.g., information and control systems, management, capital) and the low propensity of their increasing web site visitors to buy the company products or services (6).

Quality and customer service have been mentioned as most important levers on which to act in order to be successful in e-commerce ventures. However, advertising and information systems are also considered as powerful levers.

Furthermore, managing customer relationships (e.g., handling e-mails) and searching for new contacts in the competitive system (e.g., establishing partnerships with competitors, suppliers or investors) have been indicated by interviewees as activities to which they are used to devote most of their time.

The survey findings strengthened our original assumptions and supported us to build a generic SD simulation model aimed to provide SME entrepreneurs a viable tool to explore alternative scenarios in e-commerce ventures.

A generic SD simulation model to analyse growth and decline processes in SMEs pursuing e-commerce strategies

A generic SD simulation model has been built in order to capture those most relevant issues that emerged from the case-study and field analysis. In order to be applied into the surveyed companies, the model embodies an input window which allows decision makers to calibrate it on the specific context where they operate. The input window includes 4 sections, such as: market (e.g. number of visitors who browsed the site in the last year, demand sensitivity to delivery delay and post-sale assistance), commercial (e.g. search engine subscription unit cost, company and main competitors product unit price), finance (e.g. web site capitalised costs) and internal processes (e.g. number of employees managing queries).

The simulation model has a time horizon of 200 weeks (7).

The SD model (8) outlines the building and draining processes affecting the dynamics of the main strategic assets in a company undertaking e-commerce strategies. Such strategic assets (e.g. occasional visitors, visitors, visitors willing to buy, customer base,
mailing list) have been defined according to the results of the case-study and field analysis.

Figures 14 and 15 show the main feedback loops, key-variable dynamics and decisions associated with a base run of the model. Main policy levers affecting the dynamics of visitors and customers are: search engines, promotional investments, sale price, product scope and post-sale assistance.

The base run shows that a product scope enlargement, supported by investments in search engines, advertising, web site and personnel, is likely to foster an increase in new visitors, leading to higher customers and a rise in orders and cash flows. This, in turn, provides funds to finance further growth. The above reinforcing loop in figure 14 is strengthened by two other major feedback loops. One of them is related to the mailing list effect, which reduces the flow of customers lost. The second feedback loop refers to the word-of-mouth effect generated by existing customer base, leading to a further acquisition of occasional visitors, providing a source for new visitors and customers.

A side-effect produced by an increase in product scope gradually generates difficulties in inventory and purchase orders management. This leads to higher delivery delays and a decrease in new customer acquisition (9). Such phenomenon causes a decline in sales orders and cash flows, which generates financial bottlenecks for further growth. The decrease in new customers acquisition dampens sales orders backlog, which allows the firm to restore delivery delays. When the market perceives a lower delivery delay, new customers and sales orders start to increase again. However, this gives rise to a new increase in both the backlog and delivery delays.

In order to stabilise experienced oscillations, the company finally undertakes a post-sale assistance policy. However, although this improves both income and bank balances, it does not allow the firm to pursue a sustainable growth as its product scope has become too large, if compared – at least in the short/medium term – to the business service capacity (figures 14 and 15).
The relevance of the SD approach in portraying the above commented acquisition and draining processes affecting strategic assets in e-commerce ventures originates from its support in explaining the ‘physical structure’ of the relevant system. A structure consisting of several sequentially interconnected levels implies a chain of delays which can generate unpredictable oscillations in strategic assets behaviour, leading to an unmanageable system (Forrester 1961, Sterman 1989).

**Figure 15: Main key-variables dynamics related to a model base run**

In order to effectively manage an e-commerce venture, entrepreneurs must be aware of the feedback structure underlying business processes. They must be also able to selectively act on different policy levers affecting the accumulation and draining processes of strategic assets.

**Concluding remarks and implications for further research**

This paper has outlined the main findings from a research project on the opportunities and pitfalls related to e-commerce strategies in SMEs.

In order to focus the context of our analysis, main critical success factors of SMEs’ e-commerce strategies have been initially discussed, as they emerge from the literature. Three case-studies portrayed by the literature have been selected and debated in a feedback perspective of SMEs’ strategic assets accumulation and depletion processes. Such an analysis allowed us to outline some critical strategic assets (e.g. entrepreneur’s available time to handle customer queries, query database, mailing lists), that are peculiar to the e-commerce context, whose dynamics may significantly affect SMEs success or failure.

From the investigation of case-studies also emerged the importance of:

- promptly perceiving weak signals of change
- discerning short vs long-term effects from adopted policies
- detecting reinforcing and balancing loops affecting strategic assets’ dynamics.
The main results from a survey conducted by the authors on SMEs pursuing e-commerce strategies have referred to a lack of resources, the importance of quality and customer services, as well as advertising and information systems as powerful levers on which to act. Other important issues that have been noted are managing customer relationships and searching for new contacts in the competitive system.

Both the issues emerging from the case-study analysis and the survey findings supported the authors to build a generic SD simulation model to analyse growth and decline processes in SMEs pursuing e-commerce strategies. The structure of the model and a base run have been analysed in the last section of the paper, in order to show how a simulation tool can support SME entrepreneurs to selectively act on different policy levers and to explore alternative scenarios in e-commerce ventures.

Further developments will imply new contacts with interviewed entrepreneurs, aimed to test the model assumptions and to experiment its likelihood to foster SME entrepreneur’s learning in pursuing growth through e-commerce ventures.

Notes

1) By “generic model” we mean those simplified pictures of reality reflecting the broad processes (e.g., financial, production, distribution) of any firm, often related to a given industry (Lane, Smart 1996; Winch et al. 1997).

2) E.g., knowledge, image, financial resources, production capacity.

3) The firm receives on average 10 visitor’s queries for each sales order.

4) Many orders are, however, transmitted by clients via fax or phone, as visitors are not confident to give their credit card number through the Internet.

5) Both questionnaires and a detailed survey results have not been here presented, as their analysis goes beyond the purpose of this article. Such materials are available on request from the authors.

6) These findings are supported by other research projects conducted on the field. KITE 1999; The European Observatory for SMEs, Sixth Report, 2000.

7) Such period has been set to capture the short and long term effects that SMEs’ e-commerce strategies are likely to generate. From our survey emerged that the novelty of the e-commerce phenomenon for SMEs, its changing complexity and unpredictability make extremely hard any reliable assessment of future events going beyond three-four years.

8) Model’s equations are available on request from the authors.

9) This is quite a recurring problem in e-commerce ventures. Both in our survey and in the press on e-commerce failures, bottlenecks caused by a rising product scope have been mentioned as a primary reason for customer dissatisfaction. For instance, in Italy, the failure of Zivago (a company operating in books and CD-ROM e-commerce) was indicated as a main effect of unreliable delivery delays. Marco Patrone, a dissatisfied client, accused the company not to be well organised in honouring promised delivery delays. He said: “I bought four times from Zivago: the first time everything was OK, but it was the 17th February 2000, the second time (17th June 2000) there have been some delivery problems (some books were missing), the third and fourth time (26th October 2000 and 7th November 2000) I was very angry as I didn’t receive any feedback from the company even after 10 days from the expected delivery time. When I sent several e-mails to protest and ask to receive immediately the goods, I was initially told that the problem was related to suppliers and other silly reasons. After I seriously got irritated, I received all the goods. However, I promised myself not to buy anymore from this company”. [Source: Zivago, la lenta strada del’e-commerce, [Zivago, the slow path to e-commerce], in http://www.cww.it/ecommerce/2000/11/27133618.htm).
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Zivago, la lenta strada dell’ e-commerce, [Zivago, the slow path to e-commerce], in http://www.cww.it/ecommerce/2000/11/27133618.htm
This paper deals with the adoption of new technologies by SMEs. Some organisations are better able to use the advantages of these technologies companies or organisations, and this often varies according to company size. Some firms are more able to translate existing processes into cost-efficient, customer-friendly, faster processes by using these newest information technologies. Certain company processes are more easily integrated with these new technologies than other processes.

To give support to the matter of internet-ability, the main conclusions of a survey are reported. These results illustrate how organisations possibly vary in the strategic drivers, pressures, barriers and opportunities of adopting new technologies depending on their size.

1 Introduction

While the gravity of the traditional laws of economy has brought businesses back to earth, the Internet did introduce some new business rules. Speed became much more important, leading to a shorter development life cycle for products and services, faster interaction with customers and other partners. Knowledge management grew in importance in this information-oriented society. Partnerships became increasingly important in the networked society. In our 24 hours/7 days economy, management can now monitor with Internet-based software in an on-line real-time way the relationships between their products, services and customers.

Michael Porter wrote that “the established companies that will be most successful will be those that use Internet Technology to make traditional activities better and those that find and implement new combinations of virtual and physical activities that were not previously possible.” (Porter 2001)

But while some companies – be they small, middle-sized or large – are adopting Internet-technologies without a lot of problems, other firms do not succeed in implementing or integrating e-Business within their existing organisation. For that reason we tried to discover some of the criteria which will enable or attract an organisation for Internet-activities. To understand the Internet-ability issue, our research question is as follows. **Within a given business definition (Abell 1980), the customer life cycle and its related information processing activities determine the potential and reasonable use of Internet-technologies.** This position is illustrated with the results of a survey taken from Belgian small, middle-sized and big companies in 1999 and 2001.

2 Opportunities and potential of the Internet

This study starts with considering the elements of the “customer life cycle information process” as described by Ives and Learmonth (1990). The customer life cycle is not a chain of individual transactions (order, payment, etc.) but a strategy for managing the relationship with the customer. Information technology can provide the ability to
identify and track individual customers, to monitor service levels by company representatives and assist customers in specifying, acquiring, fixing or returning products. Information exchanges are occurring at different moments of this cycle.

Pro-active organisations can use Information Technologies to improve customer service strategies in three ways: personalising service, augmenting service and transforming products (Ives 1990). We will look at these three aspects from the customer’s perspective, but the same can be done from the supplier’s or other actor’s perspective.

2.1 Personalized services

Customers wish to be approached on a personal basis, and appreciate tailor-made information. Most of the time, customer-related information – if it exists – is scattered across the company in branches, divisions, sales outlets, and their respective data warehouses. To manage this information it is necessary to consolidate it at the appropriate organisational level for each single customer.

A complete information system can be build around a customer in order to improve the business relationship. The information can be used to anticipate the customer’s specific needs. With new technologies one can implement one-to-one marketing. Personalisation – building customer profiles and managing marketing tools in order to attract, please and eventually keep the customer – proves difficult to implement in an organisation because of the legacy of the existing, often badly integrated IT-systems.

2.2 Augmenting service

Service augmentation involves differentiation of products or services by providing the customer additional support. Customer support targets the various activities customers will be engaged in as they acquire and use a product/service. Every customer goes through a life cycle when he or she needs the product/service. There are four main phases in the customer life cycle: requirements, acquisition, ownership and retirement (figure 1).

While this categorisation can vary, the essential message is that there are different stages in the buying process of a customer and in the selling experience of a supplier. A company can be specialised in one activity of the life-cycle, e.g. logistics.

This concept of the customer life cycle corresponds with Michael Porters “value chain”, which divides a company’s activities into the technologically and economically distinct business activities. If a company wants to gain competitive advantage over its rivals, the company must either perform these activities at a lower cost, or perform them in a way that leads to differentiation and a premium price.

Chan Kim’s and R. Mauborgne’s “buyer experience cycle” (2000) links the supply chain with the customer life cycle, and states that a customer experiences the consumption of a product or service through six stages (figure 2).

In every stage there are several aspects that leverage the utility level: customer productivity, simplicity, convenience, fun and image, risk and environmental friendliness. It is important for an organisation to only focus on some of these aspects. This is part of the business definition, which will be discussed in the following part.
Personalisation and service augmentation are powerful strategies that can differentiate a company’s products and improve its customer relationships. The transformation of the business goes beyond mere product differentiation to develop new business practices. In extreme, it results in a fundamental shift in the nature of an industry.

2.3 Transforming your business

Michael Porter (2001) warned for the fact that dot.coms and other Internet players talk a lot about ‘business models’ instead of talking in terms of strategy and competitive advantage. The definition of what constitutes a business model can be very murky. Most often, it seems to refer to a loose conception of how a company does business and generates revenue. Yet simply having a business model is a low standard to build a company on. It is clear that it is not enough to define a business model without setting up founded business processes combined with a realistic strategic vision. In the next chapters, the word ‘business model’ is used from this critical point of view.

Treacy and Wiersema (1993) proposed that every organisation has to redefine its business model because the values of the customers have changed. Whereas in the past customers used to judge a product or service on the basis of some combination of quality and price, today they have an expanded concept of value that includes convenience of purchase, after sales service, dependability, and so on. According to Treacy and Wiersema, companies should focus on delivering superior customer value in line with
only one of three ‘value disciplines’: operational excellence, customer intimacy or product leadership. By keeping a narrow focus on only one of these dimensions, while fulfilling the minimal requirements (i.e. the industry standards) of the two other dimensions, they can become champions in one of these disciplines and take leadership positions in their respective industries.

The precise completion of these disciplines will depend on the nature of the product, the customer segments a company wants to serve and the customer function. These three characteristics are the building stones of the business definition according to Derek Abell (1980). One element of the nature of a product is whether the product is tangible or intangible. Other elements of the nature of a product/service – whether there is a good ‘fit’ between the customer and the product – can be linked with the concept of customer intimacy of Treacy and Wiersema. The strategy must also be geared towards the corresponding desires of the customer. In this respect, customer segmentation is very important to deliver the right kind of service in order to achieve maximum customer satisfaction. The purpose of a product for the customer and the expectations a customer has when buying a product or service is the last criterium that is mentioned by Derek Abell.

Burnstine (1980) classifies businesses models according to how they answer on seven fundamental questions concerning the processing of a customer order:
1. Is the product made to order or provided from stock?
2. Is the product tracked after purchase or not?
3. Is the product provided now or in the future?
4. Are customers profiled or stereotyped?
5. Is the product sold or rented?
6. Does the producer bill or take cash?
7. Are terms stipulated or negociated?

Most businesses will fall into no more than 4 or 5 of the 128 resulting business types. The seven questions can help to challenge the business model assumptions of a company and create new business opportunities.

All these concepts about the customer life cycle, business models, value chain, customer intimacy and information power are used to build the framework for the definition of Internet-ability. The next chapter deals with the criteria that have an influence on the attractiveness of doing e-Business.

3 Criteria for Internet-ability

All the concepts discussed in the previous pages form the basis of the search for criteria that influence the attractiveness of the Internet for a certain organisation. The concepts of customer life-cycle and the decision to opt for a certain business model determine the various criteria of Internet-ability. Every industry, organisation, process will be approached differently and the ability for using the Internet has to be examined for each process. On top of this – as is commonly believed in other domains – one can question whether this variety also exists between smaller and larger companies, concerning the use of the Internet.
3.1 Informational value

The level of informational content (as mentioned in 2.1) of a product or service is probably one of the most important factors that makes a product or service Internet-attractive. This depends on the nature of the product (tangible or intangible), and whether the additional cost for producing extra information is low or high. In every step of the customer-life cycle (pre-sales leads, contacts, offers or contracts; order fulfilment and the services during the delivery and finally the after-sales services), the information content plays a major role.

One element of communication is the method used by the organisation. Communication processes (with customers, suppliers, other parties) which already pass through information technologies (such as automated self-service) are more Internet-able than processes, where a physical contact with a collaborator of the organisation is required. The traditionally used media-formats (face to face, documents, oral, email) pose a technology integration problem, since the customers, suppliers and partners have to accept the computer-mediated interaction.

3.2 Business channel restructuring

Companies that in a previous life were mail order catalogue companies will forcibly and naturally evolve with the use of Internet-technologies towards an Internet-based mail order catalogue company. The word ‘naturally’ is quite important here, since the distribution channel structure is a complex subject in which mail order catalogue companies excel.

On the one hand, it can be an advantage when a firm has experience with direct sales, since this makes the transformation towards offering a catalogue on the Internet much easier. On the other hand, companies working with agents and intermediaries could have trouble selling directly to the end-customers since this can cause conflicts with the existing sales channels. It is very important to make good decisions and communicate them with the different partners to overcome this distribution channel problem. This is most visible in the PC- (Compaq versus Dell), insurance- (disintermediation of agents) and automobile-industry (dealers versus direct sales).

The intermediaries have to rethink their role if they want to stay competitive. They will have to add real value for the other partners in the value chain, or they’ll be functioning in an ignored part of the chain.

The potential for co-operation within the industry or sector is very important when one plans to make use of the Internet-technologies. If organisations work together on different levels to reduce costs in the whole value chain, this can lead to co-operation in areas such as research and development, bargaining and buying power, setting up a common marketplace.

Transparency of the market is another criterion that has an influence on the attractiveness of the Internet. A market with a lot of players and with imbalances in supply and demand (often maintained by a few bigger players in the market) is more interesting to transform with the introduction of an electronic marketplace.
3.3 Business process reengineering

If a company can combine certain existing business models or create new business models, it can generate revenue from different sources. One can use the on-line auction model or look for opportunities by setting up a common marketplace for existing retailers.

The reach of a customer segment has grown tremendously with the Internet. Exploration of certain niche-markets can at this moment be profitable because of the possible reach.

All of the criteria of Internet-ability mentioned above can be linked with the more theoretical concepts of the customer life cycle, business models, interaction moments, etc. The criteria give a view of the most influential factors that determine the attractiveness of the Internet. The article does not aims to give an exhaustive list of criteria, because there will be a lot more aspects that determine the Internet-ability, such as price, complexity of the product, regulation and security aspects, presence of human skills within organisations.

