

## THE IMPORTANCE OF KNOWLEDGE IN THE DEVELOPMENT OF SERVICES, ANALYSIS OF CAM SERVICES DEVELOPMENT IN SLOVENIA<sup>a</sup>

Mateja Kržin  
International School for Social and Business Studies, Slovenia  
matejainfinity@gmail.com

Nada Trunk Širca  
International School for Social and Business Studies and University of Primorska, Faculty of Management  
trunk.nada@gmail.com

Katarina Babnik  
Faculty of Health Sciences, Slovenia  
katarina.babnik@fvz.upr.si

### Abstract:

In the last twenty years there has been a noticeable increase of services in the tertiary sector in the society with a parallel increase of informal education offer, which creates demand for such services. We are also noticing indirect promotion of certain services through other different forms of education (informative, promotions, TV and radio shows). Because services are considered knowledge intensive activities, we predict a correlation between the level of knowledge among people in the society and growth of services.

In this article we examine the influence of knowledge on the development of services, limiting ourselves to services of complementary and alternative medicine (CAM services). The presence of these services in Slovenia has increased by over 100% during the last decade. Based on literary references, our theoretical model and findings obtained from data on growth of CAM services, as well as informal education from this field in Slovenia, we have established that there is a correlation between the increased offer of informal education and the development of CAM services. Newly obtained knowledge encourages individuals to create companies that provide CAM services and drives consumers to look for services offered by such companies. Informal education has an important role in this as well, as individuals with a higher degree of formal education generally tend to upgrade their knowledge.

*Keywords: development of services, knowledge informal education, CAM services in Slovenia*

### 1. INTRODUCTION

Development of new services depends on numerous different factors. Knowledge is an important factor and has long been considered as being in the heart of constant economic growth (David & Foray, 2002), while in the future society (Barle, Trunk-Širca & Lesjak, 2008), economic growth will be closely connected with the ability to create new knowledge. Knowledge can be gained in different ways, where the individual's knowledge base mainly consists of knowledge gained through (i) formal education, which is systematised and regulated in our society, (ii) non-formal education, which is a commercial service in our society and (iii) informal education, which is occasional and can take place anywhere and at any time. While formal education is subject to critical debates in terms of its adaptability towards meeting the actual demands in the market, we tend to approach non-formal education more cautiously because it is commercialised and focused on accumulating information instead of on contextual understanding.

Knowledge is considered an important component that drives the development of the tertiary sector (Potočnik, 2004). Knowledge intensive business service is a new term that has emerged in the past few years, which indicates the significance of knowledge for the development of services (Grimshaw & Miozzo, 2006). In addition, knowledge intensive services, consisting of services from the fields of

education and healthcare, have also gained momentum.

Knowledge has a multi-dimensional effect on the development of CAM services. On one hand, the users' knowledge is important, because it – together with information – enables them to identify their needs and look for appropriate solutions for themselves. On the other hand, the service providers' knowledge is also important, as the appropriate level of education enables them to achieve greater competitiveness, which makes the establishment, continued existence and development of their company possible. Even though CAM services in Slovenia are usually offered by service providers with no formal medical education, include methods that are not scientifically proven to be effective and are available as self-paid services, the demand for such services is increasing both in Slovenia (Židov, 2000, Kersnik, 2006, Kreft, 2015) and other countries throughout the world (Singer & Adams, 2014).

## **2. THE CONNECTION BETWEEN KNOWLEDGE AND DEVELOPMENT OF SERVICES**

### **2.1. Knowledge and education**

Knowledge is a mix of framed experiences, values and contextual information that provide the framework for evaluation and inclusion of new experiences and information (Davenport, 1998), as well as a cumulative basis of cognitive skills and information owned by an individual, company, community or family and used in work, personal or social situations (OECD, 1996). According to Plato, knowledge has to meet three conditions: it has to be true, justified and believed (Kodelja, 2010). Such understanding of knowledge is generally accepted in the western philosophy, where knowledge is defined as true, credible and formed as a proposal (Bereiter, 2010).

Slovenian formal education system consist of primary (compulsory basic education), secondary (vocational, professional and general upper secondary education) and tertiary level of education (pre-graduate and post graduate education) (Eurydice, 2016). Formal education is facing a loss of reputation, which coincides with the loss of reputation of universities that appear more as supporting economical structures and less as academic-research institutions, functioning as the main generator of knowledge and development (McFarlane, 2014). On the other hand, this brings formal education closer to certain non-formal programmes, thus blurring the line between the two (Guzmán-Valenzuela, 2016). Nevertheless, the loss of reputation of universities should not lessen their social significance, since, as proposed by Barlem Trunk-Širca & Lesjak (2008), formal education offers us the framework of knowledge, a context which serves as the foundation for all further knowledge and a basis for forming opinions and standpoints. Non-formal knowledge is generally more focused on a certain topic within a wider context and with a limited transfer of tacit knowledge (Straka, 2004).

