

Promotion of Research and Development by means of Cluster Brand Building

Diploma Thesis

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Declaration

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Abstract

Pokorná, H. *Promotion of Research and Development by Means of Cluster Brand Building*. Diploma thesis. Brno: Mendel University, 2017.

The diploma thesis deals with promotion of research clusters by means of brand building. It focuses on a current situation of research clusters, research and development promotion and cluster branding. Primary data were collected by 2 qualitative research methods, focus group and in-depth interviews, which were carried out with representatives (n = 15) of 2 chosen target groups. The results are establishing research Stroke Brno cluster together with its branding strategy, cluster mapping and content analysis report summarizing the qualitative research results.

Keywords

cluster, brand building, cluster branding, the Stroke Brno, in-depth interview, focus group, research promotion.

Abstrakt

Pokorná, H. *Propagace výzkumu a vývoje prostřednictvím budování klastrové značky*. Diplomová práce. Brno: Mendelova univerzita v Brně, 2017.

Práce se zabývá propagací výzkumného klastru prostřednictvím budování značky. Soustředí se na současnou situaci výzkumných klastrů, propagaci výzkumu a vývoje a budování klastrové značky. Primární data byla získána pomocí 2 metod, focus groups a hloubkových rozhovorů, které byly provedeny s představiteli (n = 15) 2 vybraných cílových skupin. Výsledkem je založení výzkumného klastru Stroke Brno společně s jeho brandovou strategií, zmapování klastrů a report obsahové analýzy, který shrnuje výsledky kvalitativní výzkum.

Klíčová slova

klastr, budování značky, budování klastrové značky, Stroke Brno, hloubkový rozhovor, focus group, propagace výzkumu.

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1 Introduction

1.1 Introduction

Current decade represents a golden age of research, development and innovation growth within various types of networks. Not only the European Union, but also national and regional administrative units have already incorporated in their strategies the support of such research groups. Strengthening the effectivity of European research and development by means of international networks is one of the important goals of Strategy 2020. For example, the Regional Innovative Strategy (RIS) has a similar aim on the national level, uniting top research institutions and universities of the South Moravian Region (mainly from the city of Brno) into one cooperating work group.

Whether we are talking about business incubators, clusters, regional agencies, science parks or any other type of network, the municipalities have realized one thing common to all of them. It is these research networks which are becoming the important drive of economy.

Successful research cooperation resembles the snowball effect. Cooperation of several research organizations ensures infrastructure and collaborative research. More institutions bring more facilities, more human resources and ideas which can be implemented. This leads to the growth of research results production which is the base for innovations and development. Consequent implementation of these results bring more money to economy that can be used for even higher support of research, emerging new cooperation, gaining bigger support from other providers of finances, enticing foreign experts and companies which represents new challenges, bigger and more interesting projects and increase of competitiveness.

This cycle can be accelerated even more by creating a strong cluster brand which generally attracts top researchers, business partners and organizations. This fact in the end leads to a significant increase in gaining financial sources. A proper brand and subsequent brand management can increase the recognition of research field, seat (city or region) of cluster and make the development of cluster members (people and institutions) easier.

The thesis in its theoretical and practical part covers all the mentioned issues. The theoretical part provides background to research and development and topics connected with clusters. The large part is dedicated to cluster brand building which is closely connected to the practical part. The practical part is subdivided into three core sections. The first one includes results of cluster mapping of Czech and foreign clusters based on the web analysis. The next part is dedicated to qualitative research which was carried out with the usage of in-depth interviews and focus group. The last, but crucial part contains a study case of the emerging Stroke Brno cluster and especially its brand building strategy.

1.2 Objectives

The main objective of this thesis is to create a cluster branding strategy for research expertise promotion and the increase of competitiveness of research and development institutions.

Partial objectives are:

- 1) General mapping and analysing the situation of research and development promotion in the Czech Republic and abroad;
- 2) Identifying possibilities of research and development promotion;
- 3) Identify and describing target audiences;
- 4) Mapping the situation of R&D clusters in the Czech Republic and abroad;
- 5) Applying recommendations on a study case.

2 Literature Survey

Literature survey presents all topics relevant to this diploma thesis. Firstly, research and development are introduced in general and consequently translational research and a stroke disease which are fields connected to the cluster presented later. Next the clusters are presented – the definition, main benefits, structure, typology and ways of financing. The next chapter describes what is a brand and its most important components. This chapter is followed by cluster branding which gives a concrete idea how to create a cluster brand and which steps are necessary. Literature survey is closed by the chapter concerning qualitative research, particularly the area of focus group and in-depth interview which will be used as a method of collection primary data.

2.1 Research and Development

Research and development (R&D) are defined as a systematic creative process of enlarging current cognition, including cognition of human, culture and society, gaining new knowledge or their application in practise by means of methods enabling their confirmation, addition or refusing (Act No. 130/2002). Simply said the aim of R&D is to create new information or technology that can improve some product or its effectiveness (Jílková, 2010, p. 11).

R&D represents a key element of productivity increasing, economic growth, employment and sustainability. This sector is in the Czech Republic, as well as in other highly developed countries, constantly increasing. Since 2005 the number of R&D workplaces has raised by 700, the number of workers has increased by 35 000 and expenditures to this field have increased more than twice (in 2015 they represented cca 2% of Czech GDP) (czso.cz, 2016).

Research is split into basic and applied research. Basic research is the first step of R&D and explores the fundamental aspects of a concept or a phenomenon. It creates a base for applied research which overtakes findings of basic research, verifies them and then applies into practice which leads to development (Jílková, 2010, p. 12).

2.1.1 Translational Research

In medicine the bridge between basic and applied research is called **translational research**. Translational research uses “bench-to-bedside” approach that “translates” results of fundamental research into practice and health improvement. This way is used also in stroke research (Woolf, 2008).

Stroke or a brain attack is an acute neurological condition which occurs because of the lack of blood flow to a particular area of brain. It can happen to anyone at any time. Nearly 6 million people worldwide die of this serious disease every year. It is also the most common cause of permanent disability (Volný et al., 2016, p. 43–50).

2.1.2 Research Promotion

Generally, the research and development promotion is specific in a particular way which means it has to adjust the used tools. PR management can use a combination of these **communication tools**:

- a) press release;
- b) promotional materials;
- c) media kits: a package of promotional and informational materials about product/company/event that serves to journalists;
- d) internet: a powerful tool that enables brand building, serves as an information and communication channel and makes conversions easier. According to Pavelková (2009, p. 110) all the Czech clusters have a web presentation;
- e) newsletters and bulletins;
- f) press conference;
- g) round tables: this method is used by professionals for discussion with journalist about specific topic which can result in interesting ideas and materials;
- h) lectures and workshops;
- i) interviews;
- j) educational visits and receptions for the press (Pavličková, 2010, p. 37. Keller 2007, p. 313–350).

There exist hundreds of institutions, agencies, centres, publication portals and projects across the world trying to increase the awareness of new research results as well as of the general scientific findings. Many agencies, like for example the International Research Promotion (IRP) are able to ensure “publication service” (e.g. help with preparation of manuscripts, submission) or organization of conferences (researchpromotion.com, 2017). The portfolio the other organization is much wider. The International Research Promotion Council (IRPC) has its representation on every continent and ensures many activities from training and development programmes, expert service for establishing new institutions or HR development to publishing several international journals (irpc.org, 2017). Unfortunately, none of these organisations has a direct impact on the research promotion in the Czech Republic.

In the Czech Republic no well-established organisation helping the research institutions with research results promotion exists. In the years 2009 – 2015 the Operational Programme Research, Development and Innovation (OP RDI) focused on science popularization was applied. Thanks to this programme several science centres (e.g. Vida! Science Centre) was established, 700 products (events, exhibitions, education materials, competitions, web portals etc.) created and 700 000 people (mainly pupils, students and research workers) affected (op-vk.cz, 2016).

Many activities, like those supported by the OP RDI, are focused on children or students. On the other hand, specialized agencies and institutions mentioned above target mainly on professional and research workers. So there is still a niche in educating common adult people about research. However, in the Czech Republic,

this white space is slowly filled in by specialized sections on news portals, or specialized portals like vedavyzkum.cz and by educational TV shows – for instance Věda of the Czech Television, which presents current scientific results.

2.2 Clusters

Clusters are defined as “*geographic concentrations of interconnected companies, specialized suppliers, service providers and associated institutions in a particular field*” (Porter, 1998, p. 197). Another source describes cluster as a sectoral agglomeration of regional companies of the same or similar type, which cooperate with each other, but at the same time are competing (czechinvest.org, 1994–2016a). The European Commission distinguishes 3 cluster concepts: a regional cluster, regional innovative network and regional innovative system. The base – regional cluster – which is on the lowest step of this hierarchy is then defined as a geographically bounded concentration of interdependent firms (European Commission, 2002).

Clusters are important from many perspectives, like growth, innovation or investments. They are generally set up to hire the best professionals and researchers, support investment, gain international visibility and find new partners for cooperation. Next objectives are to support export of cluster products/know-how, internationalization, gain of attention and reputation among policymakers and EU officials who are in charge of funding programs (czechinvest.org, 1994–2016b).

Christensen (2012, p. 6) sees clusters as promising and powerful instrument in promoting research, development and innovation which in turn create growth in the fields of employment, productivity and export. He states that many studies around the world have proven the positive impacts of cluster activities on R&D investments, innovation and R&D collaboration.

Global economic forum considers clusters as an important source of national economic competitiveness increasing. They identified three levels of competitiveness increase – increase of productivity between members, firms and industries, higher volume of innovations capacities and stimulation of new enterprise group creation leading to other innovations and cluster enlargement (Abbrám, 2009, p. 18).

2.2.1 Typology

Nowadays globally there are thousands of clusters, cluster initiatives and organizations. The precise number is hard to determine because not all parts of the world use tools for cluster mapping. And even though a specific region uses a tool for cluster observation, it does not necessarily ensure registration of all the clusters to a particular cluster observatory. Also, some organisations with typical characteristics of a cluster do not present themselves as a cluster organisation.

Clusters can be divided into various categories according to their size, sector, number of participants and/or employees, current life-cycle stage or geographically. One unified cluster typology does not exist. Three of them are introduced below (Pavelková, 2009, p. 21).

1) Markusen's typology of clusters

Tab. 1 Cluster typology
Source: Portugal (2012)

Cluster type	Characteristics of member firms	Intra-cluster inter-dependencies	Prospects for employment
MARSHALLIAN	Many small, innovative, medium-sized and locally owned firms well embedded in the regional social dynamics.	Substantial inter-firm transfers, joint R&D efforts, pool of assets for fulfilling clients' orders, in a milieu munificent in institutional support.	Dependent on the dynamism of the cluster given by external evolutions. Regional entrepreneurship.
HUB-AND-SPOKE	One, or few large firms; possibly oriented to external markets that is surrounded by many small suppliers and service providing firm.	Large firm(s) dictate the terms of business relations with the smaller firms in the surroundings. Few interactions among spoke firms that are focused on their ties to the hub firm.	Dependent on the evolution and success of the large hub firm(s).
SATELLITE	Driven by branch-plants, possibly subsidiaries or large supranationals.	Low level of inter-firm contact and very limited inter-firm ties in the cluster.	Depends on the growth of the branch plants and the success of the public policies adopted to attract more firms.
STATE-ANCHORED	A government owned or supported, usually not for profit; entity surrounded by related suppliers and service firms.	The anchor institution is central to the majority of the inter-firm ties but there may coexist significant exchanges among co-located firms.	Depends on public policy and the relative ability of the anchor institution to attract additional political support and funding.

2) Value Chain vs. Competences

Clusters based on the value chain are generally defined by suppliers' network relations. An example is the automobile cluster that is usually built around a spine of a value chain connecting the automobile producer with its suppliers.

Cluster based on competences is focused on the concrete area of technical expertise or competence within a region like research or educational skills. The competence cluster is for example IT and software industry whose geographical concentration can be obvious, but applications and clients for these competences are very heterogenous (czechinvest.org, 1994–2016c).

3) Research-driven vs Industry-driven Cluster

Research-driven clusters are closely linked to market needs and combine different forms of innovations and customising. They consist of smaller numbers of participants, but at least of research entity, research for-profit body and business entity. They have less complex governance than industry-driven cluster and are more successful in gaining finance (europa.eu, 2015; Lämmer, 2012, p. 23).

Industry-driven clusters (industrial cluster) represent the entire value chain from suppliers to end products. They are geographically concentrated and interconnected by the flow of goods and services. They usually involve more participants and have a greater international impact (sandag.org, 2001).

In connection with clusters it is crucial to clarify terms *cluster initiative* and *cluster organization*, both often misinterpreted and mixed up with the term *cluster*.

Cluster initiatives are, by Greenbook 2.0 defined as: "*Organized efforts to increase the growth and competitiveness of clusters within a region, involving cluster firms, government and/or the research community.*" Thus the definition lays in cooperation of firm and minimally one representative of a university, industry or government (Lindqvist, 2013, p. 1; Pavelková, 2009, p. 22). OECD defines cluster initiative as: "*Organised efforts to support the development of the cluster, with a person, organisation or consortium leading the actions.*" (oecd.org, 2010).

According to the latest data from 2012, the most common cluster initiatives (CI) sectors are IT, Food, Automotive, Green Technology, Health and Energy. 41% of CIs were initiated primarily as the reaction to a public call or policy program. Major objectives with highest priority ratings are promoting collaboration in the CI – namely Identity and brand and Strategy and vision, followed by Innovation and R&D and Business environment improvement (Lidqvist, 2013, p. 14).

Furthermore, **cluster organization** is defined as followed: "*Cluster initiatives are increasingly managed by specialised institutions, known as cluster organisations, which take various forms, ranging from non-profit associations, through public agencies to companies.*" (eur-lex.europa.eu, 2008). The cluster organisation does not necessarily have members, but it provides services to cluster initiative partici-

pants. Different countries use different names for cluster organisations, e.g. *compétitivité pôles*, centres of expertise, innovation networks and competence networks etc. (Boesso et al., 2012, p. 69).

2.2.2 Initiation, Structure and Life-cycle

Setting up a cluster is a long-term process including many steps starting from encouraging the network opportunity, facilitating introductory workshops, finding key persons, to finally identifying members, benefits, main goal and strategy of a cluster (CzechInvest, 2007).

A cluster can be set up by 3 mechanisms – bottom-up, top-down or a combination of both of them. In case of *bottom-up* approach a cluster is formed spontaneously as a natural need of deeper cooperation of companies/institutions. In contrast *top-down* cluster arises by the influence of external forces, usually state administration deputies (Pavelková, 2009, p. 23–24).

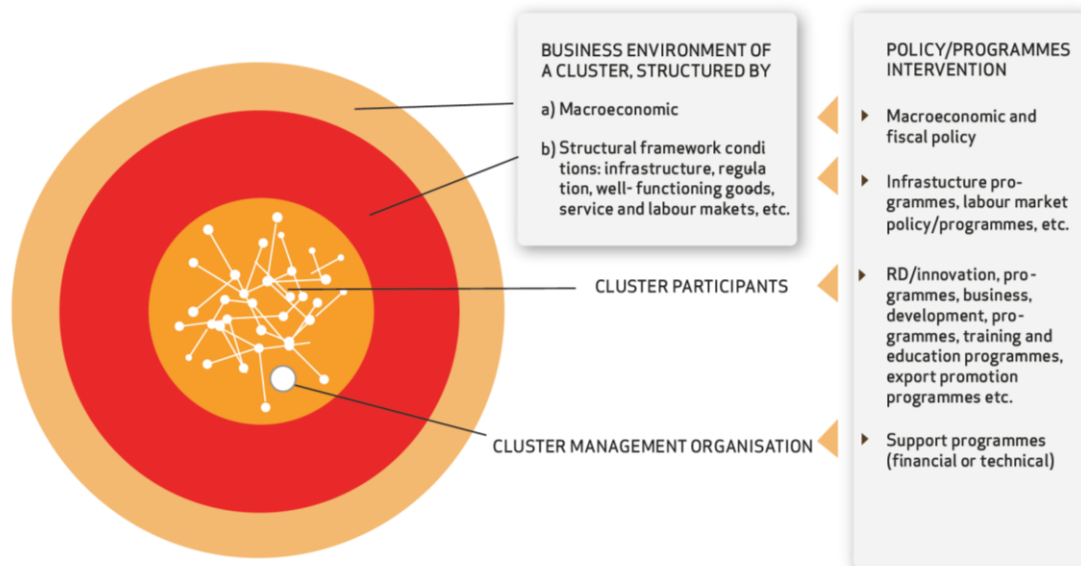


Fig. 1 Cluster scheme

Source: Christensen (2012)

Cluster formation starts at the *embryonic* stage and then moves into the *established* phase in which further development is perceived. In the third *mature* stage cluster is on its peak and is very stable. The last phase is *declining*, clusters at this stage are sometimes able to reinvent themselves and enter the cycle again (Andersson, 2013, p. 13). IKED¹ in the Whitebook from 2004 adds also a pre-stage – companies and members clustering which is visible in case of natural clusters. Christensen (2012, p. 18) divides the cluster development into 3 levels – immature, mature and clusters in transition.