4 Survey results

In order to better understand the Internet-ability in Belgian companies, a survey was conducted over a period of time (1999–2001). Particular interest was paid to wether small and medium sized companies had another state of Internet use and readiness compared with larger companies (criterion: total employment lower (SME) and higher (large companies) than 500 persons).

4.1 Strategic e-business plan

It was found that, in 2001, on average 50% of the Belgian companies had already some sort of strategic e-business plan formally written down, while 50% had not (table 1a). In 1999 only 30% of the companies had an e-business plan.

<table>
<thead>
<tr>
<th>Year</th>
<th>% Companies with a formal e-business plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>29%</td>
</tr>
<tr>
<td>2001</td>
<td>48%</td>
</tr>
</tbody>
</table>

Table 1a: Companies with a formal e-business plan in 1999 and 2001

The amount of companies that find a formal e-business plan important rose from 62% in 1999 to 79% in 2001.

<table>
<thead>
<tr>
<th>Year</th>
<th>% Companies that find a formal e-business plan important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>62%</td>
</tr>
<tr>
<td>2001</td>
<td>79%</td>
</tr>
</tbody>
</table>

Table 1b: Companies that find a formal e-business plan important in 1999 and 2001
If these results are split along the lines of company size, one finds that the small and medium-sized companies show an emerging, especially widening lag in their formulation of an Internet strategy (tables 2a, 2b). The lack of strategy formulation poses one of the major barriers for the adoption and implementation of Internet technologies in small and medium-sized companies.

<table>
<thead>
<tr>
<th></th>
<th>1999 % with a formal e-com strategy</th>
<th>2001 % with a formal e-com strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and medium-sized enterprises</td>
<td>26%</td>
<td>37%</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>31%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Table 2a: Companies with a formal e-business plan, according to company size, in 1999 and 2001

This widening gap can be better understood when asking companies’ response on the importance of having such a formal e-business plan. Due to lower interest and/or lower Internet-ability there seems to exist a large gap between perception on the importance of such e-plan between larger and smaller companies.

<table>
<thead>
<tr>
<th></th>
<th>1999 % that find an e-com strategy important</th>
<th>2001 % that find an e-com strategy important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and medium-sized enterprises</td>
<td>47%</td>
<td>62%</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>83%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Table 2b: Companies that found a formal e-business plan important, according to company size, in 1999 and 2001

4.2 Strategic drivers

To develop a better understanding on the Internet-ability for these two groups in different processes (see customer life cycle as explained above) it was thought to be useful to make a deeper study on the drivers improving adoption or on the impediments or barriers hindering such adoption for smaller or larger companies.

The following tables bring us to the strategic reasons companies quote for adopting such an Internet strategy. In a study made in 1999 (Deschoolmeester e. a.) only a minority of Belgian companies felt that the adoption of the most basic Internet technologies, e.g. an online catalogue of products, would cut costs. The Internet was not really seen as a way to improve the bottom-line results of the company, and rather as a cost-raising investment that “had to be done”. Rather, other reasons were seen as more important for the adoption of these technologies.

Six reasons are distinguished why companies would build an Internet business alongside their existing one: 1) cutting costs, 2) improving customer service, 3) differentiate from competitors, 4) improve collaboration with business partners, 5) improve their knowledge of the market, or 6) access new markets.
This CADIGA rule of thumb points to strategic drivers or thrusts that can be attained through the use of IT. The model is an adaptation made by authors on the basis of ideas from Porter (1983) and more specifically Wiseman (1985). It gives business management a list of motives why one should invest in IT.

CADIGA-rule for investing in IT

<table>
<thead>
<tr>
<th>CADIGA-rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(C) Cost reduction/capital-control</td>
<td>A lot of companies implement an Enterprise Resource Program (ERP) to obtain a more productive procurement- and production planning. This way they can achieve smaller inventories of resources and finished products. They can also achieve a more optimal use of production-resources. Also, through more efficient information processing, smaller teams of purchasers and production planners can do more work.</td>
</tr>
<tr>
<td>(A) Alliances</td>
<td>Via Internet Web browsing the customer can place his order and buy a custom-made product. Also the cycle-time between sales-order and delivery can be drastically reduced. Web sites where these facilities are available can differentiate one’s company from competitors which still follow the traditional way of selling.</td>
</tr>
<tr>
<td>(D) Differentiation from competition</td>
<td>With the help of ICT companies can grow in size, in the number of business activities, or on a geographic scale. Besides quantitative growth this also entails qualitative growth whereby information is more accessible when it is needed, so personnel can be more “empowered”.</td>
</tr>
<tr>
<td>(I) Information and knowledge/innovation</td>
<td>Having the right kind of information on the right moment brought to the right kind of decision-maker, is an essential task of all information management. If wisdom and experience are added to information, one gets knowledge. He who creates and shares the most knowledge with the help of ICT, and has a mentality of learning and sharing of knowledge among personnel will be a star player in the future. If companies want to have an image of being technologically advanced, ICT is one of the best means to achieve an image of being innovative. Some customers and suppliers prefer working with companies who prove to have a knack for innovation.</td>
</tr>
<tr>
<td>(G) organisational support of Growth</td>
<td>Integration and co-operation between the functional domains via central databases or co-ordinated activities in a integrated process are made possible with the aid of ICT. In an extended enterprise suppliers and customers can co-operate non-stop and in real-time thanks to the new ICT.</td>
</tr>
<tr>
<td>(A) Agility, flexibility</td>
<td>To improve awareness on the role of ICT for the organisation, higher level management has to question itself on a regular basis on the relationship between potential and obtained results and the past or current and future ICT project portfolio.</td>
</tr>
</tbody>
</table>

In what follows it is analysed how these drivers are showing a different importance for a number of processes occurring in companies.

a) What benefits do companies expect from a ‘gateway to market information (i.e. website) about the company’?

From the numbers in table 3a, one can see that small companies are eager to reduce costs via such a gateway, but large companies see it rather as a tool to improve internal or external collaboration and to some lesser extent also to improve customer service.

<table>
<thead>
<tr>
<th>Benefits / Company size</th>
<th>Small companies</th>
<th>Large companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce costs</td>
<td>21.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Improve internal or exter-nal collaboration</td>
<td>4.3%</td>
<td>30.3%</td>
</tr>
<tr>
<td>Improve customer service</td>
<td>26.3%</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

Table 3a: Benefits expected from a Gateway to market information
b) What benefits do companies expect from an on-line customer self-service?
Both small and large companies think of on-line customer self-service as a cost-saver. However, larger companies see it also as a way to differentiate themselves towards competitors, to improve internal and/or customer collaboration and to improve customer service. Small companies think they will improve market/customer knowledge with this application, whereas large companies don’t expect benefits in this area.

<table>
<thead>
<tr>
<th>Benefits / Company size</th>
<th>Smaller companies</th>
<th>Larger companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce costs</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>Differentiation towards competitors</td>
<td>26%</td>
<td>39%</td>
</tr>
<tr>
<td>Improve internal or external collaboration</td>
<td>16%</td>
<td>24%</td>
</tr>
<tr>
<td>Improve customer service</td>
<td>42%</td>
<td>72%</td>
</tr>
<tr>
<td>Improve market/customer knowledge</td>
<td>21%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 3b: Benefits expected from an on-line customer self-service

c) What benefits do companies expect from giving authorized access to preferred suppliers?
Clearly, larger companies expect a lot more benefits from giving authorized access to preferred suppliers than smaller companies.

<table>
<thead>
<tr>
<th>Benefits / Company size</th>
<th>Smaller companies</th>
<th>Larger companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce costs</td>
<td>26%</td>
<td>39%</td>
</tr>
<tr>
<td>Differentiation towards competitors</td>
<td>11%</td>
<td>27%</td>
</tr>
<tr>
<td>No benefits</td>
<td>31%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Table 3c: Benefits expected from authorized access for preferred suppliers

d) What benefits do companies expect from an e-application for Collaborative Supply Chain Management (SCM)?
Again, one can see that larger companies expect to improve internal/external collaboration and customer service. One third of the smaller companies sees no benefits from such applications.

<table>
<thead>
<tr>
<th>Benefits / Company size</th>
<th>Smaller companies</th>
<th>Larger companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce costs</td>
<td>32%</td>
<td>52%</td>
</tr>
<tr>
<td>Improve internal or external collaboration</td>
<td>16%</td>
<td>46%</td>
</tr>
<tr>
<td>Improve customer service</td>
<td>5%</td>
<td>21%</td>
</tr>
<tr>
<td>No benefits</td>
<td>32%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Table 3d: Benefits expected from Collaborative Supply Chain Management

e) Other results
Placing job vacancies on the Internet, is seen as a cost-saver by almost half the companies (both large and small). Larger companies again stress that this tool also improves external collaboration (30%), whereas smaller companies do not think so (16%).
Order taking for customers via the Internet is principally seen as a cost saver: 47% of the smaller companies and 61% of the larger companies think they will reduce costs by doing so.

32% of the smaller companies and 64% of the larger companies see electronic purchasing as a way to reduce costs.

Integrated CRM is, according to 53% of the smaller companies and to 67% of the larger companies, a way to improve customer service.

Larger companies see benefits in collaborative new product/service development to reduce costs (21% versus 10% of the small companies), to access new markets and create new business (30% versus 5% of the small companies) and to improve collaboration (30% versus 5% of the small companies).

f) Conclusion

A comparison with the surveys of 1999 and 2001, shows that ‘cost reduction’ is again an important reason for adoption of Internet-technologies, both for large and small companies. Nevertheless, larger companies more often mention improvement of customer service, and to a lesser extent, improvement of internal/external collaboration as a major benefit of most e-applications.

4.3 Barriers for the implementation of Internet-technologies

While having measured much more issues (12 in total), only a limited amount of variables are presented here. In table 4a, one can see that “lacking an e-business strategy” is clearly seen as a potential barrier for large companies, and even more so for small companies.

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and medium sized enterprises</td>
<td>50%</td>
<td>68%</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>53%</td>
<td>56%</td>
</tr>
</tbody>
</table>

Table 4a: How important a barrier is the lack of a formal e-business strategy?

The importance of lack of Internet technology know-how increased over the years, for larger companies more so than for smaller companies (table 4b).

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and medium sized enterprises</td>
<td>36%</td>
<td>42%</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>24%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Table 4b: How important do you perceive the lack of Internet technology know how as a barrier?

The larger the enterprise, the more language was seen as a barrier, most likely because larger companies (want to) operate on a European level, and realise the complexity of having to maintain multi-lingual sites (table 4c). But smaller companies seem to have caught up in 2001.
5 Conclusion

In this article, the authors first wanted to understand the basic components of Internet-ability in companies. These components are related, in our belief, to what extent products or services fit with the different operational processes in a company (such as purchasing process, sales process, etc.). When analyzing the opportunities for the Internet, for a given process, it was posed that, on the basis of a few real-life cases, a number of different criteria could be distinguished. These criteria were being situated at 3 different levels being the interest to improve informational value, the advantages for restructuring business channels and finally the opportunities brought forward by business process reengineering approaches.

In a second part we examined whether the Internet-ability varies between larger and smaller companies (under 500 employees being an SME in a wider European context), and also how these differences, if existing, might evolve over time (between 1999 and 2001). Larger companies more often formalized their objectives with Internet technologies into an e-business plan.

To have a more detailed view on the drivers and barriers that influence the Internet-ability, this study made an analysis for larger and smaller companies of differences in importance on a limited number of variables.

Research done by scholars who believe in the specificness of an SME and its management intends to find out if differences in interest, importance-giving or behavior are existing between smaller and bigger companies.

In this study, it is shown that the interest in e-business and the belief in Internet-ability for all sizes of companies is very much oriented towards obtaining cost-reduction in some of the major processes. For larger companies it can be seen that also other drivers, such as the improvement of customer service, but especially internal and external collaboration are of greater importance. For some processes, this study shows a widening gap in importance between these companies compared with the smaller ones in the sample.

The study however has to be careful with generalizing its findings too much since it is based on a rather small sample of companies of both sizes. Further analysis on this Internet-ability concept, studying drivers and barriers over time and for greater size of samples need to be done before making any final conclusion in this subject.

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and medium sized enterprises</td>
<td>6%</td>
<td>26%</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>15%</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Table 4c: How important are the language barriers?*
References


Transformation as a challenge: New ventures on their way to viable entities

Marc Gruber

Introduction

It is the common understanding that entrepreneurship entails a process (see, e.g. Faltin, Ripsas, Zimmer 1998, Bygrave 1997). This basic observation implies several things, most notably that (1) certain stages of organizational development can be distinguished, and (2) an important challenge in entrepreneurship is managing the process of building a company.

In order to arrive at a deeper understanding of the organizational development of new ventures, various growth models have been developed (Greiner 1972/1998, Quinn, Cameron 1983, Churchill, Lewis 1983, Garnsey 1998, Farrell, Hitchens 1988), with Penrose (1959) being among the first to study phenomena of firm growth in more detail. Although there is not an all encompassing understanding amongst entrepreneurship researchers on the question which stages of development should be distinguished (Hofer, Charan 1984), new ventures typically pass through

- a **pre-founding stage** (including e.g. opportunity identification)
- a **founding stage** (including incorporation and market entry) and
- an **early development stage** (including market penetration)

unless they fail early on in the process.

Compared to managing established organizations, the transformation of new ventures poses a special challenge for founders, as they have to deal with the usual day-to-day business operations and in parallel have to build a viable organization. In the process, many firms never arrive at becoming established entities. As evidence from business mortality statistics shows, discontinuance rates can be as high as 70% in the first five years depending on the industry under study (Yoon, Lilien 1985, Timmons 1999, Cooper, Bruno 1977).

Against this backdrop, the purpose of this article is to arrive at an integrative understanding of new venture development. In order to gain fresh insights, we apply a novel framework for studying the transformation process of new ventures which distinguishes challenges on a normative, a strategic and an operational level.

The remainder of this paper is organized as follows. In the next section, we briefly describe the key organizational characteristics of new ventures as well as characteristics of their (competitive) environment, in order to assess the challenges these firms typically face in their development. We then present an integrative framework for the development of new ventures and conclude this paper with a brief discussion.
Characteristics of new ventures and their environment

New ventures have distinct characteristics that distinguish them from larger, more established firms. They can be characterized by their newness and smallness as well as the inherent uncertainty. In addition, new ventures typically face extremely challenging competitive environments as they tend to operate in dynamic, emerging markets compared to the more stable environments established firms often compete in.

- **Newness of the firm**: There is ample empirical support for the argument that new organizations face liabilities of newness, which lead to higher failure rates of new firms compared to older ones (Stinchcombe 1965, Freeman, Carroll, Hannan 1983). Stinchcombe (1965) suggests that new organizations must rely to a high degree on social interactions among strangers. New firms usually do not have the access, links, experience, reputation as well as legitimacy of older firms, making it necessary to establish credibility and trust (Hannan, Freeman 1984, Romanelli 1989). However, there are also advantages to being "new", as aging firms often become inert and thus experience liabilities of aging. This increasing reluctance to undergo processes of change poses a serious threat for the survival of an organization for instance when external changes require a corporate transformation.

- **Smallness of the firm**: Empirical research has also shown that being small has a negative correlation with survival rates (Aldrich, Auster 1986, Birch 1987, SBA 1983). There are plenty of arguments being discussed in the small business literature as to why smallness is a liability. Notably, the lack of resources in small firms which arises partly because of problems in raising capital (Aldrich, Auster 1986), makes them vulnerable and limits their ability to survive during unfavorable conditions. In addition, lack of resources restricts the amount of power a firm can exercise. The limited size of small firms also makes it more likely that critical skill gaps are encountered (McGrath 1996). Nonetheless, smallness can also be a valuable asset. Because of their flexibility, direct communication channels and sometimes unconventional procedures, small firms tend to arrive at decisions quicker than their larger counterparts and can act in a speedy and nimble way when discovering chances in the marketplace (Pleitner 1995, Füglistaller 2001, Schumpeter 1929, Li 2001). Peters and Waterman (1983) explicitly concluded in their well-known research study on successful large corporations that probably the most important factor of their success is their ability to be large, but simultaneously act as if they were small (Peters, Waterman 1983).

- **Uncertainty and turbulence**: Uncertainty is an unavoidable aspect of entrepreneurship and essential to the existence of opportunities (Knight 1921, Kirzner 1973, McGrath 1996). Yet, uncertainty poses a major challenge, as the superior way of doing business may only be known ex post and wrong decisions may have fatal consequences for a small firm with limited resources. In emerging industries the fundamental rules for conducting business have yet to be determined. In this process, the competitive

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1 Brüderl and Schüssler (1990) propose a "liability of adolescence" and argue that firms face a time of adolescence, where the mortality rate is very low (because of their initial amount of resource endowments), and after which the death risk suddenly rises to a high level, followed by a declining rate.
structure of the industry is changing causing turbulence in the marketplace (Anderson and Zeithaml 1984, Tushman and Anderson 1986).

New ventures and their organizational transformation

The preceding discussion of the characteristics of new ventures and their environment already elaborated on the challenges new ventures typically face. In order to become an established organizational entity, new ventures have to deal with these challenges in a comprehensive way. In the following discussion we therefore distinguish a normative, strategic and operational dimension of venture management – a perspective, which has proven to be valuable for understanding firms in a comprehensive, integrative fashion (Bleicher 1999, Gruber 2000). In our belief it is a very fruitful approach for research in entrepreneurship, as it allows to conceptualize a very diverse set of challenges such as overcoming an emerging firm’s liabilities of newness or developing a market entry strategy (Gruber, Harhoff 2002, Gruber 2002).

In his concept for integrative management, Bleicher (1999) distinguishes three dimensions of management, namely a normative, a strategic and an operational level: At the **normative level**, management lays down the general, mid- to long-term goals of a firm, defines the basic codes of behaviour as well as generally accepted company norms and principles, thereby establishing the identity, culture and structure of the company. At the **strategic level**, the firm focuses on establishing favourable prerequisites for achieving above normal returns by developing valuable resources and capabilities, by positioning its own activities relative to the competition, by bundling its strengths, and by developing suitable strategies for gaining as well as sustaining competitive advantages; all within the normative guidelines of the firm (Bleicher 1999, Schwaninger 1994, Bowman 1974). At the **operational level**, the firm deals with the execution of strategies within the normative scope of the firm (Bleicher 1999, Ulrich, Krieg 1974).

Building on this generic description of management tasks, we are able to focus on specific tasks in new venture management. In this respect, figure 1 gives an overview of the key normative, strategic and operational tasks of new ventures in the pre-founding, founding and early development stage of their organizational evolution.

At first glance it is obvious that as firms advance from the pre-founding stage to the early development stage, there are a multitude of tasks which have to be accomplished in order to succeed and which require a very versatile and devoted founding team.

As this framework shows at the **normative level**, one of the core challenges in the pre-founding stage of a new venture is the definition of a company vision and its values. It is basically up to the founders to develop a vision for the future development of their company, yet they have to take into account that (1) these long term goals define the guiding lines for all other decisions, and (2) influence the perceptions various actors in the environment will have of the emerging firm. E.g., if the founders conclude that they want to remain independent and follow a low growth strategy, they will not be prime candidates for venture capital financing.
<table>
<thead>
<tr>
<th>Pre-founding stage</th>
<th>Founding stage</th>
<th>Early development stage</th>
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</thead>
<tbody>
<tr>
<td><strong>Normative level</strong></td>
<td>- Defining company visions and values</td>
<td>- Sharing of company vision and values in firm</td>
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<td></td>
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<td>- Forming organizational culture</td>
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<td>- Building credibility / trust</td>
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<td></td>
<td></td>
<td>- Definition of roles</td>
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<tr>
<td><strong>Strategic level</strong></td>
<td>- Opportunity recognition</td>
<td>- Market entry strategy</td>
</tr>
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<td></td>
<td>- Conception of business model and identification of competitive advantage</td>
<td>- Resource building</td>
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<tr>
<td></td>
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<td>- Strategic alliances</td>
</tr>
<tr>
<td><strong>Operational level</strong></td>
<td>- Business intelligence</td>
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<td></td>
<td>- Networking</td>
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<td>- Presentations and negotiations</td>
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<td>- Growth strategy</td>
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<td>- Replication resources</td>
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<td>- Sustaining competitive advantage / erecting barriers to market entries</td>
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<td>- Refining organizational structure</td>
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</tbody>
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**Figure 1: Normative, strategic and operational challenges of new venture management (cf. Gruber, Harhoff 2002)**

Corresponding to the definition of a company vision, the core values of the firm have to be defined. In practice, this happens more or less implicitly, as the founders discuss for instance how to tackle certain problems or argue about venture strategies and in doing so arrive at a common understanding of their values.

These core values as well as the vision of the company impact the gradual development of a company culture. As reported by several studies, a market orientation is found to be beneficial to the success of new ventures. E.g., Raffa and Zollo (1995), and Roberts (1991) found that firms that were quick in adopting a market orientation achieved a higher performance level than firms that did not. As the firm evolves and more and more employees join the organization, its culture has to be fostered and its vision shared. Otherwise the firm would evolve into a heterogeneous entity, losing its clear orientation and focus.

Entrepreneurs also face normative tasks such as the definition of new roles and the institutionalization of an organizational structure. Also, strategic alliances as well as

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2 Narver and Slater (1990) defined market orientation as the "organization culture that most effectively creates the necessary behaviors for the creation of superior value for buyers and, thus, superior performance for the business." Because the organizational culture sets standard social routines within the firm, it also supports the new venture in reducing its liabilities of newness.
measures to establish credibility and trust – e.g., through communication activities – can be regarded as key challenges at the normative level, helping the firm to establish itself as a respected organizational entity. Thus, normative management is able to make major contributions to overcoming the liabilities of newness of a venture. As the firm evolves into a larger and more mature entity, also liabilities of smallness are gradually overcome, however, the previously mentioned risk of becoming inert must be addressed in the process.

As we move from the pre-founding stage to the early development stage at the strategic level, major tasks include opportunity recognition and market identification, the development of a business model and a market entry strategy. Market entry presents a major milestone for the new venture. As Schonhooven, Eisenhardt, Lyman (1990) point out, “(w)hen the first shipment for revenues is made, the new firm is on its way to a more favourable resource-dependence position.” (Schoonhoven, Eisenhardt, Lyman 1990, p. 177).

Special attention has to be paid to gaining and sustaining competitive advantage in new ventures, as empirical studies have repeatedly shown that competitive advantage is the prime determinant of new product success in the marketplace (Zirger, Maidique 1990, Cooper, Kleinschmidt 1987/1993). The ability of a firm to gain and sustain its competitive advantage is closely linked to its resource base. While classical economic theory follows a very broad understanding of the term resources (cf. Ricardo 1817), strategic management mainly focuses on those key resources which enable a firm to achieve sustainable competitive advantages in the marketplace (Leonard-Barton 1992, Dierickx, Cool 1989, Williams 1992). According to Amit and Schoemaker (1993) strategically valuable resources have characteristics such as scarcity, low tradeability, inimitability, limited substitutability, appropriability and durability. As new ventures typically start out with very limited strategic resources, they need to replicate these resources in order to be able to grow. However, due to the very characteristics of strategically valuable resources, firms sometimes face severe problems in this replication process (Szulanski, Winter 2002, Dierickx, Cool 1989).

An equally challenging task for a new venture is to sustain its competitive advantage, even in the face of more established, resource-rich corporations going after the same target segment. When the new venture is a pioneer or an early mover in the market, one possibility is to erect barriers to market entry for potential new competitors. In a comprehensive literature study, Karakaya and Stahl identified 19 different market-entry barriers such as access to distribution channels, incumbent’s cost advantages or customer switching costs (Karakaya, Stahl 1989). However, the consideration of pioneering advantages has to be complemented by consideration of a laggard’s disadvantages and careful analysis of a new venture’s ability for erecting entry barriers or overcoming them. Narasimhan and Zhang (2000) observe that new ventures often race into a market only to avoid the disadvantages of entering late, rather than being able to capture pioneering advantages.

Another factor influencing the sustainability of competitive advantage is environmental turbulence. In order to sustain its advantage a new venture should continuously devote energy to staying competitive and foster its dynamic capabilities: „The term
‘dynamic’ refers to the capacity to renew competences so as to achieve congruence with the changing business environment (…). The term ‘capabilities’ emphasizes the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment.” (Teece, Pisano, Shuen 1997, p.515).

As firms progress through the various stages of development, more and more knowledge and experience is gathered on internal operations and on the environment, reducing the initial uncertainty and allowing the firm to refine its initial strategy.

At the operational level, tasks such as business intelligence or networking are important throughout all three stages of development, while for instance presentations at venture capital firms, market tests as well as the management of customer relationships gain importance with the gradual evolution of the new venture and the successful completion of certain milestones such as market entry. Due to environmental uncertainty operational management can be very turbulent at times (Macdonald 1985).

Looking at the overview in figure 1, it can easily be concluded that entrepreneurs need to manage a new venture with much anticipation. Especially in firms that need to rush to market in order to capture first mover advantages, the duration of these stages is compressed (Greiner 1972/1998), posing further challenges to the founders. For instance, with new employees joining the rapidly growing firm on a daily basis, fostering a strong culture and common vision is a major challenge at the normative level (Gruber, Harhoff 2002). Developing a market entry strategy and engaging in supportive strategic alliances within a short time frame are critical challenges at the strategic level of a high growth venture. When looking more closely at the scope and complexity of these tasks, it is evident that the time for setting up a successful new venture cannot be shortened arbitrarily.

From a managerial perspective it should also be considered that normative, strategic and operational tasks complement each other. Entrepreneurs who neglect certain tasks will have problems in establishing a successful company. Thus, normative, strategic as well as operational tasks should be addressed in a well-orchestrated manner, making it necessary to manage “hard factors” as well as “soft factors” simultaneously (Gruber, Harhoff 2002). Contemplating these challenging tasks, it is not surprising that venture capitalists typically attribute higher importance to the quality of the management team than to the quality of the venture idea. In this respect it is also not surprising that many new ventures fail, as the high failure rates cited earlier in the paper indicate.

Conclusion

This paper studied the organizational transformation of new ventures on their way to viable entities. We applied a novel perspective for entrepreneurship research by distinguishing a normative, strategic and operational dimension of new venture management. This perspective has already proven to be of value for understanding larger corporations as well as small and medium sized enterprises in a comprehensive and integrative way. In addition, it allows for conceptualizing transformation processes in
firms (Bleicher 1999). We therefore believe that it can principally serve as a very fruitful approach for studying a wide range of phenomena in entrepreneurship in a comprehensive as well as integrative fashion. By additionally distinguishing several stages of new venture development, we are also able to adhere to the common understanding that entrepreneurship entails a process.

As we have seen in the preceding discussion, there are distinct challenges an entrepreneurial team has to master in order to establish the emerging firm as a viable entity. While some are quite obvious tasks of new venture management (e.g., the process of developing and launching an offering), others in many cases are not on the top of minds of entrepreneurs (e.g., fostering a beneficial company culture), yet are likely to have a profound impact on the overall ability to succeed in the marketplace and to establish the firm as a viable economic actor. Besides its research implications, the presented framework therefore can have quite practical applications, e.g., in teaching a comprehensive understanding of the entrepreneurial process.

References


Wie lernen GründerInnen und JungunternehmerInnen (und was lernen ihre Helfer daraus)?
Förderung des Gründungs- und Übernahmeerfolges durch Abbau der „gaps“ zwischen Bedarfslage der Nachfrager und Angebotsgestaltung durch unterstützende Stellen

Norbert Kailer

1 Ausgangspunkt: Verbesserung der Unterstützungsdiensste für Unternehmen


Nicht nur für die Gestaltung von Bildungsmassnahmen, sondern generell für die Erhöhung der Inanspruchnahme sowie des Umsetzungs erfolges aller dieser Unterstützungsmaßnahmen ist die Berücksichtigung einer (meist vernachlässigten) Fragestellung wesentlich: „Wie lernen Gründer und (Jung-)Unternehmer – und wie ist dies in der Angebots gestaltung berücksichtigt?“ Als Beispiele seien die lern- und entwicklungs förderliche Gestaltung von Auswahlmassnahmen für die Gewährung von Finanzhilfen oder die stärkere Integration des Entwicklungsaspektes in das Leistungsangebot von Gründerzentren genannt. Zielgruppen- und Kundenorientierung sind auch aus Sicht...
der EU-Kommission (2001b) zentrale Ansatzpunkte für die Schaffung erstklassiger Unterstützungsdienste.

Dabei stellen sich in diesem Zusammenhang folgende Fragen:

· Welche Rolle spielt die Kompetenzausstattung und -entwicklung der Gründer und (Jung-)Unternehmer hinsichtlich Gründungs- und Übernahmemotivation sowie des Geschäftserfolges?
· Wie und von wem lernen Gründer und (Jung-)Unternehmer hauptsächlich?
· Welche Bedarfe haben Gründer und (Jung-)Unternehmer und inwieweit unterscheiden sie sich innerhalb der einzelnen Gründungsphasen?
· Gibt es von Anbieterseite ein darauf abgestimmtes Leistungsangebot?
· Wie können „gaps“ zwischen der Bedarfs- und der Angebotsstruktur abgebaut werden?


2 Kompetenzausstattung und -entwicklung als zentrale Faktoren des Gründungserfolges


Gründungskompetenz beinhaltet jedoch zusätzlich zu dieser Handlungsfähigkeit auch die Gründungsmotivation (auf die z. B. durch Information, Vorbilder und Testimonials eingewirkt werden kann) sowie die Frage der Zuständigkeit (Rahmenbedingungen der Gründung, die z. B. durch gesetzliche Veränderungen, Bürokratievereinfachungen oder Bereitstellung von Gründungsinfrastruktur und Finanzierungshilfen beeinflusst werden können).

3 Lernquellen und Hauptinformationspartner


Die meisten Gründungsinteressenten, Gründer und Übernehmer lassen sich durch Intermediäre, durch ihr professionelles oder familiäres Netzwerk beraten (Bremberger, Klimitsch 2000). Dabei kommt dem sozialen Netzwerk eine besondere Bedeutung zu (Schmude 2002).

Als wichtigste Lernquellen nannten die befragten Jungunternehmer an erster Stelle (von ca. 70 % aller Befragten) Formen informellen Lernens, ca. 60 % Weiterbildung/Beratung. Neue Lernmedien/-technologien wurden von ca. einem Drittel, Gründungsbroschüren u. a. schriftliche Unterlagen nur von jedem fünften als wichtige Lernquelle angeführt (Abb. 1).
Informelles Lernen:

Gespräche im Familien/Freundeskreis 54 %
Gespräche mit Branchenkollegen 47 %
(Jung-)Unternehmererfahrungsaustausch 37 %
Gespräche mit Arbeitskollegen, ehemaligem Arbeitgeber 31 %
Gespräche mit Fachleuten aus Forschungseinrichtungen 10 %

Weiterbildung/Beratung:

Fachberatung mit Gründungsberater 32 %
Gründungs-Checkup mit Berater 25 %
Business-Plan-Erarbeitung mit Berater 19 %
Gründerseminare 14 %
Längere Einzelberatung durch Berater/Coach 13 %
Besuch eines Gründernodes 13 %
Teilnahme an Gründerwettbewerb 4 %
Teilnahme an integriertem Trainings- und Beratungsprogramm 2 %

Nutzung neuer Lernmedien/-technologien:

Informationssuche über Internet 29 %
Recherche in Datenbank, virtuellem Gründerzentrum 9 %
Online-Lernen (Internet-Lernprogramm) 6 %
Lernen mit CD-Rom für Gründer 5 %
Selbst-Diagnoseinstrumente, Gründertests 3 %

Gründungsbroschüren/Leitfäden: 19 %

(n = 192, Mehrfachnennungen)

Abbildung 1: Wichtigste Lernformen von Jungunternehmern

Bei der Frage nach den hauptsächlichen Informationsquellen der Jungunternehmer ergeben sich deutliche Unterschiede zwischen Start-Ups (Neugründern) und Übernehmern (Abbildung 2):

Hauptinformation durch …       Gründer       Übernehmer
(Wirtschafts-)Kammer         66 %       61 %
Steuerberater               64 %       67 %
WIFI/Gründerservice         52 %       22 %
Bankberater                 43 %       22 %
Kollegen, Jungunternehmer   40 %       19 %
Behörden                    23 %       11 %
Rechtsanwalt                23 %       36 %
Unternehmensberater         21 %       22 %
Eltern                      19 %       72 %

(n = 145 bzw. 35, Mehrfachnennungen)

Abbildung 2: Haupt-Informationsquellen von Gründern und Übernehmern

Kammern und Steuerberater sind für beide Gruppen wichtige Informationsquellen.

Jedoch greifen Start-Up-Unternehmer stärker auf Gründerinformationsstellen und Bankberater zurück, für sie spielt auch in weiterer Folge die Erfahrungsaustausch mit anderen Jungunternehmern eine bedeutende Rolle. Für Übernehmer sind dagegen die Familie, insbesondere die Übergeber selbst, zentrale Informations- und Austauschpartner in der Übergangsphase, wobei für die rechtliche Ausgestaltung der Übergabe auch deutlich öfter Rechtsanwälte beigezogen werden.

4 Gründungsphasenspezifisch unterschiedliche Bedarfe an Unterstützungsleistungen

Unternehmensgründung ist nicht als zeitpunktbezogener, auf den Gründungsauftrag be- schränkter Vorgang aufzufassen: Gründer beschäftigen sich im Durchschnitt bereits 29 Monate vor der Gewerbeerlaubniserteilung mit dem Schritt in die Selbständigkeit (IfM 1997), die Aufbauphase wird meist mit etwa fünf Jahren angesetzt. Auch die Entscheidungsprozesse bei Unternehmensübertragungen verteilen sich meist über einen mehrjährigen Zeitraum (Heyse, Schepanski 2000).

Die in der (Vor-)Gründungsphase von den befragten Jungunternehmern am häufigsten genannten antizipierten bzw. befürchteten Hauptprobleme sind:
- Gründungsbürokratie
- Suche nach Finanzierungsquellen
- Suche nach Förderungen
- Grosse zeitliche Belastung
- Suche nach Kunden
- Standortwahl.

In der Aufbauphase verschoben sich die Problemgewichtungen erheblich, genannt werden am häufigsten folgende aufgetretene Problemfelder:
- Suche nach Kunden
- Zeitliche Belastung
- Suche nach geeigneten Mitarbeitern
- Einkommensprobleme / Sicherung des Lebensunterhaltes
- Grosse Konkurrenz.

4.1 Vorbereitungsphase


Während die befragten Neugründer oft professionelle Gründungsberater in Anspruch nehmen und auch Business-Pläne i.w.S. erstellen, stehen bei Übernahmen die Übergeber als nicht-professionelle Beratungs- und Gesprächspartner im Vordergrund. Dementsprechend gewinnt eine beide Partner umfassende Vorbereitung hinsichtlich betriebswirtschaftlicher und vor allem psychologischer Probleme an Bedeutung.

4.2 Gründungs- bzw. Übernahme phase


In dieser Phase wurden von den befragten Neugründern vorwiegend Kammern, Gründer servicedstellen, Steuerberater und Banken als Informationsquellen herangezogen. Bei Übernehmern spielen dagegen die übergebenden Familienmitglieder eine herausragende Rolle, zusätzlich werden Steuerberater und für die rechtliche Ausgestaltung der Übergabe Rechtsanwälte und Kammerstellen beigezogen.

4.3 Aufbau- und Entwicklungsphase


Als Lernquellen werden deshalb von den befragten Jungunternehmern learning by doing und Erfahrungsaustausch mit Unternehmerkollegen bevorzugt, wobei bei Familienunternehmen die Übergeber als wichtigste Lernquellen hinsichtlich Know-how-

5 Problemfelder des Angebotes


6 Ansatzpunkte zum Abbau des „gaps“ zwischen Angebot und Nachfrage

6.1 Erweiterung der Dienstleistungspalette durch Programminnovationen

Ein zentrales Merkmal dieser Programminnovationen ist die zunehmende Integration von Beratung und Training, von Wissensvermittlung und Reflexion und Austausch praktischer Erfahrungen: „cases of best practice“ in der Jungunternehmerentwicklung sind auf europäischer Ebene z.B. charakterisiert durch mindestens einjährige Laufzeit,


6.2 Verstärkter Einsatz neuer Medien und Lerntechnologien


Darüber hinaus können die Möglichkeiten des Intranets/Internets verstärkt auch zur Vernetzung von Gründern in ihrer Frühentwicklungsphase (Lechner 2002) genutzt werden.

6.3 Entwicklung der Beraterkompetenz und der Beteiligungskompetenz der Klienten

Geht man von einem Beratungsmodell der individuellen Prozessbegleitung über alle Gründungsphasen hinweg aus, gewinnen beratungsmethodische, sozial-kommunikative und personale Kompetenzen markant an Bedeutung. Im Zusammenhang mit der


6.4 Veränderung der Rahmenbedingungen von Unterstützungsmassnahmen


Bei der inhaltlichen und organisatorischen Ausgestaltung geförderter Beratungsprogramme sind vorab einige wichtige Grundsatzentscheidungen zu treffen, um einerseits die Teilnahmebereitschaft zu erhöhen, andererseits aber auch um eine adäquate Teilnehmerauswahl sicherzustellen und damit einen entsprechenden mittelfristigen Umsetzungserfolg sicherzustellen.


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Jörn-Axel Meyer


Diese Veränderungen werden in der öffentlichen Diskussion unter dem Schlagwort „New Economy“ subsumiert. Es gehört wohl zur deutschen Gesprächskultur, dass in Diskussionen, in Medien, in populärer und auch wissenschaftlicher Literatur der Begriff „New Economy“ zwar gerne gebraucht, aber nicht hinterfragt wird, was denn der Begriff konkret umfasst. Damit besteht die Gefahr, das ein diffuses neues „Modewort“ entsteht, ohne es genau abzugrenzen, insbesondere dann, wenn der Begriff mit anderen aktuellen Schlagworten vermischt wird. Die folgende Übersicht zeigt eine Zusammenstellung von Definitionsversuchen von populären Protagonisten der New Economy-Diskussion der letzten Jahre. Es wird deutlich, wie vielfältig aber auch allumfassend New Economy beschrieben wird.

The term New Economy points at the fact that today’s economic transformation is driven by the development and diffusion of modern electronic-based information technology. The term emphasizes that the ongoing shift is a change in structure, and not primarily a macroeconomic or cyclical phenomena. The New Economy is a structural shift, bringing transformation and disruption. But is not about macroeconomic landings, smooth growth, permanently rising stock prices, government budget surpluses, or permanently low rates of unemployment, interest and inflation.


The concept of New Economy entails much more than just the application of new information and communication technologies; attention is instead focused on three features of the aggregate economy which signal that an important change in the function of the economy has occurred: advances in digital technology, globalization of trade in goods and services, financial market liberalization and globalization.


New Economy in short – it’s an industry that generates earnings without the need to physically products and/or which uses intelligence and innovation as its raw materials. While the New Economy is most often explained in terms of such hi-tech industries as the Internet, computer software, biotechnology, etc. – the reality is that New Economy activities can take place in almost any industry.

Simpson, B.: Creating and Fostering a New Economy in New Zealand, October 2000

We live in a discontinuous world. Digitalization, deregulation and globalization are profoundly reshaping the industrial landscape. The convergence of these forces has produced a Cambrian explosion of new organisational forms, institutional relationships and value-creating possibilities. What we see today is a dramatic proliferation of new economic life forms: virtual organisations, extend enterprises, global consortia,
Net-based commerce (…). We are on the verge of a phase transition between an old order and a new one. Call it digital Economy, the knowledge Economy, or just the new.


This New Economy has three distinguishing characteristics: It is global. It favors intangible things – ideas, information and relationships. And is interlinked. These three attributes produce a new type of marketplace and society, one that is rooted in ubiquitous electronic networks.


New Economy lässt sich nicht auf Internet und Neuen Markt reduzieren, sondern bezeichnet vielmehr den Übergang von einer Wirtschaft, die sich bisher vor allem auf Kapital und Arbeitskraft gestützt hat, zu einer Wirtschaft, in der Wissen und Kreativität als wichtigste Produktivfaktoren gelten.


Unter der New Economy wird vor allem die seit etwa Mitte der 90er Jahre stattfindende IT- und Internet Revolution und die in diesem Umfeld aussergewöhnliche Performance der US-Wirtschaft verstanden. Im Mittelpunkt steht die Idee, das die IT-Revolution zu einem höheren Produktivitätswachstum führt, das Lohnerhöhungen und Stückkostenenkungen gleichzeitig und somit weitgehende Inflationsfreiheit bei steigenden Unternehmensgewinnen erlaubt.


We define New Economy as the emerging macroeconomic environment of the early 21st century. Indicators are globalization and liberalisation of markets; Data, information and knowledge management and connectivity; Relevance of intangibles (esp. knowledge, relationships).

Toepfer, O.: Strategic Innovation for Financial Service Institutions, London 2000

The New Economy is defined differently. (…) we create value with intangible assets such as people, knowledge, relationships, intellectual property, patents and prophesies(…).


Schwarz, Gerhard: New Economy? Auf der Suche nach der Neuen Wirtschaft, NZZ, 18.03.2000

New Economy muss sich inhaltlich definieren: Stark wachsende Unternehmen bewegen sich im Spannungsfeld von innovativen Technologien und neuen Geschäftsmodellen.

Rosbach, C.: Innovation verändert die traditionellen Spielregeln. Die Welt, 30.03.2001

Darstellung 1: Definitionen populärer Diskutanten der New Economy der letzten Jahre

New Economy wird wiederholt mit Begriffen wie Internet-Ökonomie, New Business, virtueller oder digitaler Ökonomie gleichgestellt. Der Begriff wird sogar – in eher po-
pulärwissenschaftlichen Diskussionsbeiträgen – als Synonym für eine wirtschaftliche und gesellschaftliche Revolution verwendet.


Hier soll dazu ein Versuch unternommen und auf drei Fragen eingegangen werden: Was ist und umfasst der Begriff New Economy? Welche Bedeutung hat das Phänomen New Economy als Untersuchungsgegenstand für der Betriebswirtschaftslehre, was ist also tatsächlich neu und anders? Welche Forschungsfragen zum Phänomen New Economy sind nahelegend?

Was ist New Economy?


Derartige branchenorientierte Abgrenzungen erscheinen jedoch für eine sinnvolle betriebswirtschaftliche Forschung wenig geeignet, da sie sich nicht an den Besonderheiten der New Economy-Unternehmen gegenüber den sogenannten „Old-Economy-Unternehmen“ orientieren.

So wird von allen dortigen Autoren die Nutzung moderner Informations- und Kommunikationstechnologien für Leistungserstellung und -angebot (z.B. Internetauftritt) als zentrale Eigenschaft genannt.

Weiterhin wird von der Mehrzahl dieser Autoren die Vernetzung mit Partnerunternehmen auf der gleichen Wertschöpfungsstufe ebenso auch mit Kunden und Lieferanten genannt.


Aus den eigenschaftsorientierten Beschreibungen der New Economy wird deutlich: Nicht die Unternehmen und ihre Zugehörigkeit zu bestimmten Branchen definieren New Economy, sondern die informations- und kommunikationstechnologisch bedingten Veränderungen der Leistungserstellung und des Leistungsangebotes durch die Unternehmen. Damit kann also jedes Unternehmen jeglicher Branche zur New Economy gehören. Dies gilt auch für die Biotechnologie, jedoch nicht per se aufgrund ihrer Produkte sondern vielmehr nur im Falle der Anwendung moderner Informations- und Kommunikationstechnologien.


Donald (1994, S. 28) fasst in ähnlicher Weise die Kennzeichen der New Economy zusammen:

- Wandel zu informations- und serviceorientierten Aktivitäten
- Die Anwendung moderner Technologien insbesondere Telekommunikation und Computer als Instrument und Gegenstand der unternehmerischen Leistungen
- Downsizing von Unternehmen und Entstehung neuer Unternehmen
- Globalisierung der Wirtschaft.

Donalds Charakterisierung legt jedoch das Problem offen, dass derartige Beschreibungen der New Economy nur zu leicht zu einer Vermischung von Eigenschaften der (typischen) New-Economy-Unternehmen mit den Ursachen der Veränderungen in diesen Unternehmen (also den modernen Informations- und Kommunikationstechnologien) und den Wirkungen der Veränderungen (Entstehung junger und kleiner Unternehmen, grenzenunabhängiges Wirtschaften, Globalisierung, internationaler Wettbewerb, virtuelle Kooperationen) führen.

Für eine nun abschließende Definition von New Economy kann Szyperski weitgehend gefolgt werden. New Economy kann u. E. beschrieben werden, als…

…das Gesamtsystem der miteinander wirtschaftenden Unternehmen, die zum Erstellen ihrer Leistungen sowie zum Auftreten am Markt und der Kooperation mit Lieferanten, Kunden und Partnern gleicher Wertschöpfungsstufe primär auf eine Informationsinfrastruktur aus modernen Informations- und Kommunikationstechnologien (wie z. B. Internet) zurückgreifen, um so gegenüber klas- sischen Wegen einfacher und schneller sowie grenzenunabhängig agieren zu können.

Eine New Economy im engeren Sinne verkörpert diejenigen Unternehmen, die ausschließlich aus dem Grunde der Nutzung moderner Informations- und Kommunikationstechnologien für Erstellung und Angebot ihrer Leistungen und der Wertschöpfung hieraus entstanden sind.


Zu Sinn und Unsinn der New Economy als betriebswirtschaftliches Forschungssubjekt

Um als sinnvolles Forschungsobjekt Bestand zu haben, sollte es eine zeitliche Stabilität, eine eindeutige Abgrenzbarkeit und Definition besitzen sowie offensichtliche Besonderheiten, gegebenfalls etwas neues aufweisen, die zudem eine Generalisierung auf die KMU-BWL zulassen.

Ist nun New Economy etwas völlig neues, eine neue Ökonomie oder sogar eine Revolution? Letzteres würde eine grundlegende Umwälzung, die das Bisherige vollständig ersetzt bedeutet (Brockhaus 1998, S. 316 ff.). Das ist hier offensichtlich nicht der Fall. Denn die bisherige „Old Economy“ bleibt bestehen, vielmehr wandeln sich viele Old Economy Unternehmen durch eine primäre Nutzung der Informationsinfrastruktur zu New Economy Unternehmen.


Die New Economy weist also keine neuen betriebswirtschaftlichen Phänomene auf. Vielmehr sind es die technischen Erleichterungen und die Integration bisher getrennter Informationswege, die nun kaufmännisches Handeln, so z.B. den Zugriff auf Informationen an jedem Ort und zu jeder Zeit und ein globales unternehmerisches Agieren sowie internationale Kooperationen und die Entstehung kleiner, aber effektiver Anbieter am Markt erleichtern und beschleunigen, was sich besonders deutlich in den Unternehmen zeigt, die diese Technologien gezielt nutzen und die man zur New Economy zählt.

Somit ist die (oder eine) New Economy nur das Ergebnis der technischen Entwicklungen, mit denen sich die Forschung zu befassen hat, also der Forschung, die den Einsatz moderner Informations- und Kommunikationstechnologien im Unternehmen vorbereitet und Nutzen aufzeigt. Die Literatur hierzu ist nicht mehr überschaubar und brachte auch viele Beiträge, die die neuen Technologien in Unternehmen schlicht nur anpreisen, anstatt ihren Einsatz kritisch zu hinterfragen. Die grosse Masse dieser Forschung verbleibt dabei auf dem Stand, dass sie bisheriges unternehmerisches Handeln in eine Informationsinfrastruktur überträgt, ja sogar in sie einfügt. Die Inhalte des unternehmerischen Handelns, so z.B. die strategische Planung, die Führung von Mitarbeitern unterscheiden sich dabei nicht von denen der Old Economy, wenn auch mit anderen, elektronischen Hilfsmitteln gearbeitet wird.

Eine spezifische New Economy-BWL, die die Grundfesten der Betriebswirtschaftslehre verändert, kann daher in der vorliegenden Literatur nicht erkannt werden. Dem gegenüber zeigt die Unternehmenspraxis mit dem Niedergang einiger New Economy-Unternehmen, dass diese grundlegende Kenntnisse in Unternehmensführung sowie Marketing- und Finanzplanung nicht beachtet haben. Dies sind Kenntnisse und Handlungsanweisungen aus der klassischen Betriebswirtschaftslehre, der sich auch New Economy-Unternehmen nicht entziehen können. In diesem Sinne ist New Economy keine neue Ökonomie und begründet aus diesem Blickwinkel heraus auch nicht ein neues betriebswirtschaftliches Forschungsfeld.

Gleichwohl findet sich ein aktuelles Forschungsfeld in den Wirkungen des Einsatzes neuer, insbesondere Kommunikationstechnologien durch Unternehmen. Es sind Forschungsfragen des Verhaltens von Unternehmen im globalen Wettbewerb, der internationalen Kooperation (u.a. Kulturvergleich, internationales Vertragsrecht), nichtpersönliche und multimediale Kommunikation mit Konsumenten, Einheit von Kommunikation und Distribution, und es sind Fragen der Konsequenzen aus der Beschleuni-
gung unternehmerischen Handelns und Austausches. Aber auch mit diesen Fragestellungen setzt sich die Betriebswirtschaftslehre schon seit langer Zeit auseinander und hat Befunde erbracht, noch bevor es die New Economy gab. Sie ist also auch hier keine Basis für ein neues Forschungsfeld der BWL, sondern lediglich das Objekt (oder doch besser Subjekt), an dem die theoretischen Überlegungen in der Realität geprüft werden können. Dies verleiht der Forschung allerdings besondere Aktualität.

Was verbleibt nach diesen Überlegungen für eine spezifische New Economy-Forschung jenseits einer beschreibenden oder makroökonomische-statistischer Erfassung des Phänomens?


Unterstützungsdienste und Unterstützungsleistungen im Rahmen des Gründungsprozesses – empirische Auseinandersetzungen mit ihren Determinanten

Herbert Neubauer

Einführung


Ein wesentlicher Grund für eine derartige erhöhte Popularität sind die mit der Förderung von Unternehmensgründungen und auch Unternehmensnachfolgen erwarteten positiven Effekte für Beschäftigung und Innovationskraft der nationalen Wirtschaft.


Ziel der folgenden Ausführungen ist es, anhand (neuerer) empirischer Daten die Erfahrungen von Unternehmensgründern und -übernehmern mit Unterstützungsleistungen und Unterstützungsdiensten aufzuzeigen, um in weiterer Folge der Frage des Stellenwertes und der Zugänglichkeit derartiger Unterstützungen nachzugehen.

Im Rahmen dieses Beitrages sollen unter „Unterstützungsdiensten“ Leistungen verstanden werden, die sich zum Ziel gesetzt haben, Gründungsunternehmen und Gründer beim erfolgreichen Unternehmensaufbau bzw. der Übernahme und bei der wirksamen Reaktion auf die Herausforderungen in ihrem unternehmerischen, sozialen und physischen Umfeld zu unterstützen.

In der Regel beinhalten Unterstützungsdienste Informationen und Beratungen, die von öffentlichen Stellen i.w.S. initiiert, angeboten bzw. unterstützt werden.

Unter Unterstützungsleistungen sollen jene Leistungen verstanden werden, deren Schwerpunkt in der Zurverfügungstellung von materiellen Ressourcen, hier insbesondere von finanziellen Förderungen, bestehen.
Wesentlich erscheint uns in diesem Zusammenhang die Feststellung, dass bei einer derartigen Betrachtung die Ausgestaltung des Beziehungsgefüges zwischen den relevanten Akteuren mit einzubeziehen ist.


Als zentrale Prämissen eines derartigen Vertäntwesnisses steht die Annahme, dass Unternehmensgründungen und auch Unternehmensübernahmen in der Regel nicht über alle zu ihrer erfolgreichen Entwicklung benötigten Input-Faktoren verfügen, ihre Ressourcengrundlage somit einer Komplettierung „von aussen” bedarf. Diesem Gedanken folgend, zeichnet sich ein unterstützendes Umfeld dadurch aus, dass es Institutionen gibt, die als Vermittler zwischen Ressourcenpool und Gründer auftreten und in einer derartigen Funktion zu einer effizienten und gleichzeitig Transaktionskosten reduzierenden Ressourcenallokation beitragen.

1 Handhabung von nicht-finanziellen Ressourcen

Der hohe Bedarf an immateriellen Ressourcen stellt ein wesentliches Merkmal von Unternehmensgründungen dar.


Damit verbunden stellt sich die Frage, welche Institutionen und Personen prinzipiell im Gründungsprozess als Know-how-Träger und -Quellen zur Verfügung stehen bzw. kontaktiert werden. Weiters gilt es, nach deren Unterstützungsleistungen zu fragen.

a. Öffentliche und private Akteure als Know-how-Quelle


Wesentlich erscheint in diesem Zusammenhang auch, in welcher Phase des Gründungsprozesses sich der Informationssuchende befindet.

Grundsätzlich zeigt sich, dass sich die Unternehmensgründer vor allem an die öffentlichen Interessensvertretungen und die Banken als Ansprechpartner wenden. Den Banken und staatlichen Fördereinrichtungen (z.B. dem Wirtschaftsservice Burgenland als eine Einrichtung des Landes und des Europäischen Sozialfonds) ist es in den letzten

<table>
<thead>
<tr>
<th>Autor</th>
<th>Stichprobe</th>
<th>Befunde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klandt et al. (1998)</td>
<td>862 Existenzgründungen aus unterschiedlichen Branchen</td>
<td>Geförderte Gründer weisen ein aktiveres Informationsverhalten hinsichtlich Finanzierung, Marktanalyse, kaufmännische Kenntnisse und öffentliche Fördermittel auf als nicht geförderte Gründer.</td>
</tr>
</tbody>
</table>

*Tabelle 1: Empirische Befunde zum Planungs- und Informationsverhalten*
Studie | Herangezogene Know-how-Quellen
---|---
Hunsdiek (1987) | 1. Bank (40,4%), 2. IHK/HWK (31,9%), 3. Unternehmensberater (29,8%), 4. selbstständiger Bekannter (27,2%), 5. Technologieberatungsstelle (17%), 6. ehemaliger Arbeitgeber (6,4%), 7. Fachverband (2,1%), 8. Andere (17%)
Picot et al. (1989) | 1. öffentliche Stellen (z.B. IHKs, staatliche Förderstellen) (78,7%), 2. Banken (76,8%), 3. GTS sowie sonstige* (jeweils 48,1%), 4. Forschungsinstitute und Unternehmensberater (jeweils 46,5%), 5. Risikokapitalgesellschaften (26,9%), 6. Innovationsberater (19,2%)
Pett (1994) | 1. Banken und IHKs (je 68,2%), 2. Technologiezentren (55,9%), 3. Familie (45,2%), 4. selbstständige Bekannte (44,1%), 5. Unternehmensberater (33,5%), 6. staatl. F&E-Institute (20%), 7. früherer Arbeitgeber (15,3%), 8. Innovationsberater (14,1%), 9. Gründungsberatung an Hochschulen (10,5%), 10. Venture-Capital-Gesellschaft (6,6%)
Kröpfl (2002) | 1. Wirtschaftskammer (84%), 2. Öffentliche Förderstellen (77%), 3. Bank (71%), 4. Unternehmensberater (36%)

*Unter „sonstige“ verstehen Picot et al. private Industriekontakte, den Freundes- und Bekanntenkreis, Steuerberater etc.

Tabelle 2: Empirische Befunde zur Inanspruchnahme externer Personen und Institutionen durch Unternehmensgründer

Die Frage nach der Qualitätsbeurteilung der zuvor angeführten Institute und Personen zeigt folgendes Bild:


Im Rahmen der WKÖ-Studie (2001) wurden die Leistungen durch die eigene Familie, der Wirtschaftskammer-Gründungsberatung und des Steuerbaters am positivsten herausgestellt. Mit deutlichem Abstand liegen die Banken an zweiter Stelle.


Die Nutzung des bestehenden Beratungsangebotes wird somit dadurch beeinflusst, inwieweit der Unternehmensgründer aufkeimende Probleme erkennt bzw. erkannt hat.
und sich in der Lage sieht, diese in Kooperation mit externen Know-how-Trägern zu lösen.


Als Ergebnis wird bei dieser Untersuchung festgehalten, dass die Auswirkung der Gründungsberatung eher „ganzheitlich“ in dem Sinne zu sein scheint, dass sich zwar in fast allen Bereichen (Person, Ressourcen und Umfeld) positive Wirkungen zeigen, die im einzelnen jedoch nicht zu wesentlichen Differenzierungen führen (Frank et al. 1999, S.159).

2 Erhältlichkeit von finanziellen Ressourcen und Know-how

Neben den rein immateriellen Ressourcen als Unterstützung im Rahmen des Gründungsprozesses kommt der Erhältlichkeit von finanziellen Unterstützungsleistungen eine wesentliche Rolle zu.

So lassen sich im Rahmen der empirischen Analyse des Gründungsprozesses an sich umfassende Studien zur Erfolgswirksamkeit der Beschaffung finanzieller Ressourcen in der Gründungsphase von Unternehmen finden. Tabelle 3 vermittelt einen Überblick über derartige Befunde.

Gesamthaft lässt sich angesichts der differierenden und weitgehend nicht vergleichbaren Ergebnisse festhalten, dass es in Folge zu klären wäre, ob das Wachstum junger Unternehmen wirklich durch die begrenzte Kapitalverfügbarkeit oder eher durch falsche Finanzierungsentscheidungen und fehlende Finanzplanung der Gründer eingeschränkt wird.

Im Rahmen dieses Beitrages wollen wir uns kurz mit einem Teilbereich daraus, dem Thema der Wirkung und dem Unterstützungsbeitrag von öffentlichen Förderungen auseinandersetzen.


<table>
<thead>
<tr>
<th>Autor</th>
<th>Stichprobe</th>
<th>Befunde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooper et al. (1994)</td>
<td>1053 Gründungsunternehmen aus verschiedenen Branchen</td>
<td>Ein hoher Kapitalbestand vor der Gründung fördert die Überlebens- und Wachstumschancen.</td>
</tr>
<tr>
<td>Frank et al. (1999)</td>
<td>1071 Gründungsunternehmen</td>
<td>Mehr als 50% nehmen Bankkredite in Anspruch, jedoch ist dieser keine unabdingbare Notwendigkeit. Informeller Kapitalmarkt hat hohen Stellenwert und privates Kapital ist mobilisierbar.</td>
</tr>
</tbody>
</table>

**Tabelle 3: Empirische Befunde zur Beschaffung finanzieller Ressourcen**

Im Mittelpunkt einer (mikroökonometrischen) Evaluation eines Förderprogrammes steht die Ermittlung kausaler Wirkungen der Förderleistungen bei den geförderten Wirtschaftsobjekten mit statistischen oder ökonometrischen Verfahren, um den Erfolg
des Programmes abschätzen und bewerten zu können. Unter dem durchschnittlichen kausalen Effekt der Förderung im Bereich Unternehmensgründung für die Unternehmen ist die Differenz zwischen dem durchschnittlich erwarteten Ergebnis bei Förderung dieser Unternehmen und dem durchschnittlich erwarteten Ergebnis, wenn dieses Unternehmen nicht gefördert worden wäre, zu verstehen.


Aus der Sicht der Auswahlprozesse für die Inanspruchnahme der Förderung steht der Unternehmensgründer ad personam im Mittelpunkt, da diese Förderungsnachfrage vom personenspezifischen Informationsgrad über Förderungsmöglichkeiten, vom Ausmass des zur Verfügung stehenden Eigenkapitals, vom unterschiedlich stark ausgeprägten Streben nach Unabhängigkeit von Dritten u. a. m. abhängig ist. Die Entscheidung der Förderstelle über die Bewilligung beantragter Förderungen erfolgt an Hand vorgegebener Richtlinien, die, wie sich in diesem Fall zeigte, jedoch für die Antragsteller nicht immer leicht nachzuvollziehen waren. Geht man vereinfachend davon aus, dass sich die Vergleichsgruppen aus der Basis jener Akteure, die grundsätzlich der Thematik – Wunsch nach Unterstützungsleistung durch Förderung – offen gegenüberstehen, zusammensetzt, so können weitgehend unternehmensspezifische Unterschiede (Gründungsjahr, Rechtsform, Beschäftigtenzahl, Qualifikation des Gründer, u. a. m.) bei der Antragstellung ausgeschieden werden, womit sich ein vereinfachter Vergleich von durchschnittlichen Effekten durchführen lässt.

Im Rahmen der angestellten Erfolgsanalyse konzentrierte sich die Untersuchung auf die kausalen Förderwirkung bei den geförderten Unternehmen wie: erfolgsverbessernde Effekte im Sinne Überlebensquote, Beschäftigungseffekte und generelle Unternehmensentwicklung.


Dazu einige Ergebnisse:
Gründer, die eine positive Förderungszusage erhalten haben, schätzen die Entwicklung ihres Unternehmens gesamthaft betrachtet nicht wesentlich besser ein, als jene, die keine Förderung erhalten haben.

<table>
<thead>
<tr>
<th>Schulnote</th>
<th>geförderte Unternehmer</th>
<th>nicht geförderte Unternehmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>2</td>
<td>49%</td>
<td>37%</td>
</tr>
<tr>
<td>3</td>
<td>41%</td>
<td>40%</td>
</tr>
<tr>
<td>4</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>5</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Abbildung 1: Selbsteinschätzung der Unternehmensentwicklung**

Eine Analyse der realisierten Umsatzentwicklung im Vergleich zur geplanten Umsatzentwicklung zeigt weiters folgendes Bild:

<table>
<thead>
<tr>
<th>Zufriedenheit</th>
<th>geförderte Unternehmen</th>
<th>nicht geförderte Unternehmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>sehr zufrieden</td>
<td>19,7%</td>
<td>28,6%</td>
</tr>
<tr>
<td>zufrieden</td>
<td>33,8%</td>
<td>31,5%</td>
</tr>
<tr>
<td>auf Plan</td>
<td>32,3%</td>
<td>22,8%</td>
</tr>
<tr>
<td>Weniger zufrieden</td>
<td>7,0%</td>
<td>11,4%</td>
</tr>
<tr>
<td>Nicht zufrieden</td>
<td>7,0%</td>
<td>5,7%</td>
</tr>
</tbody>
</table>

**Abbildung 2: Zufriedenheit mit der Umsatzentwicklung**

Daraus lässt sich ableiten, dass kein Zusammenhang zwischen der Umsatzentwicklung und der Gewährung von Förderungen besteht.

Die Untersuchung zeigte, dass 41% der geförderten Unternehmensgründer Beratungsleistungen im Rahmen ihres Gründerprozesses in Anspruch genommen haben, aber nur 25% von den nicht geförderten.

Im Bereich der finanziellen Ausgangsbasis wird die Situation wie folgt eingestuft:

<table>
<thead>
<tr>
<th>Beschaffbarkeit</th>
<th>Geförderte Unternehmen</th>
<th>nicht geförderte Unternehmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>kein Problem</td>
<td>59,1%</td>
<td>51,4%</td>
</tr>
<tr>
<td>bewältigbar</td>
<td>25,4%</td>
<td>14,3%</td>
</tr>
<tr>
<td>schwierig</td>
<td>15,5%</td>
<td>34,3%</td>
</tr>
</tbody>
</table>

**Abbildung 3: Möglichkeiten der Aufbringung von Eigenkapital**

Welche Impulse die Gewährung bzw. Nicht-Gewährung der Förderung auf den Entschluss einer Gründung hatte, zeigt folgende Darstellung:

| Gründung wäre auch ohne Förderung erfolgt | 91,5% |
| Gründung wäre eher nicht erfolgt         | 8,5%  |

**Abbildung 4: Einfluss der Bewilligung von Fördermitteln auf das Gründerverhalten aller Befragten (Basis: alle Unternehmen)**
In nur 10% der nicht geförderten Unternehmen führt der Umstand einer Ablehnung zu ernsthaften Überlegungen, ob die Gründung doch realisiert werden sollte. Zusammenfassend lässt sich aus den ersten Ergebnissen der hier angeführten Analyse einer Gründerpopulation im Umfeld mit konkreten Förderleistungen für Gründer schliessen, dass sich mit derartigen Unterstützungsleistungen keine hinreichenden Argumente finden lassen, die zu einem differenzierten Gründungsverhalten oder sogar zu einer besseren Wachstumsaussicht führen. Gründe, die derartige Erhebungsergebnisse kritisch beleuchten, lassen sich durchaus in der relativen kurzen Betrachtungsperiode und der mitunter vorerst undifferenzierten Datenaufbereitung finden. Wesentlich erscheint jedoch, dass es gerade die Unterstützungsleistungen in Form der Kompetenzerweiterung sind, die die Gründungsqualität erhöhen und es nicht in der reinen Zurverfügungstellung von finanziellen Ressourcen liegt, die Unternehmensgründung zu fördern.

3 Umsetzung und Intensität von Unterstützungen als Konzeptansatz


Zusammenfassend lässt sich die Thematik nach einem personengerichteten und einem systemisch-strukturellen Unterstützungswege differenzieren.


b. Systemisch-strukturelle Unterstützungswege wirken indirekt. Sie nehmen über eine Gestaltung der Situation Einfluss auf die Umsetzungskompetenz und setzen vor allem beim strukturellen und interaktionellen Kontext an. Hier wird auf die struktur- und beziehungsgerichtete Unterstützung von potentiellen Unternehmern abgestellt. In diesem Zusammenhang lassen sich verschiedene Unterstützungsgrade unterscheiden:

- aktive Unterstützung: Eine solche liegt vor, wenn der Ressourcengeber ein Angebot an systemischer und kontinuierlicher Unterstützung bietet (z.B. Investoren, die sich selbst einbringen).
reaktive Unterstützung: Darunter fallen Ressourcenangebote, welche zwar gezielt auf junge Unternehmer ausgerichtet sind, diese jedoch vornehmlich erst auf Anfrage zur Verfügung stehen (Beispiel: Gründungsberatung der Wirtschaftskammer).

passive Unterstützung: Hierzu zählt, wenn Akteure hauptsächlich Massnahmen treffen, die das allgemeine Gründungsklima verbessern, ohne unmittelbar in das Gründungsgeschehen einzugreifen (Beispiel: Verhalten öffentlicher Förderungsstellen).

nicht existente Unterstützung: Es gibt kaum oder keine entsprechenden Akteure im Umfeld der Jungunternehmen (Beispiel: Business Angel in Österreich).

kontraproduktive Unterstützung: Vorhandene Akteure sprechen sich gegen das Gründungsvorhaben aus und verweigern die Unterstützung (Beispiel: Gesetzgebung, Interessenvertretung) (vgl. dazu auch Wippler 1998, S.231f.).

4 Schlussbetrachtung

Unterstützungsleistungen und Unterstützungsdienste sind stets untereinander abzustimmen und konsequent aus einem übergeordneten, normativen Leitbild und der daraus abzuleitenden Strategie zu entwickeln. Unzureichend koordinierte Aktivitäten wirken nicht nur wenig gründungsfördernd, sondern können sich als Hemmnisse erweisen, die einer Realisierung des Gründungsverhaltens direkt entgegenwirken.

Forschung und Praxis sind demnach gleichermassen weiter gefordert, der Frage nachzugehen, über welchen „Mechanismus“ die grösste Wirkung erzielt werden kann, bzw. welche Einflusswege sich als die effektivsten zur Unterstützung von Unternehmensgründungen erweisen.

Literaturverzeichnis


Knowledge based economy: Factors which determine SMEs’ placement as the first priority of the economic growth in the 21st century

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The last evolutions in economy, social, technology, science, education, politics, etc. show that in this century there are several essential mutations in the economic development. One of the most important is, as our analyze has demonstrated, the priority of SMEs in economic growth and social development. The main variables which determine the SMEs placement as the first priority of the 21st century are indicated in figure 1.

Factors
1. The congruency between SME characteristics and knowledge-based economy
2. Increasing the training level of the population and economic and social culture
3. Increasing of individualization and personalization of products and services
4. Technical and technological changes
5. Informatization of the economy and the society
6. Externalizing of some organization’s activities
7. Regionalization and local development
8. Economic activities internationalization.

Figure 1: Main factors that determine the establishment and development of SMEs during transition to the knowledge-based economy

1 The congruency between SME characteristics and knowledge-based economy
The small enterprise presents several dimensional, structural and processual characteristics, which separate it from other categories of enterprises. Essentially, those are:
a) Small number of components
b) Small touchable actives
c) Small complexity of activities
d) Simple technical, economic, human, managerial structures
e) Strong entrepreneurial spirit
f) Flexibility
g) Dynamic potential
h) Strong interpersonal relations and group cohesion.
As it can be seen, the presented characteristics refer to small dynamic enterprises, not to the traditional ones. In fact, the knowledge-based economy will include first of all the high level economic sectors, where permanent innovation is the main condition of survival and the key factor for success. The small enterprise characteristics, which, are
not of course exhaustive, represent as many advantages for its redesigning according to knowledge-based economy demands.

The low number of components, small dimensions of touchable actives, the low complexity of activities and simple structures, determine knowledge to be in the flash light of concerns, decisions, and actions much easier. The entrepreneurial spirit, strong interpersonal relations, and the group cohesion, the flexibility and organizational dynamism are basic elements as well as for the knowledge-based economy and enterprise, which can be found, traditionally, within any small dynamic enterprise. Following the presented aspects, we can draw the conclusion of an equality, a strong harmonization between the small enterprise and knowledge-based economy.

2 The enhancement of training level of population and its new economic and social culture

The last century was characterized by spectacular progresses from the educational point of view, in almost all countries, the most impressing being, naturally, the developed countries. As a result, school provides labor with good background knowledge, and often, specialized in certain fields. In the same time, population’s culture, its vision of life, is more and more characterized by flexibility, dynamism, creativity, self-success will etc. These changes in the field of human resources have a positive impact on SMEs, at least from two points of view:

a) The percentage of population which has the necessary training and vision to initiate and develop entrepreneurial activities is continuously increasing.

b) Most part of the population, through its qualities, can efficiently participate, as employees or as other kind of stakeholders, within SMEs.

As a result, for an increasingly part of the population, the professional and human achievement will be fulfilled within SMEs. We also must not forget that, in the last decade, the only entities which created new jobs, were the small and medium-sized enterprises, and not the large ones. Specialists say that this trend will also continue in the 3rd millennium. So, the opportunities for professional occupation will dominate SMEs sector.

All these elements allow us to state that in the next period there will be a continuation of the increasing interest and concrete concerns of the population towards small enterprises, having positive effects on both sides.

3 Intensifying the individualization and personalization of products and services

The economy and, of course, the industrial society were characterized by mass production, considered to be the most efficient. The mass production myth, especially in developed countries, started to fade two-three decades ago, together with the substantially increasing of population’s purchasing power. People’s strong individuality, the diversity of expectations, preferences and demands, are in vivid contradiction with mass production system offers. As a result, huge opportunities for small and medium-sized enterprises appear. By their qualities they are the most capable of satisfying the variety
of consumers’ demands. Only at a small enterprise level, the individualization and personalization of products and services requested by consumers can be provided in an efficient manner.

When the economic development level and the life standard of population increase – which is happening all over the world, at present – the trend of individualization and personalization of products will emphasize. The proper solutions of this evolution will be provided by SMEs, which will substantially increase in number, diversity, economic performance and prestige.

4 Technical and technological changes

The rapid scientific and technical development in the last decades, which, as many specialists say, represents a revolution, determined many essential technical and technological changes, which are represented in figure 2.

Technical and technologies changes:
1. Minimizing the machines and the equipments
2. Technologies’ specialization
3. Specialization of equipments
4. Modulizing the technical activities
5. Technical standardization
6. Computerizing the equipments
7. Proliferation of Telecommunications
8. Expanding the ISO 9000/ISO 140000 systems.

Figure 2: Relevant Technical and Technological Changes

The mentioned changes are to facilitate the start-ups and development of SMEs, due to the:
- Decreasing complexity of equipments and technology
- Relative and sometimes absolute reduction of necessary resources for new technical and technological elements
- Increasing individual performances of plants and equipments
- Facilitation of integration of products and services of SMEs in the complex products of large enterprises
- Technical cooperation with other SMEs
- Facilitating of communication between SMEs and their stakeholders (customers, providers, partners, banks, administration, etc.).

The result of favorable elements presented above is the reduction of investment, technical and human efforts, which are necessary to start and develop an enterprise, comparative to precedent decades, which has a strong impact in increasing number and power of SMEs in all the countries, not only in commerce and services field, but in industry, transport, construction etc. Because the technical evolutions are continuously increasing in intensity, generating a growth of presented elements, we can anticipate
the acceleration of developing small enterprises, strongly related to technical and technological evolutions.

5 Informatization of the economy and society

Although approached in general, the informatization is located in the category of technical and technological changes referred to above, by its content and implication, it represents more than others. Being a product of informatics revolution, which started after World War II, informatics provides now multiple potential facilities for SMEs, as follows:

- Having remarkable performances in processing information at low costs, accessible to a large number of people and organizations
- Obtaining, along with informatics equipments, of a large number of programs, that the enterprise needs, at low costs
- Saving a large amount of human resources, especially in management and clerk fields
- Assisting the more efficient use of technical and material resources of enterprises (raw materials, equipments)
- Putting into force a substantial managerial efficiency of the entrepreneur-manager and his potential colleagues, as a result of the possibility to have a rapid access to a large amount of information and decision alternatives
- Realizing an easy and cheap connection between SMEs and major external sources of commercial, financial, technical, governmental information, etc.
- Facilitating the contracts with external partners of the firm – customers and providers etc.
- Easing and amplifying communication between the SME and business and human communities, it belongs to
- Decreasing or even eliminating the informational gaps which existed until two decades ago between small and large firms, banks, public administration.*

Due to these elements, computerization in the last period was accompanied by a continuously increasing number of small and medium-sized enterprises, simultaneous with substantial amplification of their functionality and performances. Due to the fact that computerization is continuously carried on, the benefic effects upon small companies sector development will amplify.

6 Externalization of some organizations’ activities

Being almost recent, the externalization trend of large companies activities is still going on. As already known, “externalization of activities” means the renouncement of an organization to self-realize certain processes, less important, by decreasing complexity of its managerial and operational activities, in order to concentrate on key activities,

* We mention that these advantages are obvious in the last two decades, because information had been inaccessible to small companies, due to the high costs, the complexity and high qualification of involved personnel.
determined by their performances. All externalized activities are taken over (carried on) by small and, rarely, medium-sized enterprises. Into a large firm, externalized activities are usually auxiliary and administrative, not the basic ones. In figure 3 you can see the most often externalized activities.

The enhancement of externalizing activities is specific to the movement towards knowledge-based economy, for large firms, as well as for medium-sized and even small enterprises. By this, new opportunities for establishing micro-firms and small firms will be created. Otherwise, this evolution is mentioned into a recent paper written and published by OECD specialists. The part of economy that SMEs have, will increase in the same time with the large firms externalizing their activities.

We can anticipate that, in the present situation, where a great number of firms will evolve towards market economy – inevitable process, essential for their survival – there will be an explosion of new small firms, following the massive externalization of activities.

**Externalized activities:**

- Cleaning spaces
- Spaces hygiene
- Equipments maintenance
- Plants and building repair
- Producing tools, devices, measure tools, etc.
- Managerial assistance
- Realizing marketing studies
- Publicity
- Raw materials storage
- Materials acquisition
- Products distribution
- Accounting
- Accountant audit
- Personnel selection
- Employees training
- Personnel evaluation
- Juridical assistance

*Figure 3: Main externalized activities*

7 Regionalisation and local development

This is one of the most often encountered trends of economic development over the past 20 years. So, the apparition of regional policies and of local socio-economic development techniques was a natural consequence. This trend is very popular especially in EU countries. It’s quite benefice for SMEs that a great deal of attention is focused on developing regional economic and administrative policies. As a matter of fact, the

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1 Perspectives of OECD, p. 8
SMEs are main users of these techniques. It’s been proved that the economic potential of SMEs is improved by this policy. The OECD or EU statistics regarding this matter are quite clear.

At this moment, these trends are getting stronger and stronger, aiming the uniformization of economical levels of cities or regions belonging to a country or to a group of countries. The establishment of new SMEs and the increased development of the existing ones are some of the effects of this policy.

8 Economic activities internationalization

This is one of the most powerful and complex economical evolution over the past decades and it causes many negative effects – stronger competition and economic instability – as well as positive.

Some of the positive effects are:

a) Access to new markets
b) Access to raw materials and materials with better quality-price rate
c) Possibility of getting better trained employees for lower salaries
d) Fastening technological, commercial, managerial renewal
e) Improved opportunities to get, buy and trade new products and technologies licenses
f) Fastened and improved transfer of international managerial know-how in all the fields of the firm’s activity
g) Improved opportunities for strategic partnerships and alliances all over the world.

Their benefice effects are to be seen in the increasing number of SMEs and in their economical strength. These effects are obvious if we look at successful firms in fields like industry, transport, commerce, services, etc. Their cultural and managerial evolution over the past 10 years allows them to get over the negative effects of global economic activity and to take advantage of its development opportunities. As this internationalization of economic activities is still present – and even increasing – its impact on SMEs will surely have direct proportional benefice consequences.

The global effect of these factors, as well as the effect of other factors which were not mentioned above, is represented by the powerful development of SMEs sector. In most countries, this sector is already responsible for creating more than 50% of GDP and new jobs, and in the near future, its contribution will increase. As specified in the OECD study, mentioned before, in the next few years “The SMEs’ sector dynamism will represent the engine of increasing productivity and global economic growth in OECD countries.”

2 Perspectives de l’OCDE, p. 8.
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The nature of entrepreneur-environment relations –
A participant reconstruction perspective

Simon Tam

Tracking, comparing and relating entrepreneurial success pathways have revealed some surprising empirical patterns which run counter to the predictions of both the environmental deterministic theories and the strategic choice perspective. Instead of observing environmental selection, or selection of environment, we discovered successful patterns of environmental reconstruction. The difficulty of encompassing this vast human possibility space into existing frameworks has led to a rethinking of our received views on the nature of environment, the nature of the entrepreneurial actor, and the nature of the relationship between the two. These empirical patterns, gathered from over eighty entrepreneurs across ten industries through longitudinal and comparative field studies, collectively cohere to form a distinctive entrepreneurial universe. To explain these patterns, an alternative viewpoint has to be advanced, here labeled as the participant reconstruction perspective. In the interest of expositional economy, this paper will only contrast this new theoretical position with that of its diametrical opposite, the population ecology model. Two major empirical patterns under-grid the character of this entrepreneurial universe, each of which runs counter to the assumptions of the latter model. The first is on the level of evolutionary orientation. Instead of finding species adaptation to the environments, we find the adaptation of the environment to the species. The second is on the level of agency. Instead of finding entrepreneurial actors conforming passively to environmental imperatives, we find actors proactively participating in the reconstruction of environment. Within this entrepreneurial universe, entrepreneurs are found to be both organized and organizing, environments are found to be orderly, recurring yet self-transcending, and a mutually formative relation exists between the two. This paper concludes by asking why this reality has escaped the attention of the dominant knowledge building traditions.

Introduction: From environment selection, selection of environment to environment reconstruction

The boundaries of academic debates over the relationship between organizations and environments have largely been contained within the two poles of whether environment selects us or whether we select environment, or whether we have both (Child 1998). In comparison the relationship between entrepreneur and environment has received much less attention in the field of entrepreneurship. One notable exception to that is that of the population ecology model. Within this theory the role of the environment has been accorded deterministic influence, and the role of entrepreneur is to fit in, to conform or be selected out. Within this school the prospect of exercising strategic choice is seen as suspect, the emergence of innovations, as fortuitous. The ground for making such a knowledge claim has been based on the variation, selection and retention model, a model originally formulated to explain patterns observed from collective behavior in biological populations. Lodged at a population level, and observed from afar, it is a research orientation that has been extended to study the chances of survival and growth of entrepreneurs and organizations (Aldrich 1979). In this paper, we are going to re-examine this theory in the light of the new evidence, and to make sense of our empirical data in terms of the environment select and select environment continuum. Our empirical evidence has charted a vast human possibility space that
turns out to fall exactly outside this continuum. Instead of observing environmental selection, or selection of environment, we discover diverse patterns of successful environmental reconstruction. Because the existence, structure and functioning of this additional zone of empirical universe falls outside the exploratory and explanatory embrace of both paradigms, a separate scheme of explanation is called for.

**Alternative research orientation leading to alternative view of entrepreneur-environment relation**

Since 1988, an ongoing field research program on the nature of entrepreneurial work has been launched within the University of Hong Kong to explore into the determinants of diverse entrepreneurial success patterns. Housed within a Chinese Management Research Center, the original intent of the research program was to uncover cross-cultural variability in organizations, but that path of exploration was soon detracted by the discovery of an anomaly. This program has since been guided by curiosity. The curiosity is about how and why entrepreneur could become so successful in such a variety of ways.

As a researcher with a practitioner background, his primary discontent was with the pervasive lack of useful theories that could guide entrepreneurship. Out of this discontentment, the overall research strategy was obvious. The way to eliminate the theory-practice gap is to build theories grounded on field study on business success. But to get at the secrets of business success requires skillful access to highly confidential information and closely guarded thoughts. To do that required infinite patience and competence for long-term association with entrepreneurs. A unique opportunity to study a population of entrepreneurs in action over substantial period of time was captured.

Over the years, over eighty entrepreneurs, sampled according to entrepreneurial types, and selected from across ten industries, have been studied longitudinally and comparatively. A huge database of entrepreneurial success patterns have been gathered to identify those patterns that have worked, how these patterns worked and why they have worked. Distilled from this huge database, a grounded theory, labeled the achieved re-configuration hypothesis, is being proposed to explain these entrepreneurial success patterns. This paper covers a sub-theme that contributes to that larger explanation.

Because our research orientation has zoomed into the layer of the success patterns of entrepreneurial actors rather than on the level of survival and growth of entire populations, what has emerged is a completely different picture of reality from those painted by the population ecologists. In fact, when we pool the data about these actors together back in for population level analysis, an alternative form of evolution, beyond that of the Darwinian imprint, began to stare in the face. Within this universe it is the entrepreneur who will act as the evolutionary agent, not the environment. Whereas population ecologists see evolution as specie adaptation to the environment, we see evolution as environment adapting to specie. It sees the central role of entrepreneur as a participant in the ongoing reconstruction of the environments, rather than that of conforming and fitting in, as the population ecologist would have led us to believe.
Research method and empirical procedure

What set the HKU research orientation on a separate path from most contemporary entrepreneurship researchers from the beginning is a conscious shift away from focusing on the entrepreneurial person to that of entrepreneurial task. To try to understand how entrepreneurs achieved spectacular performance I have adopted field observation methods involving long-term association with entrepreneurs to observe, interview and examine using documentary evidences. To cultivate access and longitudinal association, the researcher has capitalized on the high concentration of the entrepreneurial specie within Hong Kong, and on his committee membership within an exclusive entrepreneurial club with participants drawn from a board spectrum of industries.

As the research progressed down the years, it become obvious that there are similar but limited entrepreneurial success patterns across industries. A total of only eight generic types could be identified, plus combination and permutation possibilities. To test some of the earlier hypotheses, and to establish comparative insights, eight entrepreneurs per industry are selected for detailed study. A total of more than eighty entrepreneurs, drawn from ten industries have now been intensely researched on.

What emerged from this new line of research?

What comes out of this line of research is a relatively unique database. In effect, it is a database that attempts to capture all the conceivable forms of entrepreneurial success patterns.

Fragments of pattern discovery have emerged every now and then, through strings of aha experience. An overall image only emerged after extensive period of interacting with the data and breathing with the entrepreneurial subjects.

What emerged out of this line of research is a radically different image of reality from that advanced by the population ecology model. Our emphasis on task has led to the discovery of a hugely inter-connected and inter-related structure of entrepreneurial success patterns. Collectively these patterns converge into a stable, systemic whole. A new evolutionary possibility has revealed its presence. From this holistic insight one begins to understand through what vehicles and mechanisms entrepreneurs produce evolutionary impacts. The proactive force in evolutionary influence has been relocated: from environment to the entrepreneur. It is out of this new finding that we begin to know what exactly a proactive – instead of conforming and passive – entrepreneurial relation to environment really means. Further details of these discoveries will be expanded below.

A brief overview of the empirical patterns uncovered

Space limitation in this paper will prohibit very detailed display of field findings.

What I intend to do is to introduce some of the discovery milestones so that the empirical base for the new perspective could first be grasped. They will also provide the
necessary backdrop against which we could discuss how this new evidence could allow
us to modify our conventional view of entrepreneur-environment relation.

1. The discovery of entrepreneurial success patterns. The processes of becoming suc-
cessful are remarkably similar in form, despite the bewildering variety in substantive
contents. An ideal-typical sequence of formula search, formula realization, and for-
mula replication exist for all the entrepreneurs in the sample. The formula realization
point is defined as a point of business breakthrough, when the actors are suddenly
awash with exceptional profit. It could also be seen as a point of confirmation that an
ordinary SME owner, through engaging in some form of innovation, has successfully
went through the process of metamorphosis to engage in entrepreneurship.

2. The discovery of diverse patterns of success within the same industry. This refers to
different formula types that co-exist within the same industry, suggesting that there
is no one best way to entrepreneurship.

3. The discovery of similar patterns of success across industries.

4. The discovery of limited types of success patterns. Allowing for the possibility of
combination and permutation of these generic types in anyone actor, a total of eight
have exhausted the success possibility space. These types are labeled as product inno-
vation route, process innovation route, sourcing innovation route, distribution inno-
vation route, establishment symbiosis route, market forces leveraging route, es-
establishment-market divergence route, and resource redeployment and re-configura-
tion route. Each type could be conceived in terms of a configuration of dimensions.

5. The discovery of inter-relation between these types, so that they form value chains
relations, mutually compensating relations, renewal and synergetic relations, symbi-
otic relations, and mutually leveraging relations. Entrepreneurial success pathways
converge into limited but inter-related types, hinting at the existence of a hidden or-
der and self-organizing system. Contrary to accepted wisdom, entrepreneurs are or-
ganized.

6. The discovery of inter-generational evolutionary lineages within each types, and
strings of inter-connected creative-destruction episodes over time and space. This
hints at the existence of an evolutionary order that is socially constructed and con-
tinually reconstructed, with the entrepreneurs functioning as the key evolutionary
agents. A specie-centric entrepreneurial system has been found to exist. This specie-
centric system is found to issue in recurring way eight types of self-serving, specie-
enhancing challenges over time and space, and entrepreneurs are called upon to re-
spond with corresponding type-specific innovative solutions. An entrepreneurial
system could be reconceived as an evolving challenge and response system.

7. The mechanisms and vehicles for multiplying entrepreneurial impact could now be
isolated on a type-to-type basis. With each entrepreneurial types married to its re-
spective profit logic, each achievable only within certain configuration of forces, a
new way of understanding entrepreneurial wealth creation emerged. In the light of
these findings, a shift from a person-focused to task-focused explanation has been
made possible. The secret of business success is to be sought by asking what do entre-
preneurs do, not from who they are.

The question is, how can we explain these patterns?
Towards a new way of understanding entrepreneur-environment relation

Reflecting on the above empirical patterns, it seems clear that a vast human possibility space has fallen outside the exploratory and explanatory scope of both the population ecology and strategic choice traditions. We have considered populations conforming to environmental needs, we have considered agents selecting the most favorable of environments, but changing them?

If the previous empirical patterns are representative of the wider entrepreneurial population, then there is reason to believe that much of the legendary power of entrepreneurs might not have been derived from forcefulness of personality but might have been derived from the forces of the system. And with the help of a new perspective we might begin to demystify them and to penetrate behind the veneer. We might be able to see with what mechanism, through what type of vehicles and under what conditions could entrepreneur reconstruct the environment.

As we follow this hunch to inter-relate the patterns, an image of an entrepreneurial universe that is subjected to distinctive evolutionary logic has emerged. This logic actually functions in ways quite beyond the current comprehension of existing paradigms on entrepreneur-environment relations.

Once this underlying logic that permeates all our cases has been identified, a new way of re-structure our view on the nature of entrepreneur environment relations presents itself. We begin to see entrepreneur as evolutionary agent, and they function within evolutionary textures. The central task of entrepreneur is to enact the next evolutionary step.

A new perspective is born

In the following, we will try to present a brief outline of this new perspective, now labeled as participant reconstruction. In the interest of communication, the findings are presented here in a sequence that zooms from the big picture down to the micro level, whereas the actual sequence of discovery was from the ground, with the big picture appearing at the very end.

By zooming in first from wide-angle vision before we direct our focus to the agency level, we hope we could unpeel the layers and layers of environments in which entrepreneurial work is embedded. On at least three levels we have so far discovered patterns that seems to significantly departure from the conceptual space of the population ecologists as well as strategic choice theorists.

- The first is on the specie evolution level.
- The second is on the population’s environment level.
- The third is on the entrepreneurial actor level.

We will deal with these one by one in the following.
At the species evolution level, we have discovered patterns that point to diametrically opposite direction of fit.

The population ecology model has hypothesized evolution as species moving towards a better fit with the environment. What we have uncovered from our studies are patterns that completely reverse such a direction of evolution. We see a relentless tendency for us to reconstruct environments so that they could better fit in with the needs of the human species. One famous observer of the human condition has echoed our findings very well. He recently wrote about our collective tendency to reconstruct environment through the creation of lots and lots of man-made systems, which to him represent "an astonishing variegated mosaic of overlapping and fragmented realities."

"These realities have one thing in common: they are all extensions of our egos; in other words, nearly everything we do and create through capitalism is made to the measure of our human needs and aspirations. "The apex of this achievement is the postmodern capitalist city. We design our cities to block out the intrusions and fluctuations of the natural world... The past century's countless incremental changes in our societies around the planet, in our technologies and our interactions with our natural environments, have accumulated to create a qualitatively new world" (Homer Dixon 2001, p. 6).

And we discover that with the increasing spread of market arrangements everywhere it is the entrepreneurs who are being increasingly being called upon to effectuate this kind of incremental human environmental reconstruction. If it is in the wishes of the human species to fly, the entrepreneurs will build the aircrafts, rather than waiting for the human body to develop wings. If it is in the interest of the human species to hop from one island to the other, the entrepreneur will build bridges, or boats, or hydrofoil, instead of waiting for the human body to evolve fins.

From this angle, one could argue for the existence of two different paths of evolution: one relates to our creature-like evolution, the other relates to the human environment evolution. Once the first aircraft has been invented, it is the evolution path of the aircraft that will outstrip our creaturely evolution path of the human species. Generation after generation of aircraft entrepreneurs will participate in furthering this evolutionary trial through their creative destruction efforts, enabling us to fly further, faster, cheaper, saver, easier etc. in the air. In this sense, the flying environment for human species could be seen as unceasingly been reconstructed. The same logic applies to other fields of human endeavor, be it our food environments, our tool environments, our news environments, or even our natural environments.

The environmental selection metaphor had originated from observing biological systems, not from observing human systems. The respective directionality and logic of evolution actually differs quite dramatically. This makes the Darwinian metaphor quite ill equipped for the interpretation of our evolutionary relation with environment.
2) At the population level we have discovered enduring structure of species needs and the eight types of environment reconstruction work entrepreneurs are called upon to do

On the basis of our empirical patterns discovered, we advanced a hypothesis above that the overall tendency is for the human being to alter environments to fit their needs, rather than the other way round. The next logical step in our exploration would be to find a way to understand the evolving need structure of the human species to which the entrepreneurs would have to continuously reconstruct the environments to fit in. There are of course countless interpretations from the academic world on what our human societies really need. In our research we will ignore these academic interpretations, and instead try to understand species needs from those entrepreneurs who have successfully created business empires to serve these needs on a long term and pervasive basis. We would for example ask the following question when we examine our database:

"At this moment, accordingly to one report, there are roughly 47,000 workers within Mainland China who are working day in day out to produce fashion under contract for the label of Ralph Lauren Polo. His fashion collections now sell to most countries under the sun. What does Ralph Lauren knows about human nature to be able to capture the imagination and their wallets through his design?"

The same type of question could be asked of all entrepreneurs, Philip Knight of Nike, Akio Morita of Sony, or any other that comes to mind.

"How did Coco Channel saw the rebelliousness in the female population to be able to stage a fashion revolution when the dominant convention was so uptight?"

The question for entrepreneurial researcher on this exploration trail is: Do these entrepreneurs know something about human nature that the academic world does not know?

The strategy adopted is for the most successful entrepreneurs to teach us about the evolving needs of the human species. Our argument for pursuing this route is as follows:

This reversal in the direction of fit has entailed some interesting hypotheses for entrepreneur-environment relations:

1. The universe within which entrepreneurs are working could be regarded as a species-centric system. It is an expansive universe that revolves and evolves around the needs of the human species, and not around the needs of the natural environment.

2. The criterion of fit within this universe is self-referential. Variation, selection and retention processes are conducted in the interest of man, to the measure of man, for man, by man.

3. The market has recently emerged as the dominant mechanism around which these self-referential processes are to be conducted. The mutual-feeding, reciprocal-breeding, and symbiosis-enhancing relation between market mechanism and entrepreneurs has become increasingly pivotal in this expansive universe. Within this context, the entrepreneur is becoming a privileged agency for evolutionary reconstruction.
They need to know about their evolving needs in order that they could reconstruct
the species environment and be rewarded.

If the center of the entrepreneurial universe now seats the human species, how can we
know more about its needs structure? It is in the interest of the entrepreneurs to know,
their survival and prosperity depends on such knowledge.

Procedure for deciphering the needs structure have followed the logic listed below.

1. Because this is a self-referential system, what the server can offer and what the served
could acquire are mediated through the transactional mechanism. The server could
make a killing through correctly interpreting the evolving and pervasive species
needs and offers their innovative responses in ways that could address those needs.
The served will vote through the exercise of purchasing power to those offers that
satisfy their needs. In other words, the served are telling us what their real species
needs are through paying for them. The conditions for entrepreneurs to secure huge
rewards are two. One, correctly decipher the riddle of the evolving specie needs. Sec-
ond, innovatively respond to these needs based on such interpretations. That
only very few have achieved spectacular business success testifies to the difficulty of
doing both well.

2. Our sample of entrepreneurs has included only those who have been hugely re-
warded through exceptional profit. Therefore how these entrepreneurs have come to
learn about the evolving species needs and what these entrepreneurs were innovating
on based on such understanding provide a badly needed clue to the academic world
about what the evolving species needs are likely to be.

3. When we pool the interpretative orientations of these entrepreneurs together, we
find that their understanding of our species environments fall into limited forms. In
other words, only eight ways of interpreting our evolving specie needs had been
found to be rewarded.

4. When we sort their innovation responses one by one we also find them falling into
limited forms. In other words, only eight types of innovative responses will be re-
warded.

5. Each form of innovation could be correlated to a particular type of profit logic. All
together there are eight types of profit logics. Innovative response has to be translated
into some form so that it could be transacted, as a result that would impose a logical
limit to the ways exceptional profit could be obtained legally.

6. If we label the evolving species needs structure as a challenge environment for the
entrepreneurs, then we could also label their innovative offers as constituting the
response environment to the species. Thus we could picture the environments for the
entrepreneurs as falling into eight matching pairs, as eight types of challenge and re-
ponse systems.

7. Quite by accident, when we move beyond our field study sample in search of a his-
torical backdrop to see how these current response systems have evolved, we found
that we could trace uninterrupted lineages of creative destruction episodes. This
means that in each industry there are multiple traditions of anti-traditions. This also
means that within types there are multiple lineages of creative destruction. This find-
ing has turned out to be rather counter-intuitive. The fundamental challenges in our
specie environment have remained rather similar and stable over generations. People have always wanted variety, they have always wanted affordability, they have always wanted accessibility, they have always demanded availability etc. The complexity and sophistication of entrepreneurial response might have changed, but not the forms of challenge. The bookshop on the village corner founded one hundred years ago, the likes of Barnes and Nobel founded decades ago, and the likes of Amazon.com founded a few years ago, are all trying to solve the same form of challenge: the book accessibility problem. They are in their respective historical periods distribution innovators. The accessibility challenge is related to those types of situations like the following. In this particular location we can find this type of valuable things, how do I make sure that people in the rest of the world who needs this would have access to this as well? Stemming from such simple question streams of innovations have sprawled our specie’s evolution. We have seen how IKEA, Home Depot, Macy, Toy’r’us, Mitsukoshi, Boots etc. rose to the challenge. If we move another type we see the same. We could for example back-trace the lineage of Micheal Milken, to Goldsmith, and all the way to Jim Slater, in their respective time and place they seeks innovative ways to re-deploy and reconfigure underutilized and trapped resources. Again we see creative destruction lineage in response to recurring needs. We thus hit upon a way to nail down the specie need structure over time and space. Diagram 1 outlines an example describing one lineage of creative destruction episodes. It is related to entrepreneurs pursuing the sourcing innovation routes. This type of entrepreneur are concerned with developing innovative ways to harness mother nature so that they could be available in forms and quantities that accord to human species needs.

In this case, we looked at the evolution of pearl extraction.

In the first layer of lineage, we examine the diving for pearl in the Persian Gulf. This form of barehanded diving through seafaring expedition has lasted for centuries, and is now a dying breed. Getting pearl through diving for oysters in Bahrain is brutal work for the divers, and miserable for the oysters. Divers suffer from decompression sickness, color blindness and shark bites. Using that method, about 500 oysters need to be slaughtered in order to get one pearl. To stitch together a necklace with strings of pearls in the old days easily requires the killing of million of oysters.

The second layer innovation has focused on reducing the casualties of the divers, and the invention of the diving equipments allow the pearl divers to stay down the waters for extended period. The net result was the ease of extraction but oysters were almost driven to extinction.

The third layer witnessed the entry of Mikimoto, a Japanese entrepreneur who tried for over 15 years of unceasing experimentation to tease out why oyster produces pearl. Hundreds of experiments later, Mikimoto finally inserted something into the oyster shells that they would reject. The method of culturing pearl was born. Mikimoto has a world monopoly for decades through the guarding of that method. He had successfully turned oysters into his workers. He had successfully find a way to harness the power of nature for satisfaction of our specie need. And to produce one pearl we only need to slay one oyster.
The fourth layer we see the entry into the scene by another entrepreneur, Nick Paspyale. The culturing method of Mikimoto was transplanted to a bay in the North of Australia intended for one of the largest oyster types in the world, with disastrous results. Oysters living under Mikimoto farming conditions were dying in huge numbers and those that survived produced inferior pearls. Forced to find a solution, Nick accidentally compared the living conditions of oysters in the wild versus those living in the farm and saw the dramatic difference in vitality. He spent ten years to work out a method of culturing pearl in open seas, a type of pearl farming that approximate natural conditions. This company is now one of the most successful pearl companies in the world today, with each oyster now capable of yielding four king-sized pearls in the course of its life.

In the above example one could see the lineage of creative destruction within one particular industry, and within one type. Our database is full of various kinds of lineages across industries and types, links we have managed to establish through backward and forward tracing. As our research moves up and down through these creative destruction ladders, it dawn on us that one significant chunk of entrepreneurial work actually resides in between the evolutionary ladders. In other words, in the context of evolution, it is important for us to ask: where do entrepreneurs work? Where entrepreneurs work is the space between two innovation paradigms in the evolutionary chain, one that they reject as conventional, and the other they have visualize and participate in building. In contrast, most managers work within paradigm, elaborating and perfecting the structure of routines established by entrepreneurs.

When these findings are put together, we could see that there are eight patterns of challenge and response, and each type of challenge and response within the system has evolved through lineages over time and space. There are surprising inter-connection and inter-relation across the full spectrum of entrepreneurial work. Horizontally, these types could be dynamically inter-related into value chains, into compensating relations, into synergetic relations, into symbiotic relations, into mutually leveraging relations etc. Historically they could be inter-related through multiple lineages of creative-destruction. The entrepreneurial universe is in fact orderly in terms of how it organizes the division of entrepreneurial work, recurring in terms of the forms of challenges and constantly self-transcending through waves after waves of creative destruction responses.

We have discovered a way to reveal what the human species really needs. It is by making use of the super sensitivity of the entrepreneur to smell out what the specie really want and made a success out of it. Where we get the clue is what they need have to be satisfied increasingly through the transactional mechanism. And their shifting needs is tightly coupled to the waves of advance and demise of the entrepreneurs.

The end result of this exercise is encapsulated in the next diagram (diagram 2), which displays the contextual foundation for a typological theory of entrepreneurship. Sourcing innovation route (the evolution of methods (from 1 to 4) for harnessing mother nature so that it become available in forms and quantities that fit in human species need).
1) Pearl Diving in Bahrain
Divers to jump into open sea to pick up oysters, pairing with pullers on board with strings to retrieve them when the divers are out of breath. Yield: killing about 500 oysters for one small pearl.

2) Innovation of Diving Equipment with Oxygen Supply
Greatly increased the number of oysters that could be picked per diver. Yield: similar to above because pearls is a product of accidental insertion of foreign object into the shells of oysters. But oysters were almost driven to extinction because of this innovation.

3) Mikimoto in Japan
Some fifteen years of research and experimentation had led to the cultured pearl method. Yield: one oyster for one rounded cultured pearl.

4) Paspaley Pearl Company in Australia
Because of the failure to transplant Mikimoto method to the Australian oysters, Nick Paspaley innovated with an open sea culturing method. Yield: 4 king-size pearls for one oyster.

Diagram 1: An example of a creative destruction lineage

<table>
<thead>
<tr>
<th>Types of challenge</th>
<th>Transaction domain</th>
<th>Types of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The variety generation</td>
<td>Product/service innovation route</td>
<td></td>
</tr>
<tr>
<td>The affordability challenge</td>
<td>Process innovation route</td>
<td></td>
</tr>
<tr>
<td>The availability challenge</td>
<td>Sourcing innovation route</td>
<td></td>
</tr>
<tr>
<td>The accessibility challenge</td>
<td>Distribution innovation route</td>
<td></td>
</tr>
<tr>
<td>The coupling challenge</td>
<td>Establishment symbiosis route</td>
<td></td>
</tr>
<tr>
<td>The value fluctuation</td>
<td>Leveraging market forces route</td>
<td></td>
</tr>
<tr>
<td>The underperformance</td>
<td>Redeployment &amp; Reconfiguration</td>
<td></td>
</tr>
<tr>
<td>The unevenness challenge</td>
<td>Leveraging state-market difference</td>
<td></td>
</tr>
</tbody>
</table>

Note: There is a need for typological understanding because each matching pair of challenge and response involves a unique configuration of variables, and entrepreneurial success is premised upon concentrating on the right set of variables while ignoring others.

Diagram 2: The entrepreneurial universe conceived as a challenge and response system mediated through the transaction mechanism

At the agency level we have discovered multiple forms through which entrepreneurs reconstruct environment to fit in with evolving species needs

In the following we will first introduce a multi-purpose conceptual apparatus specially designed for use in synthesizing our field research findings into visual forms. One of its possible uses would be to relate our typological change agents to the entrepreneurial environments by picturing them in interaction over the course of a typical creative destruction journey. This diagrammatic tool is built from abstracting the core processes that typifies our business success trajectories in the sample.

The inspiration for designing this conceptual apparatus has come from Mintzberg. In his 1979 book, Mintzberg wrestled with the problem of how to present in a succinct form the full complexity and variety of organization structures. He strove on the idea
that all organizations could be conceived as composed of five basic parts, and proceeded to use the now famous logo as a base on which to overlay other discoveries. With these five basic parts on the background, variations and complexities could be captured and displayed in the foreground layer by layer. He would work out five typological possibilities as variation from this basic form. He would try to understand the complex relations that might exist between parts and key processes that take place within and across parts. Coming back after all the synthesizing, analyzing and comparing, he discovered five basic organization structures. In this research we have followed the same knowledge building and communication strategy.

The procedures we have followed to design this tool were:

1. Firstly we need to ascertain the essence of the nature of entrepreneurial work.
   From our perspective, work defines the entrepreneur and the type of work defines the type of entrepreneur. Despite the typological diversity, we have uncovered a unifying theme. To become successful, we find that all our entrepreneurs have to conduct creative destruction exercise of one form or the other. There are a total of eight forms of creative destruction, corresponding to the eight types of challenges and responses identified above.

2. Secondly we need to find way to represent the environment from the angle of creative destruction process.
   To do that we need to find a way to integrate the relevant task environments at different stages of the creative destruction process, how the evolutionary agency work has emerge and come to fruition, and how in the course of achieving wealth the environment got changed.
   Two types of environments need to be represented, those before change and those after change. As described in the above we have already discovered the evolutionary texture of entrepreneurial environment, and this could be represented by the challenge and response system. We also know that the central mechanism through with entrepreneur effect the change in environment is through transaction. So a total of five task-related environmental domains could be included. We have the before and after challenge domains, the before and after response domains and the transactional domain which link all the rest together into one inter-related piece. With these five clustered into one visual, the multi-dimensional relationships between these five domains, the multiple processes that could be done within each domain and across multiple domain could then be studied in detail.

3. Thirdly we need to find way to represent the entrepreneurial agency in interactive relationship with these different environmental domains.
   What is to be represented depends on what we found to be typical across our typological studies. What unifies the whole spectrum of typological passages are two pivotal mental shifts that together trigger off a metamorphosis that would transform an ordinary businessperson into a successful entrepreneur, and would at the same time transform a conventional environment into a new one. These two particular aha experience are pivotal in the sense that the mutual formation processes could not have taken place unless such possibilities were first glimpsed at. One mental shift is to do with how they see as emerging on the challenge horizon, while the other is to do with how they see
what is possible beyond the taken-for-granted within the current response horizon. Our data suggest that the realization of the first mental shift might have triggered the search for the other. Without both the transformation of the conventional challenge and response system will not take place.

The first type of mental shifts, those relating to the challenge environment, will generally take the following form. No matter what the trigger event was, there suddenly appears in the mind’s eyes of the subject a new business horizon emerging, believed to be largely unseen and untapped by other existing players in the industry. When asked the subject usually reports a perception of a forthcoming shift in the challenge environment. How each person has come to define the respective challenge environment varies across the board. But upon comparison they usually visualize some sort of a convergence of forces that are beginning to crystallize into a major contextual shift. This new emerging challenge have to be so divergent from the current one that the existing response pattern could become obsolete, outdated, irrelevant or conventional. In other words, there will be an increasing lack of fit. Because the existing players are so busily engaged in responding to the challenges as identified through the previous entrepreneurial paradigm, a growing vacuum evolves. This provides a period of an open space for this potential entrepreneur to jump in and to search for a response system that would realign with the emerging challenge, thus promoting a new fit.

The second type of the mental shifts, those related to the response environment, usually unfolds in a similar sequence. Again a trigger incident happened, followed by a sudden realization of a completely new prospect of response possibility. Again the conventional players are burying deep in the trenches, busily elaborating and extending the dominant paradigm. A blind spot thus engulfed the dominant players. The conventional system is running so smoothly and so interactively that it locks the minds of the dominant players, whose views is paradoxically constantly being validated by the feedback generated through the transaction system.

To incorporate these two realizations into the diagram we introduce a discontinuity between both the challenge and the response domains. This symbolizes that the fundamental shift from one challenge environment to another is rarely perceived, and the prospect for the transformation of the conventional response environment is seldom sought for. The role of the evolutionary agency began here. At this juncture it is imperative that the two evolving horizons as visualized through these two mental shifts are actually in congruence with the two contextual shifts taking place in the objective world, because the entrepreneur will now be stacking his/her fortune based on these two beliefs.

How each journey will further unfold after these mental shifts depend on the types of challenge environment the entrepreneur is dealing with and type of response system that the entrepreneur could structure at the time. That is why a typological theory is needed to enable us to tease out all the frame-breaking, boundary-crossing processes and to identify the eight configurations of variables that need to be related. Typically the entrepreneur would seek ways to align his or her innovative system to the emerging challenge environment and the two sides will co-evolve. The process will continue until this newly crafted response environment come into wide acceptance to fit into the
changed need structure of the human specie. Obviously there is bound to be a lot of hit and miss in the process, as well as quite a bit of entrepreneurial dramas in between.

This successful meeting between the new challenge environment and the new response environment would reinforce each other until transaction becomes routine and taken-for-granted. Then another entrepreneur comes along to trigger off another creative destruction cycle. The cycle then repeats.

What the diagram has enabled us to do here is to provide a framework to capture the creative destruction process empirically, individually, typologically and within this context examine how the entrepreneur and the environment both develop into a mutually forming relationship. It falls on the shoulder of the entrepreneur to inter-relate these five environmental domains, and to participate proactively in reconstructing the response environment. In the end, the entrepreneur becomes an integral part of the new response environment. Philip Knight, for example, is now an integral part of Nike, which in turn, is an integral part of the new sport shoes environment, which in turn is part of the larger global sport movement, an increasingly universal human craving. Obviously we have so far only captured the most critical turning points through this diagram. To further capture the numerous sub-processes involved in a typical creative destruction scenario, we could make use of multiple overlays on top.

Diagramm 3: The Butterfly Model – Relating entrepreneurial processes to environment reconstruction
When we use this new perspective to pull together the various strands of discovery so far, we can see that:

1. Once we begin to see the evolutionary direction of human societies as species-centric, why different industries have similar types of entrepreneurs becomes explainable. For despite their respective industrial specificity, they are all feeding into the same species.

2. Once we begin to see the evolutionary direction of human societies as self-referential, why the forms of entrepreneurial challenges have remained stable and recurring becomes understandable. For despite the increasing sophistication and complexity of our response systems, they are all directly or indirectly serving our human nature.

3. Entrepreneurial success for the actor, environmental reconstruction for the species, and creative destruction in the industry, could be seen as different facets of the same phenomenon.

4. Environmental reconstruction requires a convergence of forces, with the entrepreneur playing a proactive, participatory role in the re-configuration process, and becoming an integral part of it.

5. Since success requires a coming together of forces, some of which are evolutional, some of which are contextual, it would be important for us to recognize the spatial-temporal situatedness of entrepreneurship. Using tools developed with this perspective, we might be able to empirically ask these questions: *When is entrepreneurship?* and *Where is entrepreneurship?*

Our exploration of the entrepreneur-environment relationship has led to some surprising findings.

**Conclusion**

In this paper we have endeavored to show the fruitfulness of a new perspective that would enable us to chart a largely unmapped human possibility space. Along our path of exploration, we found that we need to invent some empirical procedures and conceptual tools to enable us to uncover some defining regularities within this space, on which we argue for the existence of a distinctive entrepreneurial universe. We have discovered that within this universe the direction of fit, as posited by population ecologists, has been reversed. With that as an anchor, we began to decipher the species-centric needs structures and the diverse routes and multiple waves of entrepreneurs undertake to respond. Since they respond by reconstructing environments for our species, we therefore looked into a typical environmental reconstruction process. We hope that through these multi-leveled examination of our findings, we could establish a case to argue that our human species not only got selected by environment, and not only select environments, they reconstruct environments to fit our needs as well.
Bibliography


Art enterprises in Hungary today regarding changes both in economy and arts (moving from the centralised system to the market economy) – status report and problem analysis

Ágnes Tibor

A few examples to help better understanding

The painter from a small town is pessimistic as he is not able to live on selling his works of art. The fact that he is the director of the local House of Arts besides puts him in a somewhat more advantageous position regarding daily contact with the local white-collars, his social reputation that goes beyond his region, and some, though very little, fix income. The latter is a must for him as academic schooling of his children consumes huge amounts of money. His duties and his financial situation do not let him refuse requests like one of the local government’s to paint a picture of the freemen of the town for payment, of course. This is his greatest sorrow as he says. He feels it unworthy opportunism and he is ashamed of it.

The nursery teacher contended with her work for decades, got a new hobby a few years ago. She started creating nicely formed, appealing puppets embodying fable figures that are favoured by nursery and primary school children. Her hobby developed into an enterprise by now. She provided the necessary financial basis with the support of her family. She bought a few sewing machines, hired a shop (which functions today as a shop floor and storage at the same time), she saved money for overhead expenses, and she purchased the raw material needed. Then she agreed with two seamstresses, she thought over the expenses of advertising and PR especially, transport and accounting. Her business skills have made her known and have given her financial stability, what is more, her enterprise have become slowly profitable. She not only sells in her shop but also posts the puppets by order to schools, nurseries, puppet-shows and individuals.

The former nursery teacher does not esteem herself as an artist but she enjoys running her life this way and she does not entirely split with pedagogy either. She teaches nursery and primary teachers how to utilise the pedagogic features of puppet games and she gives lectures and presentations in nurseries, schools and international and local conferences.

The folk-art craftsman makes trappings. Three decades ago he started to learn from his uncle who was considered as a most qualified craftsman. He stroke out on his own 10–12 years ago about the time when Hungarian equestrian sport was reborn. (This was the time when foreigners realised the Hungarian opportunities like genetically promising animals, highly qualified breeders and riders, charioteers and the growing number of quality riding schools. Specialised in harness, the craftsman creates unique, exacting and finely finished pieces of work that are more in demand. His reputation is a grapevine and sometimes he can grow his income by not billing if the customer does not require...
Only architects, interior designers and graphic designers graduating from the Hungarian University of Craft and Design can easily get employed or find a job at least. The glass, silicate, metal designers and photographers have more difficulty to find jobs. Those graduating from the textile faculty (knitters, weavers and dress designers) are often not able to do what they have learnt and prepared for in school even after long years or they are forced to compromise. The prospects of industrial designers and film animators differ very much however their chance to make good in Hungary is very little. (The writer’s own experiences were supported by a statistics made by the Hungarian University of Craft and Design in the summer of 2001 where 350 graduates of the previous years filled the questionnaires).

Are the careers of the professional painter, the hobby-artist nursery teacher or the craftsman mentioned above typical or characteristic in the Hungarian circumstances today? Can we draw the conclusion of these three and of the many more very similar examples that the professional artist succeeds harder? If so, what is the explanation? Do present students of the Hungarian University of Craft and Design have to count with the same prospects once they have finished their studies and want to get employed, and intend to get on both professionally and financially.

Should we expect in the long run that industrial artists (industrial artists deal with applied art theoretically) graduating from certain faculties will be able to become successful in their own fields only by great difficulties or after long waiting? It is quite certain that the problem is not “overproduction” especially if we consider that at the Hungarian University of Craft and Design the rate of students accepted and those graduating is much lower compared to other academic institutions. Also if our graduates get employed abroad or take part at international contests they compete very well with industrial artists from other countries.

What can be done then for the sake of qualified artists to be able to succeed professionally, morally and financially according to their knowledge and skills?

Questions rising in the researcher of the succeeding of artists

1. What does “succeeding” mean to artists? In what way is financial succeeding important to them? (Experiences show that they mean professional recognition under financial succeeding rather than this recognition manifesting in credit.) At what age or which phase of their career do they declare its importance (do they admit it at all)?

What is the reason of ignoring financial matters?

- Parents supporting them longer than those of non-artist parents (because they are well-off or they appreciate their artist child or they went through the same or all these reasons together)?
- Art students would sacrifice everything on the altar of self-realisation?
- During their student years they have their heads in the clouds (no tuition fees, they have little) financial needs?

2. Can we generalise according to the examples mentioned in the first part that the professional (with academic degree, “real”) artist can find his place harder within the Hungarian circumstances today than the artisan producing quality products?
3. If so, what is the reason?
   a) Reasons can be found within the artists’ personalities
      · Circumstances moving towards market economy, which most of the artists have not been able to adapt to?
      · Those of the “higher” artists (the ones with college or university degree) feel inferior to “peddle” in the market?
      · Are artists anti-entrepreneurs by default?
      · Do they feel adapting to the demand equals with prostituting?
   b) Reasons might be found in the drastic change of ratio between arts (or other human values) and material well-being as not any more so disdainable value? That is, the demand for art products is decreasing in contrast to the need and demand for “practical” material goods?
   c) The changed order of support cut the ground from under artists’ feet (being quite stable financially before)?
      · Is financial stability a must for artists to be able to create?
      · Did the appreciation (sometimes right, sometimes not so justifiable) of the professionals and qualified juries provide artists with a more convenient background to create in contrast to today’s more erratic world?
      · Has the order of support for artists really changed or simply the target group is different now?
      · If the order of support changed, in what ways? Did it happen or it has been changing continuously?

4. If poorer succeeding of professional artists in the new circumstances of the market economy is not typical then
   a) Which are the features of market economy complicating the succeeding of artists:
      · growing expenses of artists (even with low financial needs) including money spent on their cultural needs and schooling of their children
      · growing prices of materials they need to continue artistic work
      · the mentality of non-materially thinking and creating artists in a world with totally different values (at least at the present)
      · the judgement (right or wrong) of the market instead of only of the professionals’
      · the spread of cheap culture coming from the media generated by profit-oriented multis, forcing back the representatives of higher cultural values
      · set-back of financial stability mainly among the white-collars who have higher cultural needs
      · tougher competition as a result of the open market.
   b) Which are the features of market economy facilitating the succeeding of artists (in contrast to the non-market circumstances of the past):
      · chance to broaden their ken regarding easier acquaintance with works of other artists’ and easier placement (and applicability) of their own
      · market economy is more general, exact, long-term, legally clearer, has more exact conditions (these features have strong influence on purchasing and selling in the lives of artists as well)
      · coherence between income and market prices and its perspicuity
those artists with economist skills, ambition and capital have better chances than earlier when they were tied up by ideological reasons.

5. Artists are creative-minded. Can they be creative in other fields as well (e.g. in building and running enterprises)?

Developments of the past few years – attempts for art enterprises

Artists sought for in the economy

First of all we must mention those had become successful earlier, whose reputation comes from the past era ensuring continuous and well-paid orders. There are many others succeeding as freelancers, others again work together with their professional partners and companions, or with talented colleagues. These are searched for by the multis even from abroad. Their political relations also support (a smaller group of them if the actual political party is in charge).

Another group of them consists of those very talented, young artists who managed to make a name for themselves early in their careers by winning tenders, working abroad or through family connections. Many of them are employed by the new millionaire generation gifted with a good taste for art and they also get a number of orders from abroad. One, maximum two artists work in such enterprises normally who are also practised (though not professional) in the economical matters of their own businesses.

A third group "has been called to life" by growing demand in the economy. This group includes graphic and web designers, architects, interior designers and industrial designers in a smaller amount. They usually work in 4–12 person enterprises, share the tasks so they can better utilise their capacity and complement each other professionally. Their greatest problem is the lack of a manager. In the first place it is because of the small number of qualified art managers in Hungary. In the second place these small groups are uneasy to accept anybody not from their profession, and in the third place if one of them is gifted not only in arts but with manager skills and knowledge as well, s/he is hardly ever willing to deal with financial and administrational matters.

Family businesses that are formed to provide the young artists with a professional role to develop and renew the enterprise by their work.

Artists who realised the truth in the saying "do-it-yourself"

Most of the time professionals join in groups behind which are great ideas and desperate persons. Their economic knowledge and financial background is shaky, their existence is risky.

Those who try to raise money for their existence by tenders and sponsorship come from the same circle. They often do not have a clear idea of how to manage an enterprise this way in the long run. Sponsors and won tenders take these small businesses to a different direction from what the original “dream” was in many cases (if they manage to get these supplies at all).
Enterprises coming into existence by the active help of art mediating institutions

It is mainly about a lucky encounter of institutions, lost their former functions and searching for legitimacy (small town halls, cultural associations), and artists looking for a manager. The artist wins the competition/tender in which the institution gave him help by providing the infrastructure and in organising matters. In return the institution partakes in the money gained by the artist. These are almost exclusively local examples.

Conclusions

As a teacher of economic studies I consider as my prime task to make my industrial designer students acquainted with those economic conditions determining their creative work, living and professional success. During the past one and a half years (since I have been working with them) my students have gone through great changes individually and on the whole. The essence of this change is in their realisation of the fact that artists (even if they might stand above society) live in this world and they have to succeed here. (Being famous in one’s death is great, however it cannot compensate for the misery of life). More and more of them show concrete interest in how they might become a more active ruler of their own lives. This year, for example, 60 students applied for the Design Manager Faculty as they want to learn how to manage themselves and their own products beside artwork.

I would like to believe my researches, sharing the results of these with my students, and my teaching work also helped this change a little.

Epilogue (which might be called prologue or source description as well)

Above mentioned have all been written without the claim of completeness. They might be seen as the blueprint of an examination called “the economic and moral succeeding of artists within the local community and with the help of it”. Professional materials in connection cannot be found today in Hungary. The only exception is the previously mentioned survey made by the Hungarian University of Craft and Design in 2001 “The situation and chances for development of design in Hungary”, in which the writer of this paper took part as co-author.

The materials of this paper were collected from interviews made by about a dozen of Budapest and another dozen of provincial art entrepreneurs, full time design manager students taking part in the graduate and postgraduate training of the Hungarian University of Craft and Design, and teachers of the school.