The emergence of the phenomenon of non-formal education dates to the year 1947 when UNESCO prepared a plan of education for undeveloped countries wherein a system of formal education was replaced by shorter and less expensive non-formal education due to lack of resources (Straka, 2004). Today we are seeing an increase of non-formal education also in countries with a formal education system in place. In such countries it is accredited more and more significance for the individual and the society (White Paper on Education and Training, 1995, Svetlik & Pavlin, 2004, Straka, 2004). 1996 was the European year of non-formal education and the European Council concluded in Lisbon in 2000 that lifelong learning (including non-formal learning) is no longer only one aspect, one option, but is becoming the prevailing principle of education. The goal of non-formal education can be the acquisition of new competencies and skills, new knowledge for new professional activities, self-development, increasing the quality of life and active social involvement (Jelenc, 2007), contributing to additional literacy of children and young people, additional education of non-active or unemployed persons or can even be an alternative to the formal educational path (UNESCO, 2012).

According to Tuijnman and Boström (2002), formal education is organised as a structured system of intellectual parts, while non-formal education consists of different educational activities, that are usually not interrelated and where formal education has a significant influence on the acquisition of non-formal knowledge, because the level of knowledge (measured through the level of education) affects the individual's capability to use learning opportunities for further learning (Wozniak 1987 in Barle, Trunk-Širca & Lesjak, 2008). Individuals with a higher degree of education see more meaning to life and are more capable of balancing their lives (Carr, 1993, Pallas, 2000), as higher level of education affects the physical condition and more educated people have stronger social ties, are more likely to associate and

attend events (Smith & Noble 1995). The level of knowledge possessed by an individual has a significant effect on the feeling of being able to control one's life and the capability of solving problems they encounter (Rose and Mirowsky in Barle, Trunk-Širca & Lesjak, 2008).

Today's society is labelled as the knowledge-based society, where knowledge is crucial (Svetlik & Pavlin, 2004) and has to be updated faster and with more diligence than ever before. With faster development of sciences, economy and technology, education in childhood and youth is no longer sufficient, so possibilities for education need to be created through the entire life (Černetič, 2006), because knowledge-based economy is extremely fast in creating, accumulating, saving and depreciating knowledge (David & Foray, 2002). The new knowledge-based society will be a society of the educated, with knowledge as its key resource and where the educated will make up the prevailing part, but not the majority of the workforce (Drucker, 2001). According to Bontis (2010), knowledge is important in terms of developing competitive potential for the companies and organisations, while there are several other studies confirming the connection between the performance of a company or organisation and knowledge (Vargas, Lioria & Roig-Dobon, 2016, 2009).

## 2.2. Development of a Service

One of the key characteristics of a knowledge-based society is the transition from the production sector to the services sector. A significant increase of services can be observed over the past 20 years as services constitute up to 70% of GDP in developed countries (Potočnik, 2005, Sanchez, 2010, Usi, 2016). At the same time, services have gained popularity in academic and political circles (Sundbo & Toivonen, 2011). By definition, services are a special type of action or operation offered by the service provider to the user (Potočnik, 2005) with an emphasis on added value. Vargo and Lusch (2004) define services as skill or competence-based actions, processes or operations that create value for the users of services or service provider, while Hertog (2000) argues that the existence of a service is related to a certain problem occurring in the society for which the service offers a solution by essentially using other means instead of offering a product.

In the structure of social activities, services are part of the tertiary sector, as activities that do not produce or manipulate material goods. According to this classification, agriculture belongs to the primary sector and manufacture to the secondary sector (Illeris, 2007). Characteristics of services include intangibility, indivisibility of the user and the provider, caducity, changeability, the difficult measurability and quality control, high level of risk as the service cannot be replaced, individually tailored offer and personal contacts.

## 3. GROWTH ANALYSIS OF CAM SERVICES IN SLOVENIA

Over the past twenty years there has been a significant increase of CAM services both in Slovenia and in other countries (Siaghpush, 2000). Various studies show that between 25-50% of adult population in industrialised countries use these methods (WHO, 2013, Robinson & McGrail, 2004). Complementary and alternative healing methods are not part of the conventional medicine, where complementary treatments are used to supplement or be used together with conventional methods. Alternative treatments are usually employed instead of conventional medicine (Zaloker & Zaloker, 2011). There is a wide range of such services in Slovenia, as shown in the table below.

**Table 1:** CAM methods practiced in Slovenia

CAM METHOD TYPE	SERVICES WITHIN THE METHOD	PURPOSE
Traditional medicine	Traditional Chinese medicine, traditional Indian medicine – Ayurveda, homeopathy and naturopathy.	prevention, diagnostic, therapy and rehabilitation
Body – spirit interaction	relaxation techniques, psychotherapy, hypnotherapy, regression, biofeedback, hypnosis, therapy, aromatherapy, prayer	prevention, diagnostic, therapy and rehabilitation
Phototherapy, herbal medicine, biological based methods	diet, herbs, micronutrients, herbalism, aromatherapy, Bach drops gemmotherapy	prevention, therapy and rehabilitation
Manually healing (without contact)	breathing techniques, yoga, meditation, autogenous training	prevention, therapy and rehabilitation
Manually therapies, manipulative methods and	chiropractic, osteopathy, massage, acupressure, shiatsu, reflex zone massage, therapy, kinesiology	prevention, diagnostic, therapy and

therapies		rehabilitation
Energy healing	bioenergy, active touch, rei-ki, psychoenergotherapy, bioresonance therapy	prevention, diagnostic, therapy and rehabilitation
Diagnostic methods	Kirlian photography, iridology, astrology, thermodiagnosics	diagnostic

Source: Working draft of law on self-healing 2005

CAM services include prevention, diagnostics, therapy and rehabilitation, which are all areas reserved for the public healthcare system, wherein public healthcare professionals are trained by formal education norms and offer services that are free of charge for the users, since they are publicly funded and are scientifically proven to be effective. Providers of CAM services, on the other side, are mainly educated in the non-formal system of education and the quality of service depends on the knowledge and experience as it is not formally prescribed and as such subject to the service provider's judgment, which opens the door to different interpretation of the service's execution. These services are payable and some of them are not scientifically proven to be effective. While the commercial regulatory mechanism assures natural regulation, which is based on the quality of service and its ability to meet the demands of the user, users tend to show a certain level of reticence when it comes to the use of such services.

It would appear that the knowledge of users and that of the service providers are equally important in CAM services. The knowledge possessed by the service providers influences the safety and quality of a service, as well as its introduction, design, development and closure. It is sourced from non-formal methods of education, which have increased over the last ten years. With the intent to analyse the increase of institutions that carry out non-formal education we looked into Bizi database of companies, but encountered a problem, as such forms of education appear under different classifications. Some examples are listed in table 2, for which the data was manually compiled by examining 25 out of several hundred organisations. As such these data are incomplete, but they indicate an increase of non-formal educational institutions with CAM content, which coincides with the growth of CAM services in the last decade.

**Table 2:** Partial offer of non-formal education for provision of CAM services in Slovenia

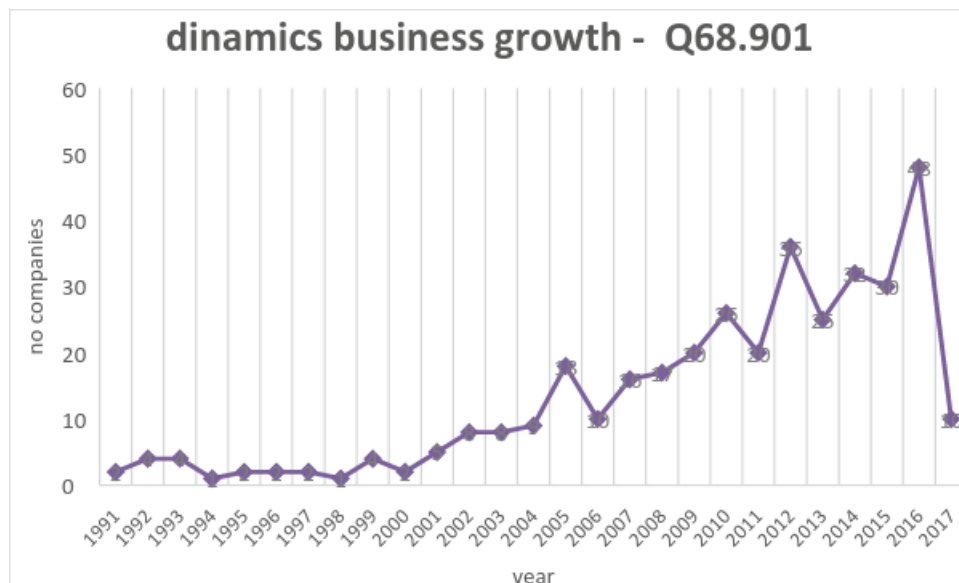
EDUCATION TYPE	NAME OF THE COMPANY; ASSOCIATION OR ORGANISATION	YEAR OF ESTABLISHMENT	STANDARD CLASSIFICATION NUMBER
Traditional medicine	ANANTA akademija	2008	Q68.901
	Naturopatska šola Saeka	2015	Q68.901
	Društvo za razvoj holistične znanosti Veda	2012	S94.999
	Akademija za zdravilstvo Bion	1990 (2014)	M72.190
	Društvo Modrina	1998	S94.999
	Center za celostno zdravljenje	2015	Q86.901
	Ljudska univerza Kranj – Homeopatija	1992 (2015)	P85.590
	Tara trgovina in storitve	1989 (2014)	G46.900
	Ayurvanica ajurvedski center	2011	P85.510
Body – spirit interaction	Tadej Pretnar s.p.	2001 (2010)	J58.190
	Nova šola naravnega zdravljenja	20014	Q68.901
Phototherapy, herbal medicine, biological based methods	Inštitut za Bachovo cvetno terapijo	2008	C21.100
Manually healing (without contact)	Joga-do, šola za učitelje joge	1997 (2013)	P85.510
	Društvo pot	2008	S94.999
	Sadhana d.o.o.	2009	P85.590
	AGNI JOGA	2014	P85.510
	Društvo Moja Joga	2005	P85.510
Manually therapies, manipulative methods and therapies	Akademija za manualno terapijo	1990 (2014)	M72.190
	Soma integra Lutman k.d.	2005	P85.590
	Društvo Modrina	1998	S94.999
	VITAL MASAŽE, šola za maserje in terapevte	2016	P85.590
	Moj Stil	2008	G47.910
Energy healing	Šola za bioterapevte po karmični diagnostiki	2003	Q86.901
	Svetovid	2014	S96.090
	ADMISSA izobraževanje in svetovanje	2011	P85.590

Source: Bizi database of companies

Increased accessibility of knowledge influences the potential users by enabling them to recognise their own issues and possible solutions. On the other hand, non-formal education programmes are intended for creating demands for a certain service that has recently emerged in the market or which the service provider would like to implement. Because of this it is important to emphasise the conflict, which Hong (2009) describes as the conflict between profit-oriented education and humanity oriented education, so additional care should be taken when interpreting information obtained through non-formal education.

CAM services in Slovenia are still growing rapidly and tend to remain in the market. Standard classification of activity for such businesses is called Alternative forms of treatment numbered Q86.901. Data on growth of companies within the said standard classification of activities will be shown graphically as the number of newly established companies by years. We analysed the period between 1991 and 2017, where a projection was prepared for 2017 based on the previous growth. The projection is not included in the graphic representation. Growth of companies in the area of Alternative forms of treatment was substantial, which is evident from graphic 1. Growth curve has been rapidly rising over the past ten years and a projection of 2017 shows that the growth rate from the first months of the year will result in the establishment of approximately 50 new businesses by the end of 2017 (48 in 2016). It appears that the number of companies offering CAM services is increasing, even though there is no assurance of their efficiency and despite the fact that these services are payable.

**Graphic 1:** Growth of Alternative treatment businesses



Source: Bizi database of companies

Among the more common users of CAM treatment methods are patients suffering from chronic illnesses, who choose these methods because they believe official medicine to be ineffective (Saydah & Eberhardt, 2006, Hrovatin, 2006), while Thorne, Paterson, Russell & Schults (2002) add, that patients with chronic illnesses complement conventional treatment methods with CAM methods and by doing so take responsibility for their health, body and care. This opinion is shared by Cassileth (1999), who also emphasizes that by selecting and choosing to undergo CAM treatment methods, patients are actively involved in their therapy. The next component that is considered important by users of CAM treatment methods is the difference in the time and attention that public healthcare personnel allocate to them, compared to practitioners of CAM treatment methods (Zaloker & Zaloker, 2011). A physician can devote between 9 and 12 minutes to treating a patient suffering from acute condition and 12 to 15 minutes to chronically ill patients (Zdravniška zbornica Slovenije, 2011), while CAM practitioners allocate more time. Other studies indicate, that there would be more trust in CAM medicine if it were institutionalised (formal education) and show increased level of trust in CAM methods in areas where treatment is at least partially institutionalised (manual therapy, homeopathy and acupuncture) (Schee & Groenevegen, 2010). Sirois, Salamonsen & Kristoffersen (2016) categorize users' motives for using CAM services into utilitarian reason, which mostly emphasise their practical usefulness (positive physical and emotional effects, satisfaction with the CAM service and the provider of this service), and symbolic reasons, which

emphasise identifying oneself with these services and being devoted to them. The latter show a higher commercial component, as providers of CAM services include consumers' social orientation in their services as well.

#### 4. CONCLUSION

Modern technology, accompanied by the increasing offer of informal education with simultaneous crisis in formal education, facilitate easy reach of knowledge and competencies. Consumers in today's society are focused on meeting their personal demands, which is manifested in the form of services that offer both wellbeing and comfort. Changes in the demographic structure indicate that the population is ageing, resulting in the need of new services in the society, while increased accessibility of knowledge enables the development of new services, to meet such new demands. The ability of users to identify their needs and find suitable solutions is on the other hand a key factor which influences the development and continued existence of such services.

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