¹ IKED = International Organisation for Knowledge Economy and Enterprise Development

Stages of cluster development:

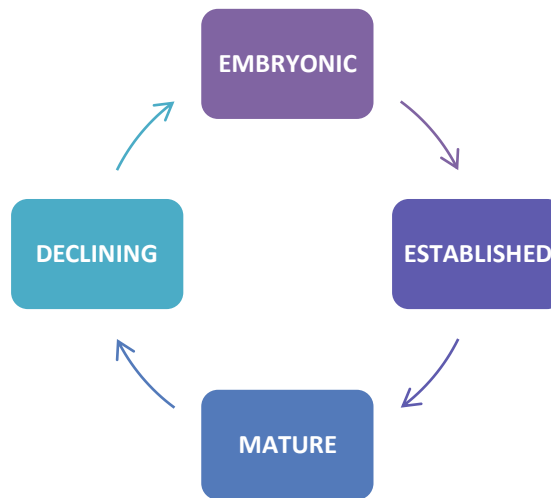


Fig. 2 Stages of cluster development
Source: Andersson (2013)

The identification of a cluster stage is important in terms to understand what kind of interventions and support should be applied. The same strategy can be usually used for the embryonic and declining stage and the same (but different from embryonic/declining strategy) for the established and mature phase.

Many branding concepts can be applied to all types of clusters, nevertheless two factors stand out. The first one is the size of the geographical location the cluster covers. The second factor is the stage of a cluster life-cycle (Andersson, 2013, p. 12).

Geographically we define three types of clusters:

- a) City or district cluster
- b) Regional cluster
- c) Virtual cluster

In accordance with the case study, the embryonic stage of a cluster life cycle and city cluster will be further described. **City cluster** covers a city or municipality. In some cases, these clusters have grown out of a science park or the equivalent. The Milano fashion cluster is an example of a city cluster (Andersson, 2013, p. 12).

2.2.3 Embryonic Cluster

The embryonic stage of a cluster is the first step of cluster building whose overall goal is **visibility and identification**. It is necessary to develop a bond both internally with stakeholders and externally with other target groups and our collaboration partners. **A role of place** is very important too – sometimes it can be beneficial for embryonic clusters to attach themselves to a place they come from and to

build up a part of brand image on this fact. This can increase external visibility and recognition as well as identification of stakeholders to the cluster.

At the early stage the **emphasis on a cluster** as a whole is crucial more than on single cluster actors. We have to create cluster reputation e.g. by means of good stories and communication with internal and external target groups. **Project orientation** is typical for the embryonic phase. Clusters often launch and communicate various projects to show the contribution of a cluster and strengthen linkages between cluster actors. Considering pull and push strategy, the early cluster stage definitely uses a **push strategy**. In practice it means that cluster has to be active in reaching its target group (Andersson, 2013, p. 15–21).

2.2.4 Financing

The founding of cluster can run through several channels and it is important for cluster development, stimulation of growth and competitiveness. Generally, financial sources are divided into public and private ones.

A) **Private founding** comes both internally from a firm and from outside a firm. Internal sources involve member fees or co-financing of joint projects, external finances flow to cluster e.g. from business angels², foreign direct investments or sponsors.

B) **Public finances** come from regional and national budgets or structural funds (grants) and are the most significant (and increasing) part of the cluster financial structure (especially for early stages of clusters). A combination of both sources is possible too (Skokan, 2004). Current surveys show that the cluster needs can be covered mainly from:

- Collaboration with venture capital companies,
- Assistance on start-up companies,
- Preparation and submission of proposals for European and national RTD³ projects,
- Funding new ventures,
- Reinforcing participation in national proposed activities and
- Elaboration of financial and business plan (asevinnova.it, 2012)

Lebo (2012) identifies six levels of cluster financing starting with meta-level in which policymakers select clusters and provide them with direct financing up to a set limit. In the following levels the activity moves on the side of clusters. They have to identify themselves as a donation acceptor, find founding opportunities and submit the application form for a grant. They can apply for a grant for a collaborative project within a cluster (cluster members joint project) or for a single cluster member product.

² Business angel = also known as angel investor is an individual donor providing capital to start-ups and businesses with a great potential

³ RTD project = Research and Technical (or Technological) Development project

Thanks to Operational Programme Enterprise and Innovation 90 mil. EUR was released for cluster support between years 2007–2013. This grant opportunity created and/or supported 30 clusters by the total amount of 35 mil. EUR. It also contributed to the creation of a favourable business climate, improving conditions for business development and innovations and building a sustainable competitive advantage (Lämmer-Gamp, 2012, p. 24–29).

Operational Programme Enterprise and Innovation for Competitiveness offers an open call for clusters currently which closes at the beginning on April 2017 (oppik.cz, 2016). Other sources available in the Czech Republic are COSME⁴, Danube Translational Programme and the INTERREG⁵ (Břusková, 2016).

2.2.5 Benefits

Unification of companies into a cluster brings many benefits for various stakeholders' groups and the ultimate goal of cluster itself. According to CzechInvest (Czech Invest, 2007) clusters bring benefits to firms, region and universities as well. **The increase of competitiveness** is seen as the main benefit not only for cluster members, but the whole region and particular industry.

Firms involved in cluster can together overcome the disadvantage of being a single small firm and can compete with bigger companies. This fact together with the exchange of know-how, technologies and information makes the collaboration easier and more effective and allows them to deepen their specialisation. The competitiveness is also strengthened by the local increase of rivalry which supports development of innovations. **Universities** collaborating with clusters have better in-view to enterprise environment and can prepare their students in a better way. Cooperation also allows a better focus of research activities which will create more attractive business offer to universities' customers. A great benefit for the **region** can be the increase of foreign direct investment or raise of reputation (Czech Invest, 2007).

Abrahám (2009, p. 21) adds that a cluster provides economies of scale and decreases costs. He also points out the factor of reputation increase which strengthens the cluster lobbying power. **Reputation increase** is also seen as the general benefit in case of Andersson (2013, p. 21–27). Good reputation leads to the recognition increase of a location in a particular field and also facilitates cluster internationalization and mobilises local pride. Positive reputation guarantees a **quality, credibility** and degree of social control that increases trust and lowers opportunistic behaviour. Clusters also create a friendly environment for entrepreneurship and innovations. The handbook consequently divides benefits based on the reputation increase into **business, functional, marketing and process-oriented benefits**.

Business benefits are represented by stronger growth of businesses located in clusters. Next, the high concentration of knowledge in one place encourages en-

⁴ COSME = Europe's programme for small and medium-sized enterprises.

⁵ INTERREG = a programme providing funding for interregional cooperation across Europe

trepreneurs to launch **more start-ups**. Clusters also support **job creation** and **tax revenues**.

The second are *functional benefits* of cluster reputation. A cluster represents a pool of employment opportunities providing security and stability to potential employees. This factor together with cluster reputation ensures the **attraction of talents** like researchers, scientists, students etc. Next, clusters help to attract both the public and private investments. The **investment attraction** is facilitated through a context and framework of communication to investors. Another benefit is **internationalization and export promotion** that is achieved thanks to the increased recognition of a cluster location. Like in previous cases this benefit is advantageous especially for SMEs (small and medium enterprises) and academic institutions – a cluster provides them with such a positive reputation that they do not have to sacrifice additional legitimisation costs and they can enter international market much more easily.

Other benefits are *marketing benefits* which include for instance the fact that clustering is **convenient for customers** who can visit several vendors in a single visit. The last ones are *process-oriented benefits* covering the process of working with brand building. Engaging in a cluster building can offer for example **clarification of goals**, driving force for internal cluster development, identification of cluster stakeholders or help with **increasing self-knowledge** and self-awareness (Boesso et al, 2012, p. 11; Andersson 2013, p. 21–27).

Tab. 2 Cluster benefit overview
Source: Andersson (2013)

General benefits	Business benefits	Functional benefits	Marketing benefits	Process-oriented benefits
<ul style="list-style-type: none"> • Recognition (reputation) • Risk reduction • Reduce complexity • Driving force for development • Managerial tool • Reinforce identification • Create civic pride 	<ul style="list-style-type: none"> • Information and talent exchange • Start-up acceleration • Stronger growth • Job creation • Tax revenues 	<ul style="list-style-type: none"> • Talent attraction • Investment attraction • Internationalization and export promotion • Sales • Lobbying and option making • Expressing CSR • Improved internal competition 	<ul style="list-style-type: none"> • Multiple vendors in one area • Expand the market for specialty products • Increase attractiveness to buyers • Joint marketing mechanisms • Marketing know-how spill over 	<ul style="list-style-type: none"> • Clarify strategic goals • Improved strategic focus • Driving force for internal development work • Identification of stakeholders • Better sense of place • New interaction structures and networks • Improve interaction and relationships • Heighten self-knowledge and self-awareness

2.3 Brand

A brand is a mixture of attributes, tangible and intangible, synthesized in a symbol, which creates value and influence (Boesso et al., 2012, p. 19). This mixture involves a *brand identity* (name, logo, colours, design, promotion etc.) connected with rational benefits of product, emotional desires and personal ambitions (Healey, 2008, p. 249). Keller (2007, p. 33) says that a brand by itself is a product creating additional dimension that differentiates it from other products satisfying the same needs. Or as David Ogilvy, father of advertising, simply said: “*Brand is what will remain when your factory will burn down.*”

Brands are important because people often choose the product according to what they consider the brand for, not according to their real value (Airey, 2010, p. 20). They create a value, power and a competitive advantage of a product (Kotler, 2007, p. 352). A brand makes the decision process of consumer easier. Consumers have awareness about a specific brand, about its quality and characters and based on these pieces of information they create assumptions which the brand should fulfil. In other words, the brand represents a *promise* to meet consumer’s awaiting (Keller, 2007, p. 39).

A brand is communicated to target audience through many ways which are called *touchpoints* (Wheeler, 2009, p. 3).

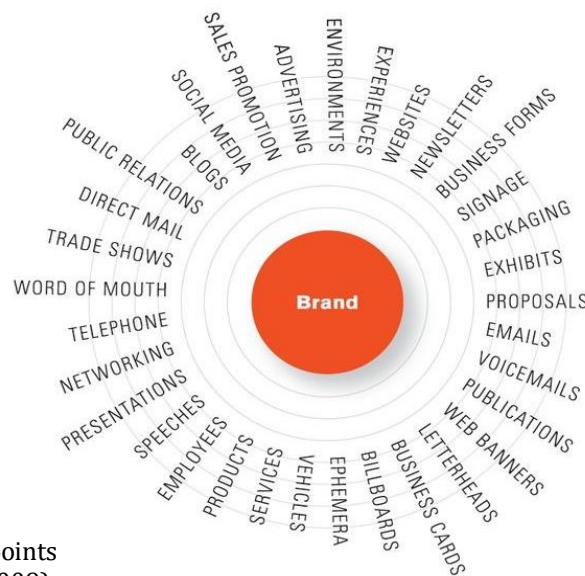


Fig. 3 Brand touchpoints
Source: Wheeler (2009)

A brand is also closely connected with two terms – brand value and brand awareness. **A brand value** comes from brand awareness and brand image. The higher the brand awareness, the higher the brand value. The brand value arises from consumer’s experience with a brand and what they have learnt about it over time.

Brand awareness consists of *brand recognition* and *recall*, which means that consumers are able to recognize a brand like something what they have heard of or seen previously and consumer’s ability to recall a brand in a specific category. It is the recognition that can measure the effectiveness of branding as well. Brand

awareness can be increased by raising knowledge and repeated publicity, like advertising, word-of-mouth publicity, social media, sponsorships, launching events, etc. (Keller, 2007, p. 92–100). It is also important to create reliable brand image, slogans and taglines and use consistent message communications. Strong brand awareness leads to high sales and high market share (managementstudyguide.com, 2016c).

We can look at brands from the perspective of relationship between brand image, brand identity and positioning. **A brand identity** is a way of how the owner wants the brand to be perceived in public. **A brand image** that stands on the other end is the result of how the brand is perceived by the public, it is the set of associations and beliefs held about the brand in their minds. The link between the brand identity and brand image creates **brand positioning** chosen by the brand owner. The key objective of positioning is brand differentiation which ensures competitive advantage over competitors (Kotler, 2007, p. 359, Andersson, 2013, p. 31).

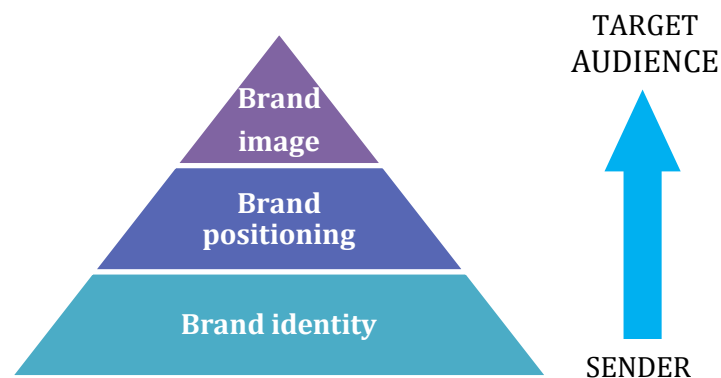


Fig. 4 Relationship between brand image, positioning and identity
Source: Andersson (2013)



Fig. 5 Brand identity and image relationship
Source: supremetoronto.com (2015)

2.3.1 Brand Identity

A brand identity represents how the organisation wants its brand to be perceived in the market. It is the total promise that an organization makes to consumers. Successful brand identity increases brand awareness, brand loyalty and credibility, motivates employees and activates buyers. Brand identity is communicated through marketing strategies and branding (managementstudyguide.com, 2016a).

Brand identity consists of several elements which help the target audience to create an opinion of the brand. The main task of these elements is to differentiate and recognise the brand among others and to create a unique and positive picture in consumer's mind (managementstudyguide.com, 2016a).

Visual elements of brand identity

Sources present different structures of brand identity elements, nevertheless the intersection creates six basic components: name, logo, URL, colour, tagline and typography. Some authors add for example mascots and giggles (Keller, 2007, p. 226 and p. 237) or a design of product package (Healey, 2008, p. 84).

Concerning the general characteristics of key identity elements, they should be remarkable, meaningful, popular, transferable, adaptive and legally protectable (Keller, 2007, p. 205).

Different sources presenting different components of brand identity.



Fig. 7 Brand identity
Source: slideshare.net, Create your Brand (2015)

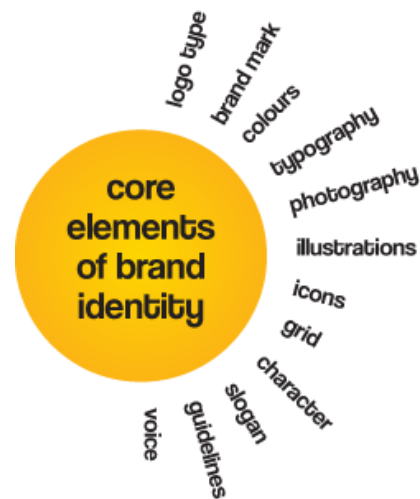


Fig. 6 Core elements of brand identity
Source: designnandi.co.uk (2014)



Fig. 8 Brand identity elements
Source: slideshare.net, Bringing your Brand to Life (2013)

a) Name

A brand name often captures the main topic and key associations with the product (Keller, 2007, p. 211). Good name refers to good reputation and it is the usually the best remarkable element of brand (Healey, 2008, p. 86).

Generally, preferred are simple, easy to pronounce and write, meaningful and distinctive names which increase the brand awareness. We also should avoid too simple or general names which unable the customers to imagine a concrete product connected with it or which are likely to be forgotten soon (Keller, 2007, p. 211–219).

While creating a company's name, we can choose from many options how to do it. Type of names are distinguished to *descriptive* (convey the nature of the business), *names after the founder*, *fabricated* (made-up names, e.g. Kodak or TiVo), *metaphor* (places, animals or foreign word are used), *acronym* (e.g. IBM), *magic spell* (distinctive, protectable names, e.g. Netflix) or *combination* of the above (Wheeler, 2009, p. 21).

A good company name means a half of branding work done (Healey, 2008, p. 86).

b) Logo

A company's logo is an important visual element of brand identity and plays its role especially when it comes to brand value and awareness (Keller, 2007, p. 221). Logo can be created by symbols – e.g. Nike Swoosh or Apple, words – e.g. Coca-Cola, or as a combination of both (Kafka, 2014, p. 41). The most important thing is to create a logo in such a way that they can be easily recognisable for customers and they have the ability to evoke the right emotions (Healey, 2008, p. 90).

Logos have many benefits – usually they are easy to update, well distinguishable and understandable across cultures (Keller, 2007, p. 223). Quality logos should be expressive, understandable, simple, original, unmistakable and timeless. From the point of graphical view, the logo has to be artistically and typographically clear, with a high quality in details and has to have enough of colour variants (Kafka, 2014, p. 39–40).

There is no universal manual how to create a perfect logo, however researches uncovered these tips: 1) Shape of logo is more important than its colour. 2) Abstract shape is better remarkable than a concrete one. 3) The best perceived is the shape oval (similar to Ford logo) (Kafka, 2014, p. 39–40). Airey (2010, p. 34–48) introduces 5 steps for a successful logo: 1) simplicity, the simpler the better to remember 2) adequacy – logo must correspond the company's character 3) timelessness 4) uniqueness 5) easy to remember – logo should contain only 1 thing which should be remembered.

c) Website

It is another strong tool of marketing communication and increasing brand awareness. In today's world the web page is a must. Except for a clear and catchy design, the page has to be easy to find, accurate, interactive and usable (Hommerová, 2015, p. 15).

While creating a website we should focus on several aspects. The most important one is definitely the **domain** – the name of our website. A domain should contain a key word, e.g. the name of the organization or a key activity. It also has to be logic, easy to remember. Another element is **web layout**, for example the menu design, additional functions and widgets (Horňáková, 2011, p. 126, 130). Next it is an **optimized content** – apart from the basic information we should add something valuable which will make our visitors to come back. Eye-catching photos and calls to action usually work very well. For enhancing the users' experience it is recommended to choose several quality **applications and widgets**. To keep the branding integrity, we should not omit the logo and its special position on the website, we also have to use our brand colours and fonts (wix.com, 2013).

The web content should be created in compliance with rules of **copywriting** and should keep the unified communication style. Texts on the website and also in other online (newsletter) and offline (e.g. catalogues and flyers) channels should strengthen the brand awareness and positive relationship with a brand (Sálová, 2015, p. 13).

d) Colour

When choosing colours, we have to have on our minds several aspects. Colours evoke emotions and each of them has slightly different meaning in the target audience minds (Healey, 2008, p. 92). Psychological studies have proven that warm colours (red, orange, yellow) radiate energy, joy and dynamics, on the other hand cold colours (blue, green, purple) express calm,

purity, stability and tradition. Certain colour combinations are typical for specific areas. For example, in branch of soft drinks, the combination of red and white is dedicated to Coca-Cola. That is why we should look for original colour combinations for our area of interest (Kafka, 2014, p. 53–59).

Corporate colours are divided into basic and additional ones. A company should use 1– 3 basic colours (the less the better because it eases company's identification), additional colours have to be in harmony with the basic colours. Generally, the most used and favourite colours are red and light blue (Kafka, 2014, p. 53–59).

Brands which are able to create strong colour associations can gain valuable advantage because a colour can serve as a mighty mnemonic aid (Healey, 2008, p. 93).

e) Slogan and tagline

A slogan is a short connection of few words that underline key aspects of products, services or brands. The main purpose of slogan should be to permanently hit consumer's minds and thus support the brand (Salem, 2012, p. 9–10). A slogan is a mighty branding tool because it helps in company's value building (Keller, 2007, p. 232). Once a good slogan is created it can last forever, unless the company needs to change the whole corporate identity. These long-lasting slogans are also called **taglines**. Short term slogans exist as well and are usually connected with one product or a timely framed campaign (Horňáková, 2011, p. 55).

A perfect slogan must be above all clearly remarkable than accurate, original and catching. Shorter sentences underlining the base of a branded subject are easy to remember. Rhymed slogans, sentences containing ambiguity, newly created catchy words, metaphors or emotional slogans have a potential to succeed (Horňáková, 2011, p. 58–67).

f) Typography

Typography deals with the choice and usage of a suitable font style which strengthens the brand identity (Healey, 2008, p. 96). The chosen font should be primarily identifiable and legible. Sometimes there is a conflict between these two requirements because usually the more original font the more difficult readability it has (Kafka, 2014, p. 60).

A good font should correspond to the business focus. Serious and precise script is suitable for B2B segment, while writing with distinctive design elements will help the retail brands fighting for a single customer (Kafka, 2014, p. 60).

From the technical point of view our font should be available in different operation systems, should contain the whole set of characters and should be readable in various output devices (Kafka, 2014, p. 63).

2.3.2 Brand Positioning

Brand positioning creates a link between brand identity and brand image (Andersson, 2013, p. 31). It is a core of marketing strategy with the main task to find the right brand position in the minds of target audience. While doing the positioning of our brand, we are actually looking for the competitive advantages over our competitors to maximize a contribution for our company (Keller, 2007, p. 149). A strong brand positioning leads the marketing strategy by explaining the base of brand, its targets and uniqueness (Kotler, 2007, p. 348).

Andersson (2013, p. 70) identifies eight approaches of brand positioning that are not mutually exclusive.

Positioning strategies:

- 1) Critical-mass positioning,
- 2) Geographical positioning,
- 3) Sector positioning,
- 4) Horizontal positioning,
- 5) Societal positioning,
- 6) High-Tech and Top Know-How positioning,
- 7) Historic Know-How positioning,
- 8) Factor Endowment positioning.

In respect to a chosen case study the strategies of geographical and societal positioning are further described.

A) Geographical positioning

It uses a well-recognised geographies and puts them in relation to a cluster which creates positive associations. The biggest advantage is building our cluster brand into an already positive place image. On the other hand, a negative picture of a place in the future can cause a spill-over to our cluster brand.

B) Societal positioning

A corner stone of this strategy is a unique way of working and creating the innovations in order to solve societal challenges. Although the embryonic clusters usually struggle with this type of positioning, it is a very good strategy from the long term point of view (Andersson, 2013, p. 70–78).

Tab. 3 Positioning strategies
Source: Andersson (2013)

Positioning	Critical Mass	Geographical	Sectorial	Horizontal	Societal	High-Tech	Historical know-how	Factor Endowment
MAIN OPPORTUNITIES	Claiming the key underpinning of clusters	Positive associations to a place	Gives space for variable geographies	Showcasing tangible added value	Showcasing process of working	Claiming to be the best, using strong markers	Strong identification	Showcasing unique
MAIN RISK	Lacks emotional appeal	Sameness rather than uniqueness	Confusion with sector associations	Conflict of interest in the use of the resource	Proposed solution not in line with challenge	Hard to live up to	Irrelevant for growth or competitiveness	Hard to develop
POSSIBLE NAMING STRATEGIES	Cluster connotation	Location	Sector, Cluster Connotation	Competency, Location	Solution, Cluster programme	Characteristic, competency, sector, cluster connotation	Location, competency	Characteristic, competency

2.3.3 Brand Image

A brand image is a unique set of associations held about a specific brand in the minds of customers. Unlike the brand identity which is knowingly created by the brand manager (and other people), the brand image is formed automatically based on subjective perceptions of associations that consumers have about the brand. It includes for instance product functionality, fame or overall value.

Brand image can be strengthened by using various communications tools, like advertising, word of mouth, packaging, etc. A positive brand image enhances the brand value, organization's goodwill and is able to exceed the customers' expectations (managementstudyguide.com, 2016b).

2.4 Cluster Branding

Branding or brand management itself is an important marketing tool aiming on diversification and sustaining competitive advantage. Everything can be branded – products, services, organizations, people, places and clusters as well. Never mind which category we fall into, the brand is one of the most valuable intangible assets – some experts estimate the brand value to up to 70% of the whole company's assets (Hommerová, 2015, p. 23–24). Branding is closely connected with marketing which serves as a tool of delivering the brand promise to stakeholders. Basically marketing deals with the question *what* to do to get the message to stakeholders while branding is about *how* we do that and how we keep our promises (Andersson, 2013, p. 30).

Branding usually involves five elements: positioning, story, design, price and relationship with customers. It strengthens reputation, increases loyalty, ensures quality and supports the product value so it can be sold for a higher price (Healey, 2008, p. 9–10).

Cluster branding covers identifying, development and communicating the specific brand identity into a brand essence. It is a holistic approach that sets social, economic, political and cultural processes in motion (Andersson, 2013). Good cluster brand image generally helps to gain international visibility, to attract new investors, firms and skilled professionals (Andersson, 2012).

2.4.1 Process of Cluster Branding

A clear and attractive cluster vision is considered to be a base for a successful brand. A great vision inspires and leads work teams and helps to decide which activities are beneficial for a brand. It also captures a mission of a brand and provides stakeholders with the feeling of meaningfulness (Taylor, 2007, p. 2, 16–18).

A good cluster brand reduces complexity and makes the cluster more comprehensible to the outside world. A clear cluster brand identity makes the decision about development, direction and cluster decision easier. Finally, an attractive

cluster brand mobilises the cluster stakeholders and pave the way for closer collaboration (Andersson, 2013, p. 21).

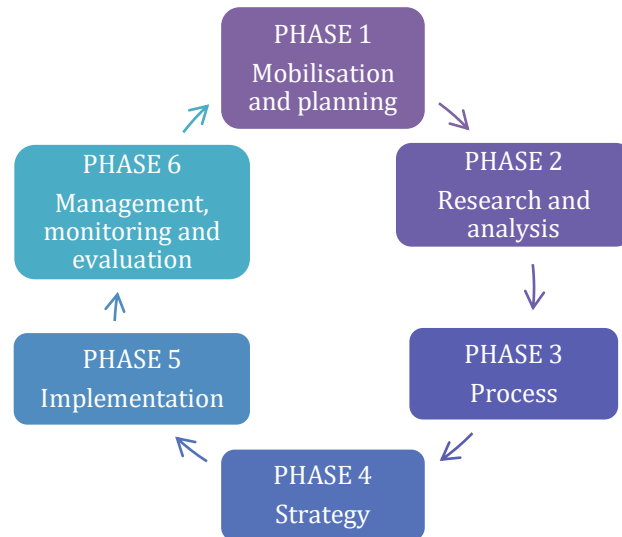


Fig. 9 Cluster branding process
Source: Andersson (2013)

Phase 1: Mobilisation and planning

In the first stage stakeholders play the key role. We have to mobilise them and ensure that they are ready to invest their time and resources. Next we have to create positive expectations about the brand and build an infrastructure, management structure (to appoint cluster manager and his/her team and create a step by step plan) and steering committee.

Phase 2: Research and analysis

The aim of this phase is to understand the cluster both from inside and outside and to find out the true attitude of stakeholders. The tools used to gather these pieces of information are qualitative interviews (like in-depth interview, focus group) with a target group, desk research of reports, websites, social media, next “mystery place shopper” technique⁶, or anthropological observation⁷. The results from the analysis serve as entrance information to the following stage.

Phase 3: Process

This step is important from the perspective of brand identity and positioning. A cluster manager should organize a process workshop with stakeholders and define “Who do we want to be?”, “How do we want to be seen in the future?” and “How are we going to get there?” – all of these questions are in accordance with the cluster mission and vision.

⁶ “mystery place shopper” technique = experiencing the cluster as a cluster consumer

⁷ anthropological observation = spending time in cluster organisations to get to know their view on cluster

Phase 4: Strategy

This phase contains working out and agreeing on the following components:

- branding platform;
- brand architecture;
- marketing communication strategy and
- action plan for developing attractiveness of the cluster.

Phase 5: Implementation

The main goal of implementation is to bring the brand to life. In this phase many supportive tools and measures are used. One of them is a training session which introduces benefits and purpose of the branding platform and shows how to put it into practice for stakeholders. Another step is a training of super users (brand ambassadors) from different cluster companies who help with promotion and implementation. Another option is co-branding encouraging companies to co-brand with the cluster. Finally, projects that support the chosen brand positioning should be planned and launched.

The most frequent mistakes in this step are the lack of leadership, resources and dissemination, weak marketing budget and low stakeholder buy-in and support.

Phase 6: Management, monitoring and evaluation

The last phase is a never-ending process that should ensure effective management of branding efforts and creative refinements of the branding process. The system for effective management and governance should be set up as well as the system of evaluation (e.g. cluster brand audit⁸ or quantitative assessment⁹) (Andersson, 2013, p. 48).

Another approach to cluster branding is overtaken from the work paper of TACTICS¹⁰ whose authors identify three phases divided into several sub-stages. The first one is Analysis of key assets involving study of a cluster itself and its environment by means of various analyses. This phase is in compliance with 1st and 2nd phase of the previous diagram.

The second stage deals with Positioning. Cooperation with stakeholders is crucial in this place. They jointly help to co-create a cluster vision, core values and its unique position. By **vision** we mean a mental image of what we would like to convey to our target audience – or a future perspective. **Mission** defines what we

⁸ cluster brand audit = qualitative evaluation of cluster branding strategy

⁹ quantitative assessment = evaluation method that takes a form of perception analysis and focuses on brand image changed over time

¹⁰ TACTICS = Transnational Alliance of *Clusters* Towards Improved Co-operation Support is a net supporting and further expanding the European Cluster Alliance, and contributing to the development of better cluster policies and practical tools for implementation in Europe, which could similarly benefit SMEs.

do; the purpose and present the state of organization, and finally **core values** are characterized as the attitude and the key issues around which the strategy is built.

In the last stage we plan and consequently implement tools created to make cluster brand functional and visible. We have to formulate the message we want to communicate and decide how we are going to get it to our target group. In order to deliver our message successfully, a visual identity of the brand and suitable communication tools should be developed (Boesso et al., 2012, p. 35).

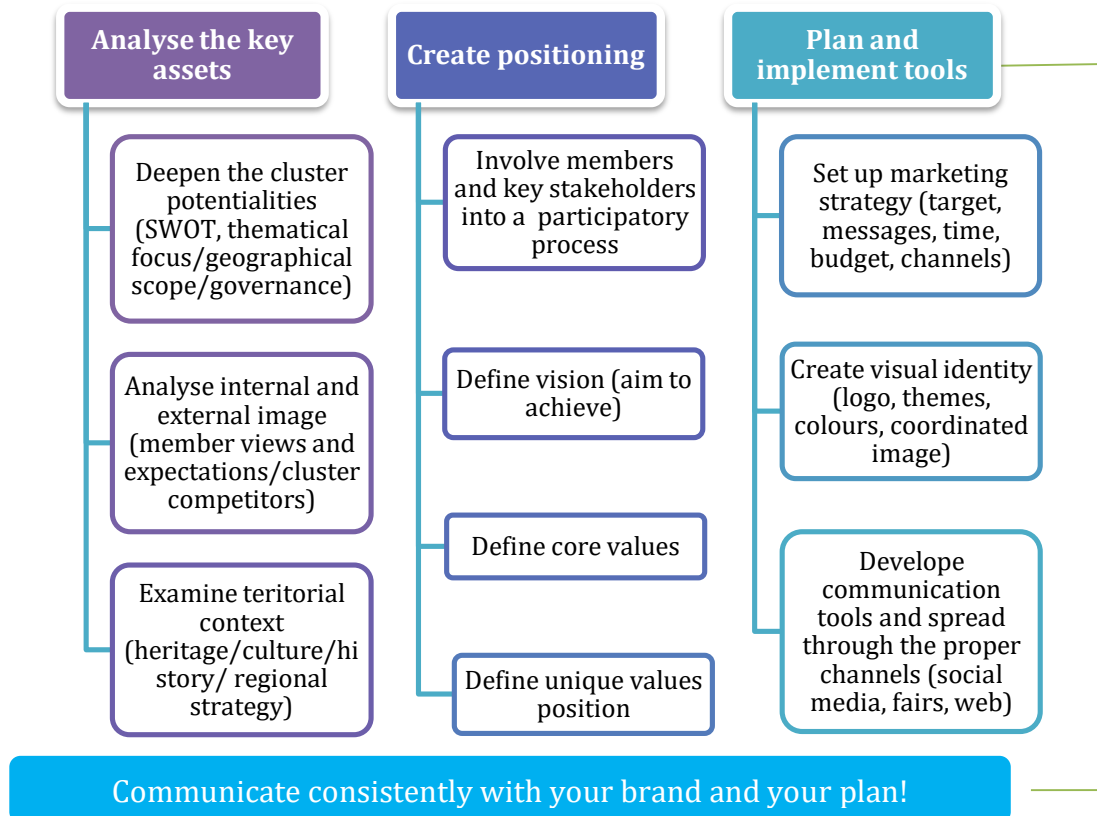


Fig. 10 Phases of cluster branding
Source: Boesso (2012)

2.4.2 Brand Architecture Strategy

Brand architecture is a structure of the brand within a geographical entity determining its nature and relationships with other brands, sub-brands and products. Identifying a cluster position and relationship among other competitive or cooperative brands is an important tool for finding stakeholders or co-branding partners. Thus brand architecture is closely connected with a specific place (city, region, country etc.) and consequently with a *place branding* (brandingstrategyinsider.com, 2014; Asworth, 2010, p. 19–20).



Fig. 11 The Place Brand Architecture

Source: Andersson (2013)

Based on brand architecture we should choose suitable strategy which is important for effective cluster function. There exist many concepts of architecture brand strategies, for instance David Aaker (2011, p. 106–120) distinguishes four of them based on relations tightness among cluster brand, its members and superior organisations. These architectures are:

- 1) Branded house strategy;
- 2) Sub-brands strategy;
- 3) Endorsed brand strategy and
- 4) House of brands strategy (see fig. 12)





















Branded House	Sub-Brands	Endorsed Brands	House of Brands
One brand creates a single powerful image, sometimes with a descriptor	Combining the corporate brand with strong sub-brands Sub brands help differentiate and boost corporate brand	Leading with a strong sub-brand but leveraging corporate brand as endorser	Decentralized companies targeting diverse markets
    	   	    	     

Fig. 12 Brand architecture strategies

Source: teamhfa.com (2016)

Other sources introduce many other classifications, like umbrella, product, endorsed and monolithic strategies or branded house, house of brands and blended (hybrid) house strategy. Nevertheless, the principle is usually very similar.

2.4.3 Cluster Promotion

For establishing a relationship with the public and other target groups it is important to set up an effective marketing communication. Communication mix contains basic elements like advertising, personal sale, sale support, direct marketing, event and online marketing, publicity and public relations (Keller 2007, p. 313–350).

Andersson (2013, p. 83–100) adds that apart from classical communication tools identified in the chapter 2.1.2 Research promotion, clusters use other specific types of communication tools and activities for cluster branding. Cluster should consider using a mixture of various types of instruments – traditional as well as the non-traditional ones. Several possibilities are closely introduced:

- a) **Ambassador network** represents a highly effective brand building tool that supports not only marketing, but also a cluster development. Ambassadors mobilise the stakeholders both inside and outside the cluster through their credible word-of-mouth (Andersson, 2013, p. 84–87). Not only well-known actors or sportsman, but also common people having a certain influence among target audience can become ambassadors. Through the brand ambassadors, the marketers derive the power to connect with the stakeholders and build brand loyalty (topbrandsnow.com, 2016).
- b) **Storytelling** including storyboards and claim is a popular technique to strengthen and expand the process of brand building. It should be interpreted through all elements of communication (like web page, videos, newsletters etc.). The stories should be memorable, credible, exciting and based on the cluster values (Boesso et al., 2012, p. 42).
- c) **Social media** have lately become a cost-effective and powerful channel for sharing a professional content. Even though the social media are helpful in reaching the target group and connection of cluster stakeholder, this tool is not often used among clusters.
- d) **Trainee programmes** can set up advantageous cooperation between universities, firms and research teams and make the cluster more visible among younger people (Andersson, 2013, p. 93–97).

Several Czech and foreign clusters also use the social networks as LinkedIn, Facebook, or both of them – for example the Olomoucký klastr inovací which is at the same time quite active on the socials. A few clusters were also found on the Google+ network, in contrary none of them occurred on Instagram.

In conclusion, target audience should be regularly informed not only about final results, but also about projects in preparation and their progress because properly set communication strategy is one of the key factor of cluster branding (Pavličková, 2010, p. 37. Keller 2007, p. 313–350).

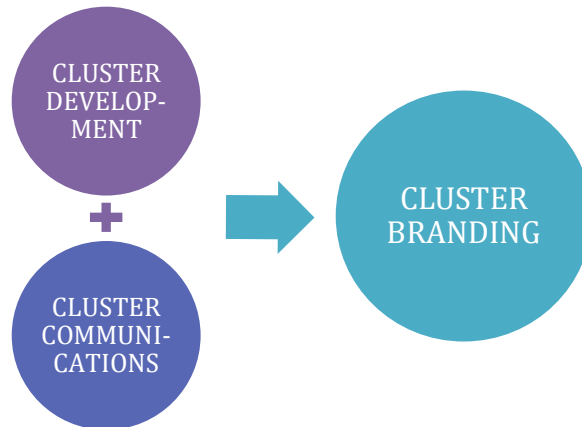


Fig. 13 Relationship between cluster communication, development and branding
Source: Andersson (2013)

3 Methodology

To fulfil objectives of the thesis, in the first stage a detailed literature survey was carried out. The literature survey was focused on all topics relevant to the diploma thesis, from the research and development background, description of clusters and research promotion, to the introduction of cluster branding and qualitative research. The background about clusters within regional politics was also specified on the ground of personal interviews with the South Moravian region political proponent Ing. Jan Vitula and with Ing. Tomáš Avrat, a marketing manager from JIC¹¹.

3.1 Methodology of the Cluster Mapping

Next the situation of Czech and foreign research and development clusters was generally mapped and analysed. This cluster mapping was processed through available secondary data. The main source were websites of cluster observatories providing the data about number of clusters, their specialization, legal status etc. Another source were websites of clusters – mainly those focused on medical research or directly on stroke research. The focus was placed on:

- a) How the clusters are mapped (survey of cluster observatories);
- b) Number of Czech clusters and study of available web information;
- c) Overview of Czech and foreign clusters from matching R&D branches and
- d) Cluster labelling.

3.2 Methodology of the Cluster Branding

The following phase was dedicated to a study case – creation and branding of the research cluster Stroke Brno. At first the cluster had to be formed by itself. At the start the cluster analysis and identification of target groups was carried out – which is one of the sub-objectives of the thesis. After that the cluster key assets analysis was done including SWOT analysis uncovering deep cluster potentialities, examination of territorial context and analysis of target groups' view and expectations. Next positioning was defined covering cluster goals, mission, vision, core values, the problems the brand should solve and the position of the cluster among other institutions was defined (brand architecture). Based on all these pieces of information two positioning strategies have been chosen. The third part of cluster brand building was the implementation of branding tools, which means the brand identity elements and communication tools.

Branding was first created on the base of the literature survey and mapping cluster websites. Apart from these sources, the important knowledge for setting up a cluster and making its brand was also gained from the attendance at these training courses and workshops:

¹¹ JIC = The South Moravian Innovation Centre

- StartUp Club: From Brand to Lovebrand; organized by JIC
- Digisemestr; semestral online marketing course focused also on branding and copywriting
- Brand Building in Social Media; organized by Sun Marketing company
- The importance of clusters for regional development and the success of CREA Hydro&Energy Cluster; organized with support of the South Moravian region

A draft of the graphical part of brand identity (website, logo, colours, typography) projected from all the acquired information was presented to a graphic designer whose task was to bring the brand to life. A brand design was made based on the best practice and during approximately 3 months long period was constantly revised and modified. At the same time a textual part of brand identity was formulated, which means mission, vision, slogan and web copywriting. The draft was consequently evaluated by participants of qualitative research and their comments were incorporated in the final brand look. During qualitative research the participants of the focus groups explored the website on one big screen handled by moderator, who went through single web pages one by one. Participants of in-depth interviews went to the website via link.

3.3 Qualitative Research

Then a qualitative research was carried out with the aim to find out the attitude of the target group to a research cluster, motivation to do research and also the opinion of branding of the created cluster. Qualitative research is generally used to gain an insight into the problem and help uncover opinions, motivations and reasons of the behaviour of respondents (Dundelová, 2013).

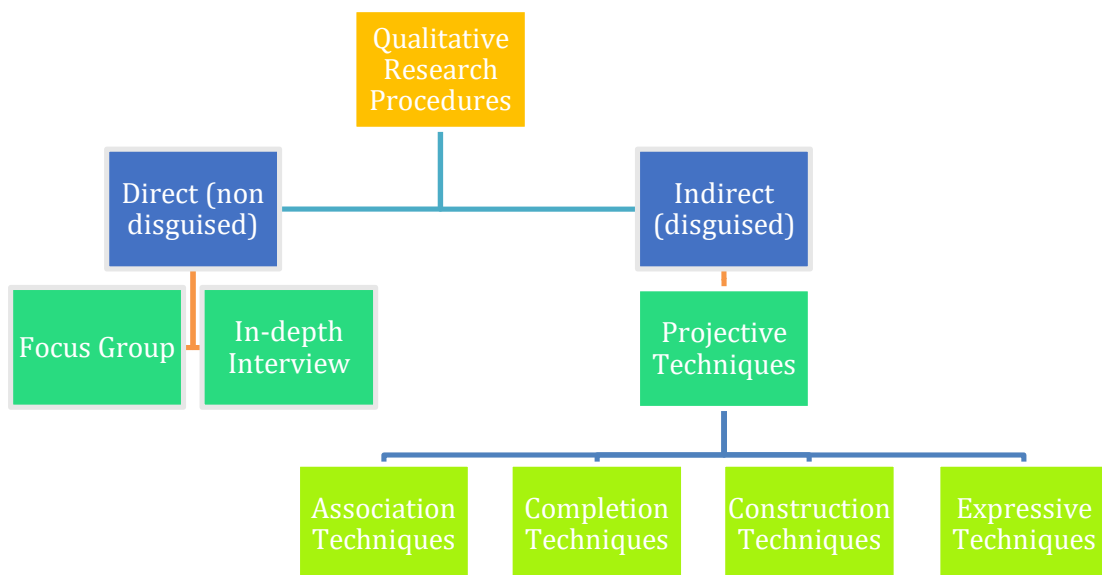


Fig. 14 Qualitative research techniques
Source: Bradley (2007)

Qualitative research methods are divided into direct or indirect ones according to the fact whether the true purpose of the project is known to the respondents or not. From many possibilities, two direct (non-disguised) techniques were chosen as the methods of this qualitative research. These approaches were in-depth interview and focus group, in which the purpose of the project is revealed to the respondents or it is obvious to them from the questions asked (Malhotra and Birks, 2006, p. 171–173; Burns and Bush, 2006, p. 116).

These two approaches were chosen from several reasons. Nowadays, a focus group dominates in consumer research and is also often used in health, education and evaluation research. It is very dynamic and flexible, goes in depth and the interaction among participants enables to reveal new dimensions of the topic discussed (Brinkmann, 2013, p. 26). The in-depth interview allows the interviewer to collect both attitudinal and behavioural data from the subject and it is very suitable for probing sensitive issues (confidential, embarrassing topics) that cannot be discussed e.g. by means of focus group method and in generally allows to uncover underlying motivations, beliefs, attitudes and feelings on the topic (Hair et al., 2000, p. 219; Bradley, 2007, p. 238). Both methods were also discussed and approved by two experts in qualitative research.

3.3.1 Focus Group Background

During the session the moderator asked questions following one of the questioning route. As Krueger (1999) recommend, the draft of questions was shared with the other team members in order to get the most relevant answers in the end. In this case the questions were first consulted with the head of the stroke research team of FNUSA-ICRC and extended by his recommendations. Then comments of other team members were incorporated. Finally, the questioning route was consulted with an expert in the focus group.

Krueger (1999) considers as optimal the preparation of 8 to 14 questions of different types. Setting questioning route has 2 modifications (according to the group of respondents) containing from 12 to 15 questions. It has 1 opening question encouraging everyone to talk in the group, then 1–3 introductory questions that allow participants to describe how they see the phenomenon under investigation. Next, 4 transition questions follow which serve as a logical bridge leading to the core of the discussion. Then 4–5 key questions are asked which are the most important part of the discussion and the questioning route is closed by 2 ending questions summarizing the discussion and its most important points (Krueger, 1999, p. 21–30).

The discussion was carried out with two interest groups – 5 students (3 women) and 6 cluster members – researchers (3 women). The number of respondents was set according to Krueger's methodology and the experts' suggestions. The participants were asked through e-mail and/or Facebook. Both sessions

took place in modern bright conference rooms of FNUSA-ICRC¹² and were carried out in the Czech language. After the oral approval of all participants, the discussions were audio-visually recorded by a camera. The discussion with researchers took 90 minutes, the session with students 100 minutes. Both sessions followed the structure of the questioning route with the usage of probing and follow up questions. At the beginning the moderator introduced herself, then the topic and objective of the discussion were introduced and also basic terms used in questions were explained.

Researchers identification:

- Mgr. Andrea, Ph.D., researcher in Institute of Biophysics of the CAS
- MVDr. Jana, Ph.D., vet and researcher in FNUSA-ICRC
- Mgr. Jan, Ph.D., researcher in Institute of Biophysics of the CAS
- Ing. Jiří, researcher in Institute of Scientific Instruments of the CAS
- MVDr. Peter, Ph.D., vet and researcher in FNUSA-ICRC, businessman
- MUDr. Ondřej, Ph.D. neurologist and researcher in FNUSA-ICRC, businessman

Students identification:

- Albert, 4th year undergraduate student of Faculty of Medicine, Masaryk University
- Karolína, 4th year undergraduate student of Faculty of Medicine, Masaryk University
- Lucie, 5th year undergraduate student of Faculty of Medicine, Masaryk University
- Tereza, 5th year undergraduate student of Faculty of Medicine, Masaryk University
- Václav, 5th year undergraduate student of Faculty of Medicine, Masaryk University

3.3.2 In-depth Interview Background

In-depth interviews often referred to as a *depth interview* or just "*depths*" (Burns and Bush, 2006) were carried out with foreign representatives of the target groups "Students" and "Researchers". Potential respondents (2 women and 2 men, 1 from each group) were approached via e-mail (researchers) and Facebook (students). Malhorta and Birks (2006) recommend the length of the interview from 30 minutes to over an hour. The interviews with respondents took from 20 to 45 minutes and were done in the English language. Depths were carried out via Skype which is a method acceptable in special cases when the respondents cannot be interviewed face to face.

Respondents identification:

¹² FNUSA-ICRC = International Clinic Research Centre of St. Anne's University Hospital Brno

- Andreea, B.Sc. (Romania), researcher from the University of Calgary
- Steven, B.Sc. (Canada), researcher from the University of Calgary
- Kathrine (Norway), 4th year undergraduate student of Faculty of Medicine, Charles University in Prague
- Raúl (Spain), 4th year undergraduate student of Faculty of Medicine, Charles University in Prague

3.3.3 Data Analysis

Responds were evaluated through several methods. First, right after the debates a debriefing was held with a colleague of the author – the stroke research manager – with whom the most important points and comments were identified. This method is recommended by Hair (2000) for its high effectiveness. Then the results were grouped according to the topics and the general conclusion was derived. This method can be considered as a report of content analysis, compiled according to Krueger's methodology and experts' recommendations.

Separately was also evaluated results of assessing the website attributes by means of simple rating table:

WEB PAGE RATING, please use numbers from 0 (worst) to 5 (best)	
Design	
Colour scheme	
Clarity	
Information content	
Representativeness	

Fig. 15 Web attributes rating table

In the end all the pieces of information were put together and the cluster and its branding strategy were set. After the implementation of brand identity elements, the communication strategy and steps for the year 2017 were suggested. The author also provided a brief economic evaluation of branding.

4 Results

This chapter presents the results of cluster mapping, qualitative research and branding strategy of emerging research cluster Stroke Brno, which were set as objectives of the thesis.

4.1 R&D Clusters in the Czech Republic and Abroad

In order to fulfil one of the thesis objective and map the situation of Czech and foreign clusters available online information were searched and analysed.

4.1.1 Cluster Mapping

Clusters are globally mapped thanks to various cluster observatories. The aim of these observatories is to store the most important data about clusters within a defined region and provide them to public and all other stakeholders. Clusters are classified and stored in the system based on different methodologies. Some of them consequently enable their analyzation and comparison (clusterobservatory.org, 2012–2014).

Globally there exist several cluster observatories: The European Cluster Observatory, The Australian Cluster Observatory, The Indian Cluster Observatory, The Canadian Cluster Data Project, Project of U.S. Cluster Mapping and Industrial Cluster Information of JETRO [Japanese External Trade Organization]. While European and Australian Cluster Observatories divide clusters into 176 sectors, the Japanese Observatory uses only 10 branches. The Indian Cluster Observatory uses completely different methodology and organises clusters according to the number of enterprises and turnover per year into the Industrial and Micro-enterprise cluster. They also distinguish between Services, Handicraft and Handloom clusters (clusterobservatory.eu, 2016; clusterobservatory.com.au, 2016; jetro.go.jp, 1995–2016; clusterobservatory.in, 2016).

Several important universities are involved in cluster mapping. Firstly, it is Harvard Business School, MIT Sloan School of Management, and Temple University's Fox School of Business which jointly generated a methodology for cluster classification into 51 *traded* and 16 connected with *local industries* with sub-sectors and also detailed data storage. This unique design enables comparison of clusters across industries and regions, provides information about number of employees or average wages within the industry. This principle is used in the USA and Canada and a similar one in The European Cluster Observatory. The next highly involved university is the Centre for Strategy and Competitiveness at the Stockholm School of Economics in Sweden. The Centre established The Global Cluster Observatory which serves as an access point to cluster observatories and other leading cluster resources throughout the world (clusterobservatory.org, 2012–2014; clustermapping.us, 2014).

With regard to the thesis, The European Cluster Observatory is the most important one which contains data about various types of formation across European

countries, including the Czech Republic. This institute was launched in June 2007 and is financed by the European Commission (clusterobservatory.eu, 2016).

4.1.2 Czech Cluster Overview

History of Czech clusters started approximately 15 years ago and first of them was established in 2003 (Břusková, 2016). The information about Czech clusters was collected from 3 main sources: The European Cluster Observatory, The European Secretariat of Cluster Analysis and The National Cluster Association (Czech organization supporting clusters).

Unfortunately, from the very beginning two crucial issues occurred. Firstly, no databases contained the same list of clusters. This fact is partly connected with the second issue – unclear terminology. In the theoretical part differences between a cluster and cluster organization were defined. While a cluster is simply said co-operation and interconnection of companies in a particular field, a cluster organization is described as further development of a cluster acquiring various forms from non-profit associations to public agencies. It means that a cluster can only be a brand covering a joint action of companies and an organisation has in contrast a legal form. However, the lists of clusters provided by the institutions have a mixed up terminology. The National Czech Association shows the list of “cluster organisations” despite the fact that some of these “organizations” have explicitly in their name the word “cluster”, not “cluster organization”. The fact that we are really talking about clusters is also underlined by the information provided on clusters websites where their legal form can be verified.

The same problem occurred on webpages of The European Secretariat of Cluster Analysis and European Cluster Organization (ECO), which does not include straight clusters into their lists either. In case of ECO the problem is even more complex. Even though you click on the “list of clusters” the listing contains organisations from categories: Business Incubator, Chamber of Commerce, Consulting Organisation, Cluster Organisation, International Agency, National Agency, National Ministry, Professional Organisation, Regional Agency, Research Organisation, Science Park, Technology Broker, University, University Transfer Office and Venture Capital Firm. There is even missing the possibility to register a pure cluster or cluster initiative. What is more, the registration of a cluster is not obligatory, so the lists are incomplete and finally, some companies with characteristics of a cluster do not consider themselves to be a cluster.

Despite these troubles 50 active Czech clusters from various branches connected with or involving research and development have been identified. Mostly from IT, construction, production and engineering, nanotechnology, energy and industry clusters.



Fig. 16 Member clusters of the National Cluster Association
Source: nca.cz (2016)

4.1.3 Czech and Foreign Cluster from Matching R&D Branches

Neither in the area of the city of Brno nor in the Czech Republic exist any clusters concerning stroke or relative topics. During the research, one cluster, with the seat in Germany was discovered, registered in the European Cluster Observatory as a cluster organization concerning the same topic as our cluster – stroke. Kompetenznetz Schlaganfall, in English **Competence Network Stroke**, combines and links existing research potentials to make further advances in the prevention and treatment of stroke. Main goals are prevention, optimized patient care, improvement of diagnosis and acute therapy, usage of stroke databases, support of education and training and promotion of young scientists. The network has 15 partners. More information is available on: <http://www.kompetenznetz-schlaganfall.de>

The European Cluster Observatory identifies several sectors suitable for the Stroke Brno: Biomedicine, Biotech, Health, Healthcare, Life Sciences, Medical Technology, Medicine. These areas cover approximately 140 clusters/cluster organisations, mostly from France, Germany, Italy, Sweden, Switzerland and Belgium.

4.1.4 Cluster Labelling

Like in every human activity also in the cluster management there is a requirement of a certain quality. The quality label established in 2009 by the Commission is applied for clusters all over the world – mainly in Europe, USA, Canada and India. To continue the successful work of this initiative The European Secretariat for Cluster Analysis (ESCA) was established to offer practical advice to cluster management organizations. ESCA developed a methodology for cluster benchmarking that is acknowledged by cluster managers and policy makers throughout Europe and today there is a network of cluster experts from more than 30 countries.

European Cluster Excellence Initiative (ECEI) quality label involves three degrees: Bronze, Silver and Gold which are assigned based on the quality criteria (e.g. web presence, stability of cluster participants, maturity of the cluster management) (Lämmer-Gamp, 2014, p. 6–9).

Eight Czech clusters have currently the valid Bronze quality label and one firm Golden. 34 clusters across the world have topically valid quality labels in the health and medical science industry which is potentially a branch suitable for the Stroke Brno cluster (www.cluster-analysis.org, 2016).

4.2 Research Results

This chapter introduces identified target groups and the content summary of all the given questions. Some of the detailed comments are presented afterwards in the context with individual topics.

4.2.1 Identification of Target Audience

In the first step cluster stakeholders were identified – it means people and institutions at which the cluster is directly aimed and other target audience that could be interested in the cluster brand.

Based on the qualitative researchers' recommendation two groups were consequently chosen as the participants in the focus group and in-depth interview.

Tab. 4 Identification of cluster target groups

No.	Group	Who is included in the group	Why their opinion matters
1	Consultants (marketing, branding, innovation and strategy)	<ul style="list-style-type: none"> • ICRC Marketing Specialist • ICRC PR Manager • ICRC Web-marketing Manager • Promotion agency Representative • JIC Marketing Specialist • JIC Cluster Specialist • ICRC Technology Manager • Strategy Research Consultants 	Make the cluster marketing, brand and strategy attractive and targeted to attract students, researchers, companies to cooperate with, sponsors, supporters.
2	Students and young researchers	<ul style="list-style-type: none"> • Pre-gradual students of: Medicine, Biomedical Engineering, Biophysics, Engineering, Science, Population Studies, Healthcare Management • Representative of the Institution working with young talents 	The cluster needs them as new employees, young generation to develop stroke research.

3	Members of the Stroke Brno Cluster	Principal investigators, other researchers, managers	To make the cluster marketing strategy tailored to their needs, to ensure their identification with the cluster.
4	External and foreign researchers	Researchers from abroad or homeland researchers from other fields	If the cluster makes difference in their preferences where to work, with whom to collaborate.
5	Members of other clusters	Member of Stroke Cluster, Germany Member of technology cluster Members of research clusters	To get their experience and to learn from them.
6	Municipalities, Public Authorities	Representatives of Brno City Municipality Representative of South-Moravian Regional Authority Regional Innovation Strategy Manager South-Moravian Representation in EU, Brussels	The cluster needs their political or financial support. We want to know what politicians find attractive on the research cluster to support that.

4.2.2 Content Summary of Individual Answers

In this subchapter opinions of qualitative researcher participants were summarized according to the individual areas in the content analysis report. Precise wording of the questions is to be found in the Attachment and the most important participants' comments are presented afterwards in context with individual topics.

Attitude to research

According to students, research is important and ensures the progress in treatment. To a certain extent they perceive research as a creative activity. This corresponds with the opinion of researchers who see their work as a creative activity as well. According to students, researchers are below-averaged paid in, but it depends also on attractiveness of a research field. They see the stroke research and neurology generally as attractive areas. They also perceive Brno as a city of developing science centre, which was an interesting point of discussion.

Among greatest motivators why to join research are for students the lecturers – a good teacher at the faculty transfers his/her enthusiasm – experts in the field (idols) and personal experience. Other stimuli can be attractiveness and development potential of the field and very motivating is the conviction that research has practical impact on patients.

Problems in research

Researchers are generally, from their professional point of view, dissatisfied with difficult process of ordering material (test tubes, syringes etc.) and long waiting period which delay the whole project. Another problem is lack of information about grant calls and high administrative burden.

On the hand students are disappointed from the lack of education concerning research within the Faculty of Medicine. They would be happy with optional 1 year-long practice focused on pre/clinical research which would be evaluated by credits. In general, students perceive low support from the side of the medical faculty. They also mentioned too much paperwork and competitiveness instead of cooperation among research institutions. Students are also not well informed about research trainee programmes and workshops held by the FNUSA-ICRC and other institutions.

Research promotion

In general, researches stated that the promotion is weak, the public is not sufficiently informed and have distorted opinion on research and researchers. They perceive that their work is not promoted enough and it is not internationally recognizable.

The students have similar opinion. They evaluated the promotion of research generally low and badly accessible for the public. One reason, why media do not pay attention to this topic could be that some research results are difficult to explain. People also do not fully realise the importance of research discoveries. Students also mentioned that weak promotion leads to the publishing of some research results in predator journals which is a great weakness of research.

Attitude to the cluster

For researchers from basic research is very interesting and motivating that they are working on project with direct impact on patients and that they get in touch with clinical research. Similarly, for researchers from the other side of spectrum – medical doctors focused on clinical research and application of new treatment into practise – is very interesting to be in one research group with biophysics, vets etc. and to see the very beginning of working on a new project. As the greatest benefit of the cluster they can see stabilisation of environment which leads to faster projects' progress.

The multidisciplinary is seen very positive also among students. Joining the cluster would be motivating in terms of foreign network partners, high salary, top researchers – colleagues and bigger research opportunities. They also realise they would have access to more facilities and that a multidisciplinary team could generate more interesting research topics.

General summary

Both groups generally perceive the research promotion as very low and badly accessible for the public. As the cons of research they see non-cooperative environ-

ment, process delays caused by the high administrative burden and lack of information and support of research provided to students by universities. They found the form of cluster cooperation very attractive, mainly for its multidisciplinary, bigger opportunities (professional, research) and the creation of independent and stable work environment. The interesting point of discussion with students was their perception of the city of Brno as a research a technological centre (rather than Prague or other cities/regions).

4.3 The Case Study – The Stroke Brno Cluster

The idea of research cluster came out naturally more than 1 year ago after a long and prosperous cooperation with partner institutions of author's workplace FNUSA-ICRC. For the first time the concept was presented at a joint meeting and pre-approved by the research group heads from institutions.

The Stroke Brno cluster was built up of four important Brno research institutions. These institutions have been collaborating for five years and doing a joint translational research focused on stroke.

The creation of a cluster brand brings many advantages not only to individual people, but also to institutions. The cluster and its successful branding can solve some of the burning issues, like the lack of young researchers, difficult fund gaining, the lack of visibility and attractiveness of this research field.

Initial reasons for establishing a cluster and its branding were various:

- 1) making stroke research field more attractive for young researchers;
- 2) making it more visible for foreign researchers;
- 3) building, sharing and concentrating knowledge and facilities;
- 4) research and knowledge coherence;
- 5) becoming a stronger partner for Horizon 2020¹³;
- 6) being able to offer more expertise to companies;
- 7) performing more results and doing better research.

Basic cluster characteristics:

- Joint focus: stroke research
- Number of member institutions: 4
- Mechanism of setting up: bottom up (naturally)
- Current life cycle stage: embryonic
- Geographically: city cluster
- Typology: Marshallian's type of cluster; based on competences

The process of cluster branding is primarily based on Boesso's strategy supplemented by Andersson's method. Thus first the key assets were analysed, then positioning and finally tools of branding were implemented.

¹³ Horizon 2020 is an EU Framework Programme for Research and Innovation

4.3.1 Introduction of Members

International Clinic Research Centre of St. Anne's University Hospital Brno (FNUSA-ICRC)

The FNUSA-ICRC is a new generation science and research centre focusing on finding new methods, technologies and medicaments for effective prevention, early diagnostics and individualized treatment of cardiovascular and neurological diseases. These are among the most widespread diseases in the modern society (fnusa-icrc.org, 2016).

This institution is the initiator of a stroke research cluster and often a starter of new projects and ideas. The stroke department interconnects experts from other institutions, holds regular meetings and keeps the collaboration in progress. It is the last link in the chain before the results of previous exploring are implemented into practice and applied into patient treatment.

Institute of Biophysics of the CAS (IBP)

The IBP is engaged in basic research of the structure, function and dynamics of biological systems (biomolecules, cell components, cells and cell populations). According to the latest evaluation performed by an international committee, IBP is one of the best research institutes in the Academy of Sciences in the Czech Republic. Each year it publishes around 100 original results that open new ways of investigation for the number of scientists in the whole world (ibp.cz, 2016).

Experts from the IBP usually start solving the issue from the molecular level. They are also able to make various models simulating the real human body environment. These models are used for so called *in vitro*¹⁴ testing.

Institute of Scientific Instruments of the CAS (ISI)

The ISI performs scientific research in the areas of magnetic resonance, electron microscopy and microanalysis, utilization of lasers, acquisition and processing of bio signals, construction of scientific instruments and their parts and improvement and utilization of special technologies. The goals are to perform scientific research, contribute to the utilization of its research and provide research infrastructure (isibrno.cz, 2001–2016).

In many studies the ISI creates an interconnection in research of the IBP and the VRI. They are able to verify the findings by means of modern technical facilities and methods.

Veterinary Research Institute (VRI)

The Veterinary Research Institute is the only centre of research specialized in veterinary medicine in the Czech Republic and one of the few in Europe. Institute's core activity is delivering high quality research and dissemination of research results to both the academic community and practical users in the agricultural and food industry (vri.cz, 2014).

¹⁴ in vitro = outside the living body and in an artificial environment

In contrast to previous institutions the VRI carries out the *in vivo*¹⁵ testing. Before the new medicament and findings are applied to practice and used for patients their functionality has to be verified on animals.

4.3.2 Key Assets Analysis

Key assets analysis presents the strategic SWOT analysis uncovering deep cluster potentialities. Other components, like examination of territorial context or analysis of target groups' view are interconnected with other chapters (see qualitative research and implemented tools of branding).

The Stroke Brno Cluster SWOT Analysis

A) Strengths

- long-term cooperation of involved institutions before,
- joint research results,
- joint grants,
- regular meetings of research members,
- the cluster/research is managed by one of the most respected stroke researcher in the Czech Republic (and Central and Eastern Europe),
- management support by the ICRC stroke team,
- enthusiasm of support team,
- each partner of the cluster has the international partners established,
- territorial nearness of cluster members.

B) Weaknesses

- unclear funding for future joint research,
- no management structure at this moment,
- weak cooperation with companies for stroke research,
- dependency on animal facilities of the third party (Vet University),
- unclear future research orientation,
- small or no support of management of some institutions,
- the international network of partners is not used enough, the cooperation is not developed across the cluster,
- no paper establishing documents.

C) Opportunities

- support of the Brno City Office,
- involvement in the SMART CITY Brno strategy,
- no competition in the Czech Republic in stroke research in such a scope,
- Brno is a city of students (there are six universities) – drafting students, cooperation with universities (biomed, science, medicine, vet),
- innovative companies in the South Moravian Region,

¹⁵ *in vivo* = in the living body of a plant or animal

- cooperation with The South Moravian Innovation Centre,
- support of The South Moravian Region Office,
- promotion on cluster observatory websites,
- draining talents (South Moravian International Mobility Centre),
- using EuroAccess for drafting foreign researchers.

D) Threats

- political displeasure,
- displeasure of stroke centres in the Czech Republic, where the research is also conducted (funding can be concentrated in the cluster),
- displeasure of other research fields (drafting the best HR for the stroke cluster),
- disagreement of cluster members about research goals, funding and cluster management,
- refusing attitude (worries) of cluster members to new membership and changes in general,
- lack of funding,
- loss of interest of basic research institutions in stroke,
- funding opportunities for different research fields (and stopping stroke research),
- legal or internal limitation of using infrastructure by members within cluster,
- municipalities will focus their support to other science/research groups in Brno (e.g. newly established Biology Park).

4.3.3 Positioning

For successful positioning a cluster has to know its goals, mission, vision and place among other brands. Based on all these pieces of information two positioning strategies have been consequently chosen.

Goals of the Stroke Brno Cluster branding:

- 1) making the stroke research and stroke treatment more visible;
- 2) attracting more students and young researchers to participate in stroke research and working for our teams in Brno;
- 3) obtaining more funding from national, EU and other grants;
- 4) attracting motivated researchers of all levels from abroad to work in Brno for stroke research;
- 5) attracting top-level research institution in the world to work with;
- 6) starting and enhancing collaboration with private sector;
- 7) cooperating with local, regional and national authorities and obtaining support from them.

Tab. 5 Cluster goals in respect with the brand

No.	Goal	What problem it solves - the status quo	How to meet the goal
1.	Making stroke research and stroke treatment more visible.	Stroke is not as visible as cancer, cardiovascular diseases or mental disorders despite the fact that the stroke is one of the most devastating diseases. Stroke research is not as much supported as research of more visible diseases mentioned above.	BRAND Logo Colours Name Mission Vision Slogan Web design Web structure Web function + other communication tools
2.	Attracting more students and young researchers to participate in stroke research and to work for our teams in Brno.	Lack of students for stroke research, namely in the medical field. No young researchers who would follow today's generation of PIs in stroke research.	
3.	Obtaining more funding from national, EU and other grants.	Lack of funding for Czech research institutions, lack of funding for stroke research in general, low chances of Czech institutions in international competencies (H2020).	
4.	Attracting motivated researchers of all levels from abroad to work in Brno for stroke research.	Lack of international connection, lack of new inputs from research abroad.	
5.	Attracting top-level research institution in the world to work with.	Lack of visibility, lack of access to international structures and international funding.	
6.	Enhancing collaboration with private sector.	Lack of interconnection with application sector, lack of implementation of research results into application.	
7.	Cooperating with local, regional and national authorities and obtaining support from them.	Lack of interconnection with local authorities, lack of information from research to authorities and vice versa, thus lack of support.	

Ultimate goal of cluster:

"To decrease the number of stroke patients and rate of consequent disability."

Based on the set of goals of the cluster, the mission and vision have been created.

Mission:

"We are connecting experts from different fields to perform joint research leading to improving stroke prevention, diagnosis and treatment."

Vision:

"Everybody stays healthy after stroke."

The mission describes what and why the cluster does and the vision reflects its ultimate goal to decrease the number of stroke patients and rate of consequent disability.

In general, the respondents agreed with the formulation of the cluster mission. *"The mission is clear, quick and precise,"* said Karolína (a student). Tereza (a student) adds: *"I agree, it involves everything important...that it involves more institutions, it's about stroke and that it's focused on diagnosis and treatment. There's not much space for creativity."* On the other hand, both groups found the vision too optimistic. Tereza (a student) explains: *"Concerning the vision I'd prefer something with improving quality of life after stroke, this is too out of reality."*

Core values:

- 1) connect stroke experts
- 2) execute fast, effective and valid research
- 3) improve stroke prevention and eliminate its consequences

Brand architecture

Next the cluster brand architecture has been identified which means its position among other superior brands and also its relation to member institutions.

The brand Stroke Brno first has to take into account the brand, intentions and general strategies of the South Moravian Region and the city of Brno. Both of them have some long-term goals and cluster should attempt to be in harmony with them.

Closer to the cluster stay 3 regional/city strategies. From left it is Smart City strategy for city of Brno which tries to make more "user friendly". Cluster could be in compliance with the Smart goals in terms of creating new workplaces and partners. And the representatives of Smart strategy could in return support cluster's research cooperation and promote it. Similar way of cooperation could be established with the Regional Innovation Strategy of the South Moravian Region and with the Velvet Innovation that is emerging movement trying to promote the South Moravian Region as an area of innovations.

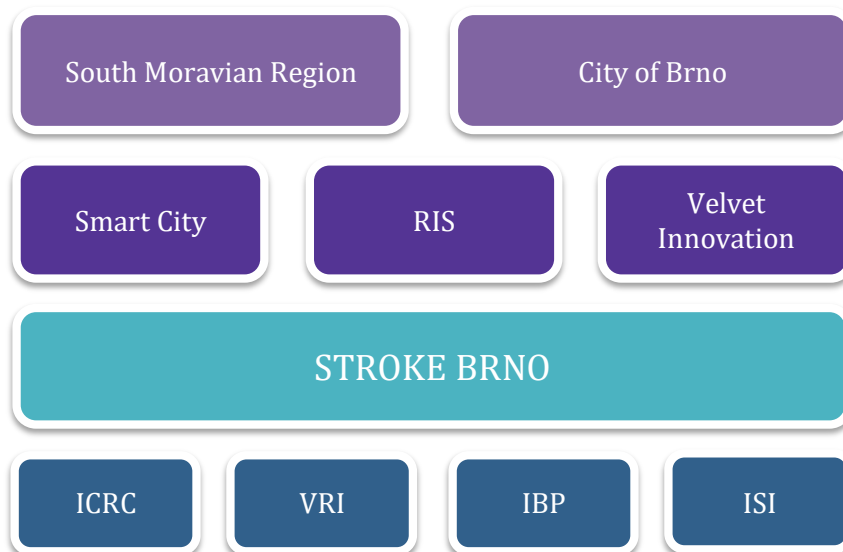


Fig. 17 The Stroke Brno brand architecture

In relation to the member institutions, the Stroke Brno cluster will let them absolutely free in respect of any activities. The only area of joint management and marketing is stroke research.

Positioning Strategies

For cluster positioning two main strategies have been chosen – geographical and societal. **Geographical positioning** is reflected in the cluster's name which uses the name of the city of Brno. This is also closely connected with the place branding that could be picked as an effective strategy in the future. Both are connected with the brand of the city of Brno and with the fact how the city has been perceived during the last five years not only within the Czech Republic, but also abroad. Brno has refreshed its brand and now it is seen mainly as the city of students, universities and top research and innovation centres (CEITEC, JIC, FNUSA-ICRC, CzechGlobe etc.). This finding has unwittingly resulted from the focus group discussion.

Societal positioning reflects the cluster focus which is stroke research. Cluster is basically a solver of crucial societal and economical topics with an ultimate goal to decrease the number of stroke patients and rate of consequent disabilities.

4.3.4 Implemented Tools of Branding

First the results of brand identity elements creation are presented, which means the cluster's name, logo, web page, colours, typography and slogan. In the next subchapter, the draft of communication tools implementation is presented.

a) Name

The cluster's name of **Stroke Brno** connects two most important things about the cluster – *What do we do?* and *Where do we do it?* The brand's name captures our main topic. At the same time, it is a place brand that uses the fact that Brno is

(among interest groups) known as the city of universities, city of professional research groups and has a high concentration of top research workplaces. The brand's name is simple, meaningful and easy to understand for foreign target audience.

The cluster's name had great success among target audience and no negative comments occurred. For example, Václav (a student) said: *"I like it very much and finally something is directly connected with the city of Brno!"*. According to Albert (a student) and also others, the name is rememberable.

b) Logo

The symbol of stroke – brain was chosen for the cluster's logo. Picture of the brain is designed in modern and unusual way because atypical shapes are more easily to remember. The symbol of brain is accompanied by the cluster' name of Stroke Brno. Among target groups the logo is understandable and clear also for foreign audience (who speaks English).

Generally, the logo is designed to be simple, clear, original, easily recognisable and understandable. The full coloured version gives dynamics to the logo.

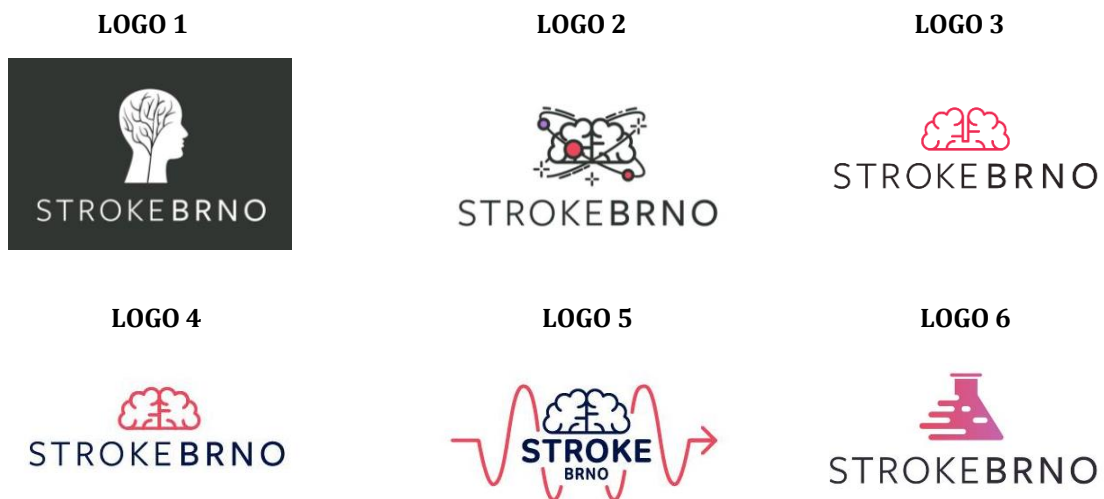


Fig. 18 Logo drafts

The majority of participants of both groups agreed on logo number 3. Andreea (a researcher) said: *"Number 3 is nicely done, clear and eye catchy. I like this one the most."* Václav (a student) expressed how much he liked this logo as follows: *"Logo 3 is totally exclusive, I'd be happy to place it on a T-shirt...and the text below is also absolutely great."* Several respondents did not like the notch, but finally, in comparison with logo number 4 (which is without the notch) admitted that number 3 is much better.

Concerning logo number 1, Jana (a researcher) and also Lucie (a student) claimed it looks like a logo of an ecologic organisation. Jana: *"Number 1 looks rather like a tree, it's like a symbol of an ecological organization."* Lucie: *"The first logo is like some eco-thing – like a tree in head..."* The only participant who liked it was

Katharina: *“As for me, logo 1, as it is, is simple and different from other logos I have seen.”* Others found it old fashioned.

Logo number 2 was, according to the participants, a bit overcomplicated and reminded the, of a space. *“Number 2 reminds me of the Big Bang Theory,”* said Tereza (a student), *“Yep, it’s like a space...like a confused researcher,”* nodded in consent Lucie (a student). Logo number 4 was generally evaluated very positive, but in comparison with logo number 3 was assessed as the weaker from this duo.

Two participants (Lucie and Jan) liked logo number 5 most for its dynamics, but for instance Tereza (a student) opposed: *“...it looks like two logos in one.”* About number 6 most of the respondents said, by words of Tereza (a student) that it: *“...absolutely does not catch the essence of the project.”* Andrea (a researcher) also added: *“I don’t think the test-tube is so much connected with our thing. The central symbol should be definitely the brain.”*

Final logo (after qualitative research):



Fig. 19 The Stroke Brno final logo – 2 colours



Fig. 20 The Stroke Brno final logo – full coloured

c) Web presentation

The website has been designed according to the latest trends. The layout is very clear and catchy, using modern elements like whitespace which makes the site pure and elegant. Every page keeps unified design, using the same colour scheme, typography and communication style. The logo is placed on all pages. Calls to actions – like join us or contact us and also eye-catching original photos of authentic researchers and workplaces can be found on the website. The information content was designed by the author of the thesis.

The official domain is www.strokebrno.com, thus it directly contains the cluster’s name. Other 1st domains .eu, .cz, .org, .net and .info will be redirected to www.strokebrno.com. The website was created on the WordPress platform by the graphic designer and it is available in the Czech and English languages.

The website contains page:

- Home – main information, interesting things, stories,
- About us – mission, vision, goals and who is in,
- Institutions – information about cluster members, their focus and available facilities,
- Research – research results, joint project, publication, patents and conference attendances,

- News,
- Join us – what we offer and how different target groups can join or support the cluster,
- Media – press releases, logo etc. and
- Contact us – contact form and contact information about member institutions.

In general, the web presentation was accepted better by younger respondents who described the web presentation as modern, elegant, clear, easy to navigate and pure. Some researchers did not like primarily the combination of colours and for example Jiří (a researcher) missed one unifying element on every page. On the other hand, Karolína said: *“The web page is very nice, only the menu text could be bigger. Anyway the font is very nice, the colours as well, everything is unified, it looks fine.”* In general, the comments were mostly positive. Tereza (a student) said: *“I’m really nicely surprised because usually the websites of hospitals are a pure disaster.”* And Václav (a student) summarized his thoughts with these words: *“It’s really pure, like if we were a kind of Scandinavian university.”*

Besides the word evaluation a short questionnaire assessing the most important attributes of the website was filled in as well. Respondents used simple rating scale from 0 (= the worst) to 5 (= the best) points. The elements evaluated were: design, colour scheme, clarity, information content and representativeness of the website.

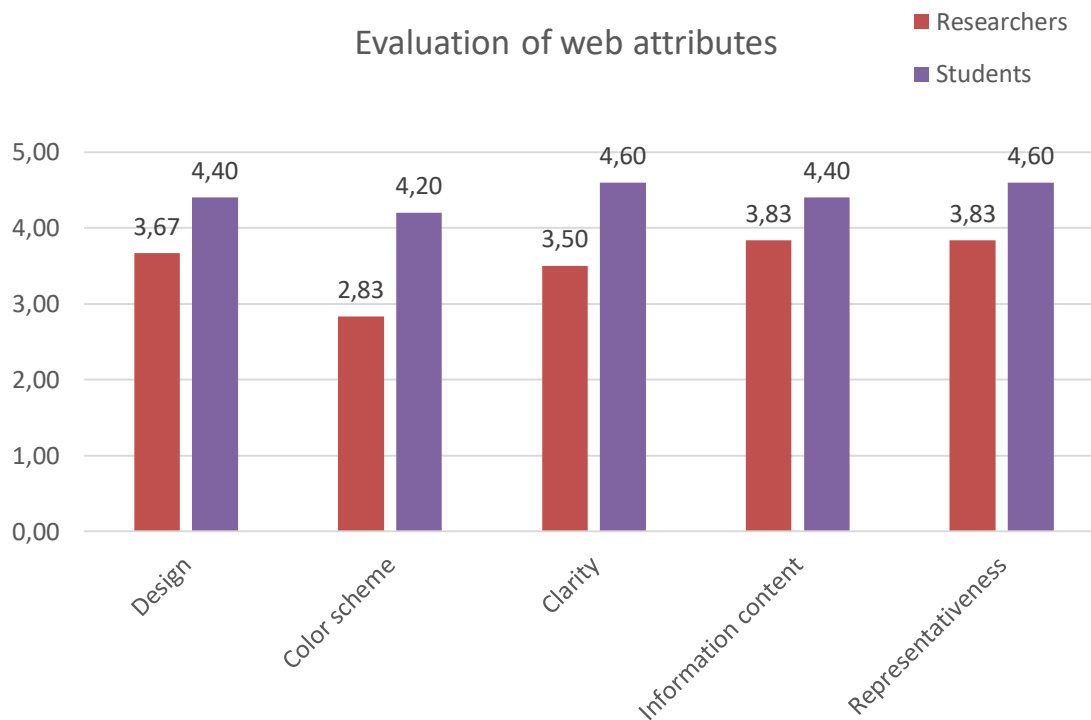


Fig. 21 Evaluation of web attributes by target groups
n (r) = 6, n (s) = 5

The web representativeness obtained the highest average score between both groups (4.2 points out of 5). The colour scheme was evaluated worst between both groups (3.5/5). The overall rating of all attributes given by students was 4.44 points, with lowest mark 4.2 for colours and highest 4.6 for representativeness and clarity. The average rating given by researchers was 3.53 points. They put only 2.83 points to colour scheme, in contrary they evaluated representativeness and information content with 3.83 points.

From the scores it can be derived that researchers are not, unlike medical students, used to new trends in branding and perceive some of them as too courageous. The age group around 40 is probably used to different web layout and they often search on various medical webpages which design is more than 10 years old (mainly the problem of hospitals).

In the end, all comments and recommendations have been responsibly considered and many of them are incorporated in the final look of web presentation.

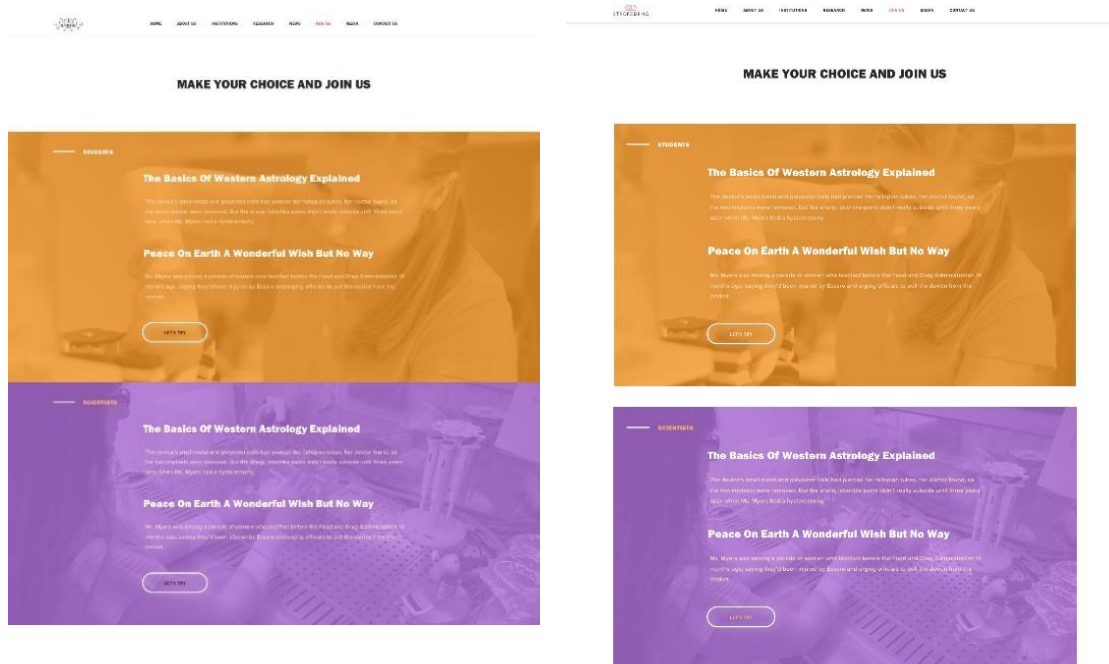


Fig. 22 Part of JOIN US webpage before and after the qualitative research

The respondents recommended a white space around coloured boxes and different colours of buttons on the Joins us webpage.

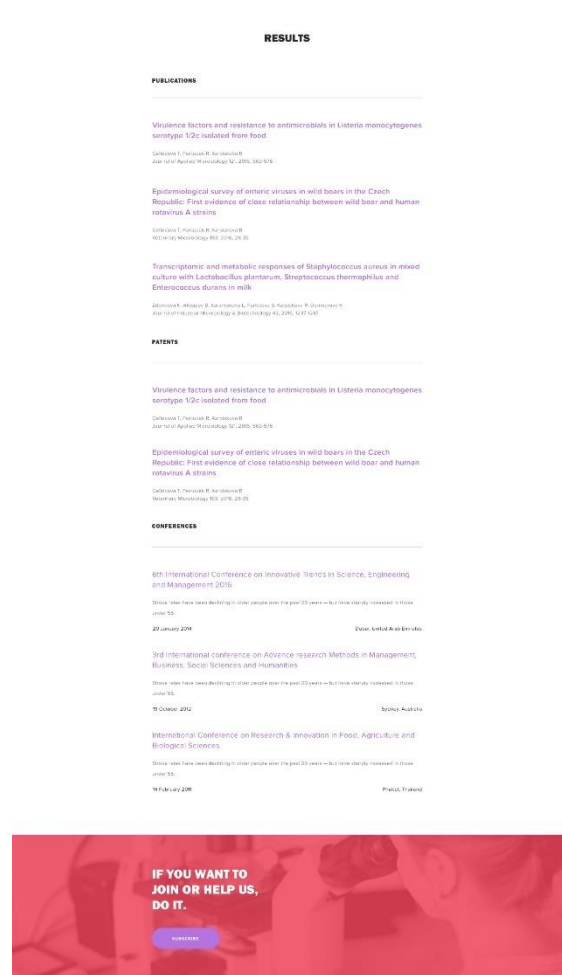
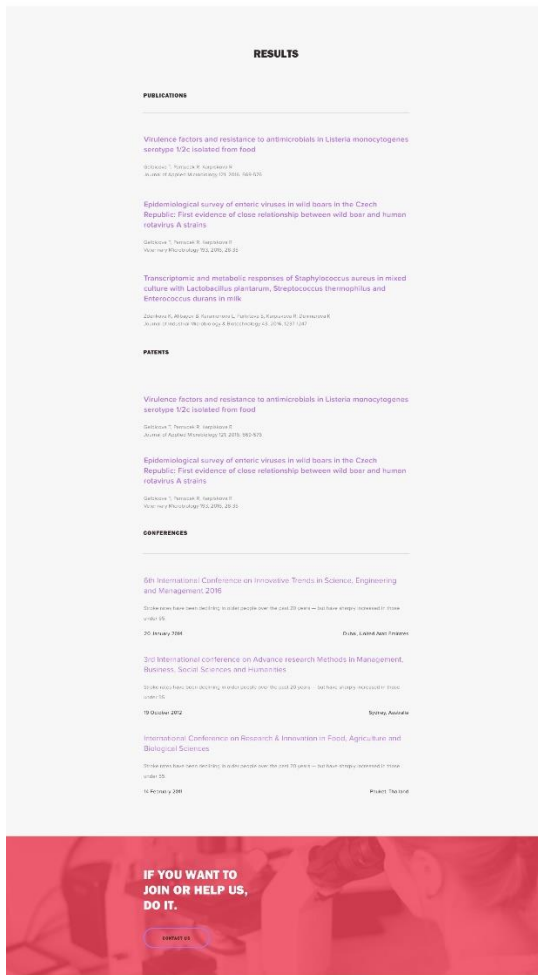
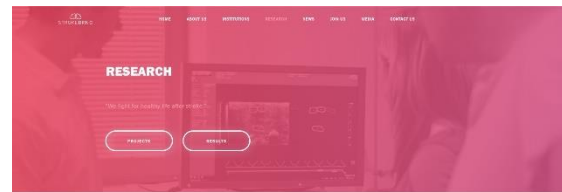


Fig. 23 Webpage RESEARCH before and after the qualitative research

On this page participants suggested coloured boxes for single projects, white background and the full-coloured button on the bottom of the webpage.

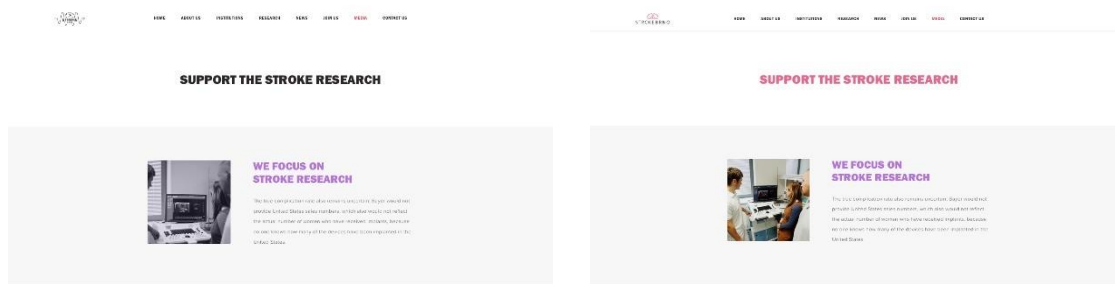


Fig. 24 Part of MEDIA webpage before and after the qualitative reserach

In this case, participants wanted to add more colours. Jana (a researcher): *“It’s a web page for media, it should be more colourful, they are used to it and they probably expect it.”*

Pictures of all websites are to be found in the Attachments and on the website www.strokebrno.com. At the time when the pictures of web pages were taken, most texts were illustrative. During January 2017, the real texts were added and the webpage was launched.

d) Colours

Red with undertone of raspberry colour was chosen as a basic colour. Red colour, which is used in logo and on the website, is connected with the city of Brno, next with the red logo of FNUSA-ICRC and it is also generally linked with medicine. Red colour also represents dynamics and speed which correlates with our slogan. Additional colour is purple that is traditionally connected with stroke (e.g. Purple May¹⁶) and creates calm and stabile supplement to the basic colour.

Regarding the colours, respondents were indecisive. Some of them did not like the combination of pink and purple or they thought the website was too colourful. Jana (a researcher) said: *“Oh, there is just really too much of pink. I don’t mind pink in some extent, but this is too much. What’s more it’s a conflict colour, I mean poisonous, someone could really hate it. And the pink text on the pink background is terrible, I can’t read what is stated here.”* For example, Jiří (a researcher) a combination of grey and white. Lucie (a student) does not connect these colours with research of brain. She said: *“...I don’t like the combination of pink and purple. It’s like something for woman, connected with gynecology.”* On the other hand, the rest of the respondents mainly liked the colours, some students event suggested to use more aggressive shade of red to look more the blood. Albert (a student) summarized his idea in this sentence: *“I think these colours are nice, it’s better than just a white boring page.”*

¹⁶ Purple May is the Stroke Association's annual stroke awareness month, which takes place every May. Friends, families and communities are invited to show their support for people who have been affected by stroke.

e) Slogan

The original slogan was meant to express the dynamics of cooperation and destroys the general idea of never-ending research vicious cycle. The first part stresses out the gravity of stroke, but the second part immediately offers the solution – fast cluster research.

Original slogan:

“Stroke is fast, our research is faster.”

The group of researchers had besides positive comments also several critical comments concerning the slogan. They described it as puffy, arrogant, or as Ondřej (a researcher) said: “... *quite courageous – but good.*” Some of them also felt it like a bit negative because of stressing the fact that stroke is a serious disease. In contrary students supported the idea that this information should not be omitted. Albert (a student) said: “*I definitely wouldn’t change it. I think it’s important to stress that stroke is fast, that it’s no joke.*” And Tereza (a student) agreed: “*Absolutely! It stresses that stroke is a serious problem and this is the point, right?*” Some participants appreciated also a hidden dimension of the slogan: “*The slogan is super. I really like that you incorporated the “FAST”. The people who are involved will know that it’s a mnemonic tool for stroke symptoms and they will discover another slogan dimension. I like it very much,*” said Tereza (a student). The slogan was understandable also for foreign respondents: “*I like it very much, it is short and easy to remember,*” added Raúl (a student).

Based on the respondents’ opinions the second part of the slogan was modified in order to look less puffy and courageous. The first part was kept in order not to omit the seriousness of stroke. This statement was suggested by Jan (a researcher).

Final slogan (after qualitative research):

“Stroke is fast, our research as well.”

f) Typography

For the website and the text in general rounded Proxima Nova Soft sans serif font optimised directly to the cluster website was chosen. This font is very clear, elegant and popular, it has geometric look and modern proportions. In titles Franklin Gothic sans serif font is used, often presented in newspapers, books and billboards. For the logo manually modified Freight Sans Pro sans serif font was chosen. This font looks very modern and friendly.

No negative comments concerning the chosen font occurred, some participants only suggested to make the text bigger in some parts.

4.3.5 Communication Tools

The communication with target groups will be done primarily online. The strongest communication channel will be website through which the newsletters will be sent too – thus direct marketing will be used. The element of storytelling is incorporated on the website as well. During 2017 profiles on several social media – Facebook and LinkedIn should be established. Facebook is important to reach the students and younger population generally, LinkedIn is necessary from the professional point of view and connection with similar research groups and firms. Internal communication will be managed via mailing, newsletters, phone calls, regular and annual meetings.

Visit around institutions' workplaces and presentation of interesting devices connected with press conference about interesting research topic could be offered to the press. The press will be also regularly provided with newest press releases.

As for the experts (and others who would be interested), the cluster workers could arrange a series of lectures and also to present the results or the cooperation itself on cluster conferences and fairs. All the research results should be also, besides the website and the social media, presented in specialized journals and the best of them also in other publicly available media (news portals or TV news). The cluster could also run a trainee program for university students, to attract young people with potential.

Within all forms of communication, the cluster should keep the unified style corresponding with the set branding. It could also make a use of its unique positioning (societal and geographical) and tie its communication with the city of Brno which is increasingly perceived as a research a technological region.

4.3.6 Recommendations for the Future of the Stroke Brno

The newly established cluster is a big challenge to the future. It needs to keep loyalty of member institutions which requires a competent administrative support. It is up to the management to build a future strategy not only for the brand, but for sustainability of the cluster itself as well.

Several proposals of future steps and improvement for the Stroke Brno cluster are identified here.

1. Setting up a Marketing Strategy

From the beginning of 2017 the marketing strategy should be formulated and short-term and long-term goals planned. Targets have to be SMART¹⁷ and formulated also with respect to the budget, time frame and available communication channels. Special attendance should be focused on the development of communication strategy and brand management. The Stroke

¹⁷ SMART is a best practice framework for setting goals. A SMART goal should be specific, measurable, achievable, results-focused and time-bound.

Brno cluster should also follow the SWOT analysis and to make use of lack of competitors.

During 2017 social media channels should be implemented (LinkedIn, Facebook). There is also possibility to promote the cluster on cluster fairs and conferences (e.g. European Cluster Conference).

The creative voucher of JIC could be used for successful brand management. The voucher can be applied on projects which are in compliance with the RIS. Currently, RIS does not explicitly support clusters, but its specific goals are to ensure young talents (young researchers) and networking of regional and foreign organizations which are sub-objectives of the Stroke Brno cluster and thus the voucher usage would be defensible.

Important point of strategy will be the gain of municipalities' support, which for example means to become a part of the Smart City strategy or support of region.

2. Cooperation with the National Cluster Association (NCA)

One of the first things to do should be the initiation of cooperation with the National Cluster Association that supports and covers (not only) emerging clusters. The president of the association, PaedDr. Břusková is very in favour of helping cluster and providing it with various methodologies and recommendations.

3. Setting up a Legal Form

In order to reach the most interesting grant opportunities it is necessary to set a cluster legal form. Czech legislation offers several options. This step will require approval of the heads of all member institutions.

4. Grant Application

Topical possibility of a grant application is "Cooperation – Clusters – Call III" within the Operational Programme Enterprise and Innovation for Competitiveness. It is possible to gain the maximal financial support 3 mil. CZK for emerging clusters. This sum can be used for cluster enlargement, cooperation improvement and cluster management, marketing, networking or know-how sharing.

Next a grant opportunity of "Centres of Competence II" is in preparation which is implemented by the Technology Agency of the Czech Republic. This grant requires setting up a legal form of the cluster and the call will be opened probably in 2018. The support will aim to activity coordination and joint research projects.

Another possibility is to try to gain funding from Horizon 2020 programme. One sub-programme supports joint research with companies and implementation of their results. This would first require enlargement of cluster by firms from medical and research field.

5. Enlargement to Cluster Organization

Within 2 or 3 years a cluster could be enlarged to a cluster organisation uniting various organisations and projects dealing with stroke on different levels. Among new participants there could be non-profit organisations (e.g. Czech Stroke Society, Ictus Help), firms (Biovendor, Contipro), campaigns/projects (HOBIT project, campaign Time is Brain), universities (Medical Faculty of Masaryk University), municipalities (the South Moravian Region, City of Brno) or foreign stroke clusters (e.g. Competence Network Stroke) – which would mean the creation of a meta-cluster.

6. Continuous Evaluation

Not only the brand, but the cluster itself should be submitted to evaluation. As for the brand a reliable indicator is a ratio of brand recall and recognition. Managing of cluster activities and its successful development can be evaluated by professionals in cluster labelling commissions.

4.3.7 Economic Evaluation

Currently it is not possible to calculate total costs for branding because it is a continuous process including many steps. Nevertheless, till now a graphic designer has spent approximately 40 hours by creating a logo, 60 hours by the web design and 100 hours by programming the website. The hourly rate also plays a significant role in this account. For the next years it will be necessary to hire a person who will be in charge of cluster and brand management. Finances for running the cluster will be obtained mainly from grants.

In the future it will be very interesting to carry out regular evaluations and see the impact of brand on the cluster. In the first place the brand itself is important asset of the company (some experts estimate the brand value to up to 70% of the whole company's assets) and ideally it should grow in time. Literature also agrees on many benefits which the cluster brand should bring – from attracting new workers and partners, support of municipalities, to gaining higher grants and more interesting research opportunities. Unfortunately, no study of cluster's annual report presenting concrete percentage of financial evaluation before and after branding has been found. This means that SMART targets (marketing, financial and branding) will have to be set up by an experienced manager leading the Stroke Brno cluster.

Concerning the regular evaluation, it will be also crucial to monitor if the costs were effectively used and if they did not exceed the profit. Precise parameters following these facts have to be properly set up in advance as well.

5 Discussion

First, based on the literature and web survey two partial objectives were fulfilled – identification of R&D promotion possibilities and identification of cluster target audience (totally 6 groups). Some forms of cluster promotion may have been omitted, for instance because of the fact that the author does not have an account on all the biggest social networks and thus there was no possibility to check if any cluster profile exists there. Nevertheless, the situation in the Czech Republic and abroad was generally analysed and specific activities within our country described.

Next, the situation of Czech and foreign clusters was mapped and analysed. The whole process of cluster mapping was a bit difficult because of the unclear terminology (cluster vs. cluster organisation) and different methodologies used by cluster observatories. Despite this fact, active Czech clusters were successfully identified and the overall situation in our country and in Europe was described. This part was also enlarged by findings about cluster labelling which could be for the Stroke Brno cluster topical in several years.

The case study covering the creation of brand strategy for emerging Stroke Brno cluster was the main objective of the thesis. The process of cluster branding was primarily based on Boesso's strategy supplemented by Andersson's method. Because of a very specific topic no other publications of the same quality were found. Thus, the insight in cluster branding had to be enlarged also by the consultations with several experts and attending several workshops.

In order to find out the overall attitude to research and development promotion, the form of cluster cooperation, pros and cons of research and the cluster brand, the qualitative research was carried out. Totally 15 respondents answered questions within a questioning route. The number of respondents might be perceived as a limitation of the research, nevertheless it met the number set in the diploma proposal and also the standards of focus group participants number. The number of groups was recommended by the expert in qualitative research and the author picked up 2 most crucial groups. Qualitative research was also limited by the moderator (= the author of the thesis) who is not a sociologist. In order to get the best result as possible, this topic was consulted several times with doc. PhDr. Iva Šmídová, Ph.D. and Ing. Denis Drexler who are experts in qualitative research methods.

During the sessions (with groups and interviewees), the website had not been programmed yet, so it was not possible to let the respondents to try all the interactions. That is also the reason why the functionality of the website was not discussed and was not included in the web attributes evaluation. In spite of the fact, that all comments and recommendations resulting from the qualitative research had been responsibly considered and many of them are incorporated in final brand look, others were processed according to the final decision of the author. The most visible example is the vision statement, where most participants agreed that it was too optimistic and unrealistic. Based on the author's knowledge and the feeling the vision is not in conflict with general recommendations and in fact could work very

well. Among companies and organisations there exist many “unrealistic” visions, for example, Oxfam International vision: “A just world without poverty.”, Alzheimer’s Association vision: “Our vision is a world without Alzheimer’s.”, or Feeding America vision: „A hunger-free America.“, but more important is the core information that is caught here. That is why the cluster’s statement “Everybody stays healthy after stroke.” was not modified according to respondents’ comments.

6 Conclusion

The main objective of the thesis was to set a branding strategy for a research cluster. It included many steps leading to the best possible branding which should be a corner stone of the cluster, increasing its competitiveness. The sub-objectives were to: 1) Generally map and analyse the situation of research and development promotion in the Czech Republic and abroad; 2) Identify possibilities of research and development promotion; 3) Identify and describe target audiences; 4) Map the situation of R&D clusters in the Czech Republic and abroad and 5) Apply recommendations on a study case. In order to fulfil the set goal, first, the detailed literature survey including all the relevant topics was carried out.

According to the participants of the qualitative research, the promotion of research and development in the Czech Republic is low and badly accessible for the public. The author of this thesis generally identified the activities provided by various organisations which are helping with promotion of research results, unfortunately, none of these organisations have direct impact on the research promotion in the Czech Republic. Activities promoting science in the Czech Republic are mainly focused on children and there is a niche in educating adults about research results. Based on the available information a ground of communication strategy for the cluster Stroke Brno was created and is presented in chapter 4.3.5. Communication Tools.

Concerning the situation of clusters, according to the available data clusters can be seen as a new, progressive form of cooperation with a great potential for economy. In the Czech Republic clusters have quite short history, first of them was established around 2003, nevertheless during the last few years they have been getting to the centre of attention, including more financial support opportunities and support from the city and regional structures. This trend comes obviously from the USA, Western European and Scandinavian countries.

In the Czech Republic there are currently 50 active clusters/cluster organisations. The interesting thing is that despite relatively high number, none of them is focused on any medical research field. Similar situation can be found within Europe and across the world – except the German Competence Network Stroke there exist no stroke clusters at all (registered in any official cluster observatory and/or having website).

The greatest benefit of the thesis is setting a real research cluster and its brand strategy. The Stroke Brno cluster was formed from a natural cooperation of four Brno research institutions focusing on stroke research. Within this thesis first the cluster key assets analysis was done including SWOT analysis uncovering deep cluster potentialities, examination of territorial context and analysis of target groups' view and expectations. Next, positioning covering cluster goals, mission, vision, core values and brand architecture was defined. Based on all these pieces of information two positioning strategies were chosen. The third part of cluster brand building was the implementation of branding tools, which means the brand identity elements and communication tools.

In respect of all the previous found information (literature survey, attendance on several workshops, provided cluster analysis and cluster mapping) and in co-operation with a graphic designer a draft of brand identity elements was designed. This draft consequently entered the phase of evaluation by the target audience. Totally 15 respondents (Czech and foreigners) from the target groups of *researches* and *students* were asked to participate in qualitative research. Apart from evaluation of the cluster's logo, web presentation, used font and colours, name and slogan, respondents also generally talked about research, its pros and cons, motivation to do research, level of research results promotion and cluster as a form of cooperation. The results are: 1) functional website of the Stroke Brno cluster www.strokebrno.com, 2) finalized brand identity elements, 3) set communication strategy for the next year and 4) formulated concrete points and goals which should be fulfilled for a successful cluster development are the results.

In the future the Stroke Brno cluster brand should be able to attract top researchers, ambitious students, business and academic partners. This fact should lead to the increase of competitiveness and chances to bigger and more interesting research projects and the significant increase in gaining financial sources and support of relevant authorities. A proper brand and subsequent brand management could also increase the recognition of research field, seat (city or region) of cluster and make the development of cluster members (people and institutions) easier.

Starting a cooperation with the National Cluster Association, the formulation of proper marketing strategy including communication strategy and continuous brand management were identified as the most important goals for 2017. Next, the social media channels like LinkedIn, Facebook should be implemented and management should consider promotion of cluster at European Cluster Conference. The important point of the strategy is gaining municipalities' support. In the following years the cluster should consider setting a legal form in order to reach the most interesting grant opportunities. Then the Stroke Brno cluster could fully use grant possibilities e.g. from Operational Programme Enterprise and Innovation for Competitiveness, Technology Agency of the Czech Republic or Horizon 2020. Within 2 or 3 years the cluster could be also enlarged to a cluster organisation uniting various organisations and projects dealing with stroke on different levels. Among new participants there could be non-profit organisations, firms, campaigns/projects, universities or municipalities.

Based on the cluster branding strategy creation, several general recommendations can be derived:

- 1) involve the target group in the process of branding which will set their initial relationship with the cluster,
- 2) do something extra besides the literature survey. This for example means to attend specialized branding courses and workshops, consult more complex areas with experts and ask your colleagues about their opinion of less complicated parts or to read specialized blogs about brand design. All these things will make a good use in the end,
- 3) set a realistic timeframe with a sufficient time reserve. Especially the brand design requires at least 4 months – including constant revision,

- modification, creation of the text and incorporation of comments of the target audience. Rash work will have to be reworked sooner or later,
- 4) create at least 3 logo versions, get a feedback from target audience and take their comments into account. It is crucial to hear opinion of the others, when we are stuck in our own images,
 - 5) take your time with the name of your cluster – take into account not only your field, your location, target group, but also political and other aspects. Your name can open the door to funding, support of authorities and to world,
 - 6) be interested in the strategy of the region you are located (local, national, international...) and correspond your branding with such strategy – if your branding fits with local strategy, it will help you to be more visible, to use channels the region offers, to be officially involved in the strategy and more supported,
 - 7) inform all stakeholders in advance you want to create a research cluster and discuss the brand with them in advance – if your university, your boss, your colleagues, the local authorities, different supporting organization are involved, they will feel on board and will not go against your idea,
 - 8) cooperate with students and young people, they are enthusiastic to create new things and will help you on the volunteer basis.

In conclusion, all given objectives have been fulfilled and the thesis has a great practical impact. Apart from the fact of establishing real research cluster and creating its brand, the thesis can also serve as a set of recommendations for other newly forming clusters or other types of networks and their branding. It also presents a unique overview of current cluster situation in the Czech Republic and in Europe with the overlap to other continents. Finally, the result of qualitative research has shown interesting opinions to current research promotion and the need of institutions to share know-how, facilities and other tools through the cluster cooperation.

7 References

- AAKER, David A., Erich JOACHIMSTHALER., *Brand leadership*. New York: Free Press, 2011. ISBN 9781439172919.
- About us. *VRI - Veterinary Research Institute* [online]. Brno, 2014 [cit. 2016-11-17]. Retrieved from: https://www.vri.cz/en/about_us
- ABRHÁM, Josef. *Klustry jako nástroj regionální ekonomické konkurenceschopnosti: (případové studie České republiky a zemí Evropské unie)*. Praha: MAC, 2009. ISBN 978-80-86783-38-3.
- Act No. 130/2002 Coll., on the support for research and development from public means and on the change of some relevant acts. In: ASPI [legal information system]. Wolters Kluwer CR [quoting: 18. 11. 2016].
- AIREY, David. *Logo: nápad, návrh, realizace*. Brno: Computer Press, 2010. ISBN 978-80-251-3151-0.
- ANDERSSON, M. and EKMAN, P., "The function and characteristics of cluster branding", (2012), conference paper presented at the International Place Branding Conference, January 20-21, 2012, Utrecht, Netherlands.
- ANDERSSON, M., SOLITANDER, A. – EKMAN, P. *Cluster Branding and Marketing: a Handbook on Cluster Brand Management* [online]. 2013 [cit. 2016-06-15]. Retrieved from: http://www.innovationclusters.no/globalassets/filer/nic/verktoy-filer/tendesor_cmb_handbook-090113-sheets.pdf
- ANDERSSON, T. *The cluster policies whitebook*. Malmö: International Organisation for Knowledge Economy and Enterprise Development (IKED) [online]. Malmö, 2004 [cit. 2016-06-15]. ISBN 9185281034. Retrieved from: http://www.clusterpolisees3.eu/resources/cms/documents/2004_The_Cluster_Policies_Whitebook.pdf
- Asevinova. In: *Research Driven Clusters in Europe: Overview* [online]. European Commission, 2012 [cit. 2016-07-1]. Retrieved form: <http://www.asevinova.it/>
- ASHWORTH, G. J. a Mihalis. KAVARATZIS. *Towards effective place brand management: branding European cities and regions*. Northampton, MA: Edward Elgar, c2010. ISBN 9781848442429.
- Australian Cluster Observatory* [online]. Australia: The University of Adelaide, c2014-2016 [cit. 2016-06-20]. Retrieved from: <http://www.clusterobservatory.com.au/index.html>
- Basic information about the Institute. *Institute of Biophysics AS CR* [online]. Brno, 2016 [cit. 2016-11-17]. Retrieved from: <http://ibp.cz/en/about-ibp/basic-information/>

- Basic information. *ISI Brno* [online]. c2001-2016 [cit. 2016-11-17]. Retrieved from: <https://www.isibrno.cz/index.php>
- BOESSO, Ivan, Maria Sole D’ORAZIO and Alessandra TORRESAN. *Supporting Cluster Marketing and Branding* [online]. 2012 [cit. 2016-06-20]. Retrieved from: <http://abclusters.org/wp-content/uploads/2013/12/Cluster-marketing-and-branding.pdf>
- BRADLEY, N. *Marketing research: tools & techniques*. Oxford: Oxford University Press, 2007. 531 p. ISBN 978-0-19-928196-1.
- Brand Architecture Strategy Guide. *Branding Strategy Insider* [online]. 2014 [cit. 2016-12-02]. Retrieved from: <http://www.brandingstrategyinsider.com/2014/01/brand-architecture-strategy-guide.html#.WEFWfVynZOY>
- Brand Architecture: A Foundation for Managing Multiple Brands. *Independent, Full-Service Advertising Agency* [online]. 2016 [cit. 2016-12-07]. Retrieved from: <http://www.teamhfa.com/news/insights/brand-architecture-a-foundation-for-managing-multiple-brands/>
- Brand Identity - Definition and Concept. *Management Study Guide* [online]. 2016a [cit. 2016-09-12]. Retrieved from: <http://www.managementstudyguide.com/brand-identity.htm>
- Brand Image. *Management Study Guide* [online]. 2016b [cit. 2016-12-02]. Retrieved from: <http://www.managementstudyguide.com/brand-image.htm>
- Branding - Brand Identity Toronto. *Supreme Marketing Solutions* [online]. Toronto, 2015 [cit. 2016-12-09]. Retrieved from: <http://supremetoronto.com/toronto-marketing/branding-brand-identity/>
- Bringing your Brand to Life. *SlideShare* [online]. 2013 [cit. 2016-12-09]. Retrieved from: <http://www.slideshare.net/CiscoChannels/partner-plus-brand-basics-session-3-workbook>
- BRINKMANN, Svend. *Qualitative interviewing*. New York: Oxford University Press, c2013. Series in understanding qualitative research. ISBN 978-0-19-986139-2.
- BŘSKOVÁ, Pavla. *The importance of clusters for regional development and the success of CREA Hydro&Energy Cluster*. Lecture. Brno. 7. 12. 2016.
- Building your Brand to Market your product. *Top Brands Now: Brands that matters* [online]. 2016 [cit. 2016-12-14]. Retrieved from: <http://www.topbrandsnow.com/2016/09/26/building-your-brand-to-market-your-product/>
- BURNS, Alvin C. a Ronald F. BUSH. *Marketing research*. 7th ed. Boston: Pearson, c2014. ISBN 0133074676.

- Canadian Cluster Data: Institute for Competitiveness & Prosperity* [online]. Toronto: Institute for Competitiveness & Prosperity, 2016 [cit. 2016-06-20]. Retrieved from: <http://www.competeprosper.ca/clusters/data>
- CARSON, David. *Qualitative marketing research*. London: SAGE, 2001. ISBN 978-0-7619-6366-0.
- Catalogue of Members 2016* [online]. Ostrava: National Cluster Association, 2016 [cit. 2016-12-09]. Retrieved from: <http://www.nca.cz/upload/catalogue-of-members-2016.pdf>
- CHRISTENSEN, Thomas A., Thomas LÄMMER-GAMP a Gerd Maier ZU KÖCKER. *Let's Make a Perfect Cluster Policy and Cluster Programme: Smart Recommendations for Policy Makers* [online]. Danish Ministry of Science, Technology and Innovation/Competence Networks Germany. Berlin/Copenhagen, 2012 [cit. 2016-09-28]. Retrieved from: http://www.cluster-analysis.org/downloads/Clusters_web_singlepage_06092012.pdf. ISBN 978-87-92776-53-2.
- Cluster Observatory India: A Project of MSME Foundation* [online]. New Delhi [cit. 2016-06-20]. Retrieved from: <http://www.clusterobservatory.in/index.php>
- Cluster Policies* [online]. OECD, 2010 [cit. 2016-09-30]. Retrieved from: <http://www.oecd.org/innovation/policyplatform/48137710.pdf>
- COMMISSION, European. *Regional clusters in Europe*. Luxembourg: Office for Official Publ. of the Europ. Communities, 2002. ISBN 9289435607.
- Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards world-class clusters in the European Union: {SEC(2008) 2637}. *EUR-Lex* [online]. Brussel, 2008 [cit. 2016-9-11]. Retrieved from: [http://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:52008DC0652R\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:52008DC0652R(01)&from=EN)
- Create your Brand. *SlideShare* [online]. 2015 [cit. 2016-12-09]. Retrieved from: <http://www.slideshare.net/javedm/create-your-brand-marketing-101>
- CZECH INVEST. *Průvodce klastrem* [online]. 2007 [cit. 2016-09-30]. Retrieved from: <http://www.czechinvest.org/data/files/pruvodce-klastrem-63.pdf>
- DAWSON, Catherine. *Practical research methods: a user-friendly guide to mastering research techniques and projects*. 3rd ed. Oxford: How To Books, 2002. ISBN 9781857038293.
- DUNDELOVÁ, Jana a Blahoslav ROZBOŘIL. *Social psychology for students of management and economics*. Issue 1st. Brno: Mendel University, 2013. ISBN 978-80-7375-714-4.
- European Cluster Observatory* [online]. Stockholm, 2016 [cit. 2016-06]. Retrieved from: <http://www.clusterobservatory.eu>

- European Commission. *Research & Innovations* [online]. Belgium, 2015 [cit. 2016-07-1]. Retrieved from: http://ec.europa.eu/index_en.htm
- Global Cluster Observatory* [online]. Stockholm, c2012-2014 [cit. 2016-20-06]. Retrieved from: <http://www.clusterobservatory.org>
- HAIR, Joseph F., David J. ORTINAU a Robert P. BUSH. *Marketing research: a practical approach for the new millennium*. Boston: Irwin, c2000. The Irwin/McGraw-Hill series in marketing. ISBN 0-256-19555-2.
- HEALEY, Matthew. *What is branding?*. Mies: RotoVision, c2008. ISBN 978-2-940361-45-8.
- HOMMEROVÁ, Dita. *Branding neziskových organizací*. Žatec: Ohře media, 2015. ISBN 978-80-905122-8-3.
- HOPE GROUP s.r.o. *Evaluaace popularizace výzkumu a vývoje: Závěrečná zpráva* [online]. Praha, 2016 [cit. 2017-01-03]. Retrieved from: www.opvk.cz/filemanager/files/file.php?file=61160
- HORŇÁKOVÁ, Michaela. *Copywriting: podrobný průvodce tvorbou textů, které prodávají*. Brno: Computer Press, 2011. ISBN 978-80-251-3269-2.
- How to Create a Website that Maximizes Your Brand Identity. *Wix Blog* [online]. c2006-2016 [cit. 2016-09-14]. Retrieved from: <http://www.wix.com/blog/2013/02/create-a-website-that-maximizes-your-brand-identity/>
- International Research Promotion* [online]. 2017 [cit. 2017-01-03]. Retrieved from: <http://www.researchpromotion.com/>
- International Research Promotion Council* [online]. 2017 [cit. 2017-01-03]. Retrieved from: <http://www.irpc.org>
- JETRO: Japan External Trade Organization. *Industrial Cluster Information* [online]. Japan, c1995-2016 [cit. 2016-06-20]. Retrieved from: <https://www.jetro.go.jp/en/>
- JÍLKOVÁ, Eva. *Ekonomie vědy a výzkumu*. Olomouc: Moravská vysoká škola Olomouc, 2010. ISBN 978-80-87240-27-4.
- KAFKA, Ondřej a Michal KOTYZA. *Logo & corporate identity*. 3., přeprac. vyd. Praha: Kafka design, c2014. ISBN 978-80-260-6771-9.
- KELLER, Kevin Lane. *Strategické řízení značky*. Praha: Grada, 2007. Expert (Grada). ISBN 978-80-247-1481-3.
- Klastry. *CzechInvest* [online]. 1994-2016a [cit. 2016-12-07]. Retrieved from: <http://www.czechinvest.org/klastry>
- KOTLER, Philip a Kevin Lane KELLER. *Marketing management*. Praha: Grada, 2007. ISBN 978-80-247-1359-5.

- KRUEGER, Richard A., *Analyzing & reporting focus group results*. [Nachdr.]. Thousand Oaks, Calif. [u.a.]: SAGE, 1999a. ISBN 0761908161.
- KRUEGER, Richard A., *Developing questions for focus groups*. [Nachdr.]. Thousand Oaks, [u.a.]: SAGE, 1999b. ISBN 9780761908197.
- LÄMMER-GAMP, Thomas, Helmut KERGEL a Michael NERGER. *Cluster organisations in Europe – insights from Bronze and Gold Label assessments* [online]. Berlin, 2014 [cit. 2016-06-15]. Retrieved from: http://www.cluster-analysis.org/downloads/InputPaper_COMWorkshopSeptember_published_140918.pdf
- LÄMMER-GAMP; Thomas. GERD MEIER ZU KOCKER; THOMAS ALSLEV CHRISTENSEN. *Clusters are individuals - creating economic growth through cluster policies for cluster management excellence*. 2012. Kbh.: Forsknings- og Innovationsstyrelsen. ISBN 9788792776228.
- LINDQVIST, Göran, Christian KETELS a Örjan SÖLVELL. *The Cluster Initiative Greenbook 2.0*. 3rd ed. Stockholm: Ivory Tower Publishers [online]. 2013 [cit. 2016-06-14]. Retrieved from: <http://www.czechinvest.org/data/files/the-cluster-initiative-greenbook-3916-cz.pdf>. ISBN 978-91-974783-5-9.
- MALHOTRA, Naresh K., David F. BIRKS. *Marketing research: an applied approach*. 2nd European ed. Harlow: Financial Times /Prentice Hall, c2003. ISBN 0273657445.
- NEUENDORF, Kimberly A. *The content analysis guidebook*. Thousand Oaks, Calif.: Sage Publications, c2002. ISBN 0761919783.
- NEUMAN, Lawrence W. *Social research methods: qualitative and quantitative approaches*. 7th ed. Boston, Mass: Allyn and Bacon, 2010. ISBN 9780205615964.
- OPPIK.cz - Spolupráce. *Informační portál o dotacích pro podnikatele: OPPIK Operační program Podnikání a inovace pro konkurenceschopnost* [online]. eNovation, 2016 [cit. 2016-09-28]. Retrieved from: <http://www.oppik.cz/dotacni-programy/spoluprace>
- PAVELKOVÁ, Drahomíra. *Klastry a jejich vliv na výkonnost firem*. Praha: Grada, 2009. ISBN 978-80-247-2689-2.
- PAVLÍČKOVÁ, Renáta. *Marketing ve vědě a výzkumu*. Olomouc: Moravská vysoká škola Olomouc, 2010. ISBN 978-80-87240-22-9.
- PORTER, Michael E. *On competition*. Boston, MA: Harvard Business School Publishing, c1998. ISBN 0875847951.
- PORTUGAL FERREIRA, Manuel, Fernando RIBEIRO SERRA, Benny KRAMER COSTA, Emerson A MACCARI and Hergos RITOR COUTO. *Impact of the Types of Clusters on the Innovation Output and the Appropriation of Rents from Innovation* [online]. 2012 [cit. 2016-12-07]. ISBN 10.4067/S0718-

27242012000400006. