ACTA UNIVERSITATIS AGRICULTURAE ET SILVICULTURAE MENDELIANAE BRUNENSIS

Volume LIX 45 Number 7, 2011

ENTREPRENEURSHIP WITHIN HEALTH CARE – A DILEMMA OF IDENTITY AND PROFESSION

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Received: August 31, 2011

Abstract

ŠEBESTOVÁ, J.: *Entrepreneurship within health care – a dilemma of identity and profession.* Acta univ. agric. et silvic. Mendel. Brun., 2011, LIX, No. 7, pp. 423–430

This paper focuses on specific area of entrepreneurship – health care services. Insufficient commercial business knowledge by the managers of SME health care businesses and a lack of entrepreneurial skills relative to the medical care industry could also be considered barriers to growth or barriers to survival within a crisis environment. An analysis of the strategic elasticity of small a health care organisation could help find an answer to the question of how this specialised business segment, with its multi-faceted sources of finance, might deal with challenges from the external environment and what mixture of strategies might they use to achieve their goals. This will allow the organisations to be proactive with regard to market risk and to construct their own model of behaviour under the four pillars of crisis strategic behaviour – marketing, financial, personal and plan of supply of services. How can one utilise the fundamental planning pillars within health care businesses when the behaviour itself is not predicable? What interactions support the dynamics and adaptability of the business in a positive way? Can different types of stakeholders (or other factors such as business age or interconnections) shed light on developing a better understanding of strategy making in health care services? This paper compares the original options of measurement based on modelling with ROC curves and reflects upon the possible problems of applying this option to the context. A detailed analysis of the data suggest the following results – better understanding about health care management/business and how to strategically guide such businesses in a unique regulatory environment. And answer the question – do physicians make good managers/businesspeople or would it be better for them to delegate this role to an experienced business manager. From a practitioner perspective, the paper will give feedback for entrepreneurial effectiveness in this specialized area of commercial activity.

entrepreneurship, identity, profession, health care, strategy

Entrepreneurship in health care services can be seen as a very specific area of business activity which introduces a unique set of commercial dimensions (Borovský and Dyntarová, 2010; McDaniel and Driebe, 2001). There are many distinctive barriers to entry within the medical market itself, in addition to the classical business start-up procedures for providing professional medical services. One such distinction is that they are two types of companies – state-funded medical entities and the individual small and medium-sized enterprises. A fundamental problem of doing business and planning strategy can be seen in the perspective of the medical art and business, where such peculiarities are highlighted (Souček and Burian, 2006; Arrow, 1963):

- **Conflict between medical science and available resources**: It is not easy to balance the provision of services according to patient needs or expectations based on innovation, science, and transfer of research in the area of drugs and procedures, combined with the available financial resources of the health care provider.
- **Standardization and calculation of services**: The service sector deals with problems such as scaling and process measuring. Such irregularity can

cause problems with the appropriate calculation of routine activities as more than 60% of activities are based on individual care.

- **Business knowledge and management**: Health care is classified under the service sector as a knowledge-intensive service that requires lifelong learning. However, there is a phenomenon within start-ups that highlights a lack of basic skills regarding business knowledge and management within health facilities.
- **Strong influence of institutions**: The first part of influencing or lobbying in this business activity comes from pharmaceutical and biomedical companies, offering instrumentation, drug support or testing. A second influence are central institutions who primarily regulate the price policy and health care business activities (Ministry of Health), make the expertise reviews and approval of process (National Institute of Drug Control, National Institutes of Health), give licenses for health insurance companies and regulate co-operation with the various business entities. The last influencer is the patients as recipients of care, seeking high quality at low cost, but who do not appreciate the real cost of their care.

On the other hand, it could be argued that such business units behave as normal enterprises for the following reasons (Borovský and Dyntarová, 2010):

- They have fixed prices for their services;
- They give wage rates to their employees; and
- They pay for goods purchased at market price (medicines, equipment).

When the service is done, after a patient has been through a complicated relationship, the services are then mostly paid by someone else (health insurance company), and the provider (medicare businessman) loses the direct link with the user. The user does not know about the price and does not make some comments regarding the price adequacy. This information is traditionally missing, but it could be as a key for feedback in the medical field. It is available only when a person chooses a service which is not covered by public insurance and a person has to pay directly to the business owner. According to a review of the literature study has yet attempted to measure business behaviour or relationship between identity and profession, across economically active units in sector of the health industry.

1 Health Care system in the Czech Republic as determinant

The Czech Republic has a system of Social Health Insurance (SHI) based on compulsory membership in a health insurance fund. The Ministry of Health's chief responsibilities include setting the health care policy agenda, supervising the health system and preparing health legislation. The Ministry also administers certain health care institutions and bodies, such as the public health network and the State Institute for Drug Control. Patients are free to choose one of health insurance funds to provide (pay) for their care. Insurance contributions are obligatory and the amount depends on the wage or income. The majority of expenditure is through the SHI system which is financed through compulsory, wage-based SHI contributions and through state SHI contributions on behalf of certain groups of economically inactive people. The health system in the Czech Republic has three main organizational features:

1. SHI with virtually universal membership, funded through compulsory, wage-based SHI contributions;
2. Diversity of provision, with ambulatory care providers (mainly private) and hospitals (mainly public) entering into contractual arrangements with the health insurance funds; and
3. Joint negotiations by key actors on coverage and reimbursement issues, supervised by the government.

Approximately 95% of primary care services are provided by physicians working in private practice, usually as sole practitioners. Patients register with a primary care physician of their choice, but can switch to a new one every three months without restriction. Primary care physicians do not play a true gate keeping role as patients are free to obtain care directly from a specialist and do so frequently. Secondary care services in the Czech Republic are offered mainly by private practice specialists, health centers, polyclinics, hospitals, and specialized inpatient facilities (Bryndová, Pavloková and Roubal, 2009).

Strategy management under this determinant

Strategic planning in SME health care organizations has a relatively unique position in the business literature. These businesses are under political, institutional and professional pressure regarding how to use their resources (Light, 1997; Zon and Kommer, 1999), while simultaneously other agencies such as governmental institutions and insurance companies maintain a strong influence on their strategic behaviour. These health care organizations are often criticized for their lack of attention to the factors and signals from the commercial market because of the institutional protection that they enjoy (Oliver, 1991). Since the health care manager is an agent of a health care organization and not a passive observer (Stacey, Griffin, Shaw, 2000), they are required therefore to develop a strategy that will enable the health care organization to emerge and self organize from their uncertain state (McDaniel, Driebe, 2001). This approach can be expanded with the resource based approach of managing a firm (Barney, 1997) by adding components of knowledge to provide strategic flexibility to health care organizations in the market.

I: *Research sample*

Type of service	Number	Percent of Total	Size [persons] median
Nursing and home care	10	2.6	5
General Practitioners (GP)	86	22.4	3
Laboratory	3	0.8	4
Other specialists (cardiologists,neurologists...)	67	17.4	3
Pharmacy	104	27.1	7
Stomatologists	54	14.1	4
Physiotherapists	44	11.5	9
Psychologists	16	4.2	2
Total	384.0	100.0	

Source: own research

MATERIALS AND METHODS

Main goal of this part of analysis was identity, profession and strategy (composed from four main pillars – marketing plan, production plan, financial plan and personal plan). The survey was targeted at owners or managers of health care businesses in the Czech Republic with less than 50 employees. A total of 384 valid responses were gathered through personal visits (with business owner, who was agree to participate) and the completion of a standardized questionnaire, collected from November 2009 – June 2010, and again from September – November 2010, so every Health Care entrepreneur had to deal with the changes (new impulses, new threats, new price policy, insurance policy and others) in the market during the intervening period.

The questionnaire had three parts: (1) main reasons for start-up and evaluation of the current environment (access to finance, cooperation, possible, expansion); (2) main barriers to close down the business; and (3) strategy evaluation (resources, responsible person, activities). The target audience primarily consisted of private practitioners and operators of small specialized outpatient clinics such as surgeons, cardiologists, stomatologists (in almost countries – dentists), and physiotherapists. The development of identity and profession relationship allowed the data to be analyzed in many different ways which thereafter enabled deeper insights to be gathered.

The use of ROC (Receiver Operating Characteristic) Curves

The analysis is based on data analysis using multidimensional statistical methods in the qualitative research area. All collected data were processed in SPSS for Windows (ver. 18). To get more sophisticated results and to identify dominant tendencies, the applicability of data was examined by Bartlett's Test of Sphericity with the values of the presented results being under $P < 0.05$. For all of the data the authors used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) with a recommended minimum value of 0.6 (Sharma, 1996) to verify that factor model is appropriate. All data inputs had KMO and Bartlett's Test value at a level of 0.736, which make the data analysis valid.

Hamel (2009) used ROC (Receiver Operating Characteristic) Curves not only in the sphere of medicine and biochemistry, but recommended in business cases too. It is very important to test, classify, and identify, which components of strategy are really connected with the external environment and the strategic behavior of a business unit (real connection with profession and identity). The ranking values (reference line = 0.5) are typically normalized to values between 0 and 1 and the left part of the curve represents the behavior of the model under high decision thresholds (conservative) and the right part of the curve represents the behavior of the model under lower decision thresholds (liberal). ROC curves were computed for each segment to describe different behavior to compare business behavior – based on profession and identity. After that the area under curve (AUC) explains the significant parts of the plan which cause the success.

RESULTS AND DISCUSSION

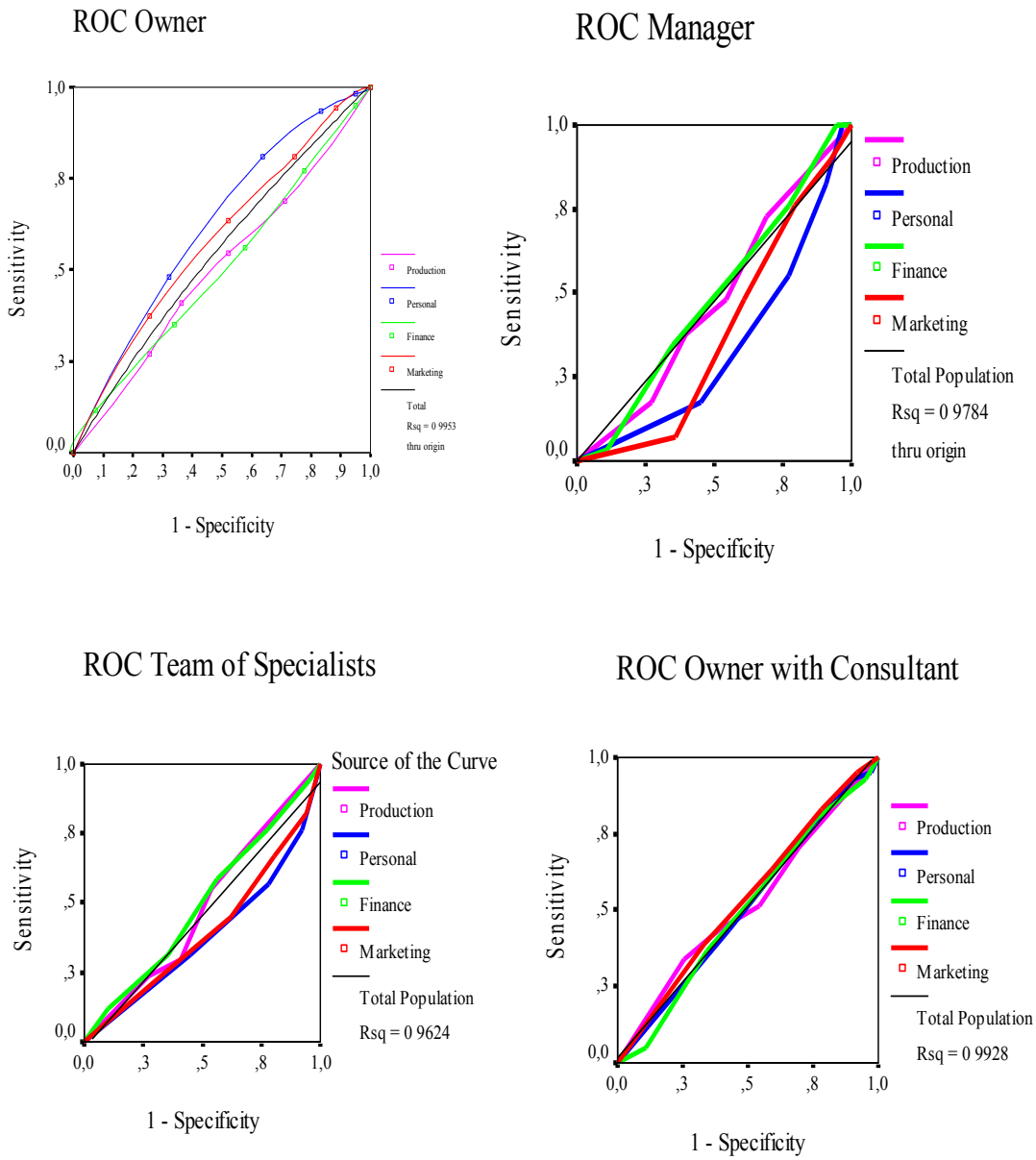
Relationship between Strategy, Profession and Identity

The research sample was prepared as multidimensional so as to see differences in business behavior. Measurement of relationship between identity and profession we used several definition. Entrepreneurial identity is commonly defined as the term "small business manager" or "self – employed" or the person, who builds up an organization to manage resources (Wickham, 2001; Barney, 1997; Collins and Porras, 2004), in the questionnaire it was imitated by the question "Who prepare your strategy?" (related with four types of plan – marketing, finance, personal and services, rated by respondents). Professional identity within health care is constructed as occupational status, which is built on occupational skills (Svensson, 2006) based on working experience and education

(question for segmentation: Type of care). All of the sample are health care providers or they are included in the clinical chain in the health care sector, but they differ in dependence on demand on service, payment per service (direct or indirect – mostly from insurance), and size. Most of them are officially a micro-sized operation, but they often use the co-operation structure, especially where they share one building and they provide a health centre.

A brief analysis would suggest that the owner/ managers are practically oriented. These results provide support that customer relationship management in health care services is still not widely used. The most sensitive group is pharmacy, which have to offer more than drugs prescriptions. In terms of financial planning, laboratories are the most elastic at offering supporting services. They have to create a wide area of work that can be offered to more than one type of medical centre, and they must also be concerned with production planning. Finally, specialists such as surgeons, cardiologists, and others care about their marketing activities, mostly targeted on their reputation in the area of specialization. The effect of the elasticity (accommodation with changing environment, reaction by proactive approach and strategic-speed changing) is greater when:

- Businesses are unsupported by the diagnosis – related group (DRG) system, and are dependent on the direct payment and direct relationships with customers, must be more elastic under crisis environment; and



1: *Identity and strategy based on strategy "creator"*
Source: own research

II: *Area under Curve ROC – Based on strategy preparation*

Type of plan	Owner	Manager	Team of Specialists	Consultants
Marketing	0.578	0.377	0.398	0.538
Finance	0.505	0.486	0.496	0.503
Personal	0.613	0.335	0.398	0.512
Production	0.507	0.476	0.482	0.522

Source: own research

III: *Area under Curve ROC – Implementation Stage (Owner´s effect)*

Type of plan	Home Care	GP	Laboratory	Specialists	Pharmacy	Stomatolo-gists	Physiother-apists	Psycholo-gists
Marketing	0.519	0.661	0.125	0.571	0.314	0.618	0.462	0.260
Finance	0.455	0.588	0.264	0.564	0.437	0.460	0.464	0.480
Personal	0.366	0.592	0.168	0.542	0.395	0.590	0.511	0.318
Production	0.542	0.503	0.324	0.517	0.540	0.465	0.450	0.460

*grey cells: the result is very different from plan, red: better than expected.

- Businesses offer a wide variety of quality-based services to customers where satisfaction is important because of a high level of competition.

It is also possible to make a small comment about each segment. GP units possess a low level of elastic business behavior as they are typically supported businesses from different funding sources (payments per capita, fixed payments, fixed price of medical fee per visit, payments per production). Home care services are mostly paid directly, just as with physiotherapy and psychology and other specialist treatment (see Fig. 1, Table II).

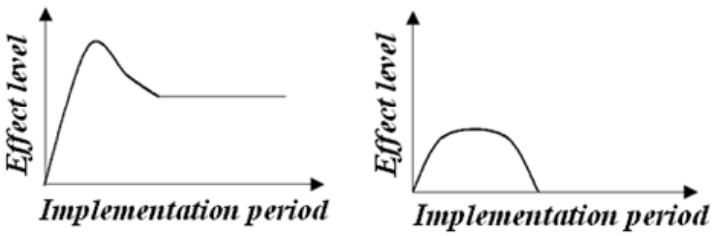
Significant situation, for each segment, is to get marks above 0.5. It means that they are concerned with this type of plan and understand their importance.

Briefly, it could be seen, that identity and strategy are going hand in hand. Owner and owner with helpful team of consultants prepare dynamic and balanced strategy with spread risk. In order to test the behaviour of each segment in implementation stage, the author used the same method. It was found that the implementation stage was quite different to what was expected. All planning resources are prepared as equal partners for success, but after comparison with following table, preferences were changed (the biggest differences are in grey scale, only specialist are in the same position without differences).

Even if the logic and point of view is different, professionalism building is a fluid and is overlapping all business activities. In case of health care services is quite difficult to classify basic success by economic terms using.

Strategic elasticity within health care companies in the business environment could bring dilemma and often be called the "socially desired effect" (professional dilemma) where different ideas are not presented because they do not encompass normally used methods or strategy elements (Green, 1977). This could cause future problems with strategy development and strategy dynamics. The consequential time delay could cause more behavioural change and may well have an impact on the final effectiveness. This approach divides into the following types of effect:

- Delayed effect (delay of impact) if the effect is measured only as the difference before and after the change process and the final effect could be greater because of the re-engineering of the main process, new activities and innovations. This approach was used as a model for factors influencing strategic behaviour (looking for efficiency, especially when business identity is in hands of owner, professionally laboratories or psychologists; see Fig. 2).

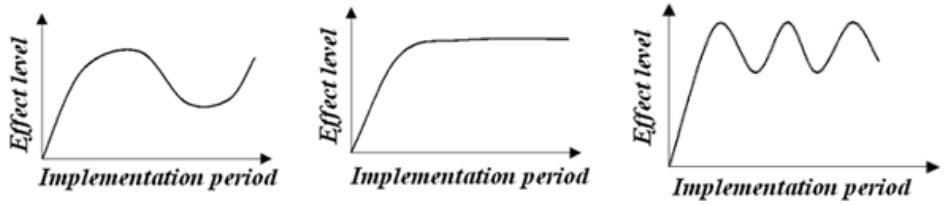


2: *Delayed and backsliding effects*
Source: own

- Backsliding effect (decay of impact) – if the dynamics are measured after the project, as an on-going process, so the deviation with the plan and the final effect is near zero (should be seen if strategy is prepared in combination with owner and consultant).
- Activation effect (borrowing from the future) – businesses are prepared for some problems due to their business area and internal and external procedures, and so they improve their leadership, strategy and goals. It appears to be similar for business plan preparation according to market analysis, price analysis, customer analysis and other factors (looking for effectiveness, behaviour of fast growing enterprise, especially when strategy is prepared by manager).
- Historical effects (adjusting for secular trends) – for the compilation of strategy dynamic businesses use customer segmentation and price diversification to spread the risk. It is practical to first see the partial effect of dynamic decision making on observed groups and after that it should be used as a strategy as a whole (main used in ownership hands).
- Contrast effect (treatment effect) – the plan and the implementation do not join together in the future (The strategy was not consulted with the owner. Owner didn't accommodate identity with proposed business model; compare Fig. 3).

CONCLUSIONS

The internal validity is significant for first phase and conclusions, and provides an opportunity to develop the idea. But on the other hand, this approach brings about problems with the strategic prognosis using only internal valid models in another type of company. The difference in responding to the business environment and the self interests of companies brings about constraints on being dynamic as a gazelle. Many companies have as the main goal for their future not innovation, but merely survival, not looking to the future dynamically, but in case of status quo. This research confirmed that in services the most important factor for the dynamic development of personal planning is the relationship with the production plan. Most are independent on direct payment from customers such as homecare services or physiotherapists so they have to develop these types of skills to be successful in this business.



3: *Activation, historical and contrast effects*
Source: own

SUMMARY

The challenges for some organisations can be greater than others dependent upon the size, nature and industry of the business activity. In the health care sector for example, bureaucracy and regulative activities are particular factors which can cause significant delays to any potential strategic changes in business behaviour, such is demonstrated by five possible effects. This paper examines standard behaviour of a company, where all the planned activities run through this organization, must be coordinated on every level. This area is presented as a case study, especially made for the area of health care businesses using models with ROC curves as a tool for research sample evaluating. These dilemmas – which parts of plan and responsibilities face to face static planning dynamics cannot be resolved simply by trying to measure and evaluate. Some will not yield to quantitative and deductive solutions as an index method or behavioural study. It seems to be important to say, that in these businesses production and finance are on the first place and marketing and personal activities are on the opposite side. All of them are based on conceptual and inductive analysis to clarify and to expand the theoretical and experiential managerial basis for describing what passes as a health care practice as well as at strategy planning and its effectiveness though relationship between company identity and profession, mainly as ethical problem than business decision.

Acknowledgements

Research behind this paper was supported by the Internal Grant System of Silesian University within the project IGS SU 7/2011 "Dilemmas of theory and practice within entrepreneurship in health care services".

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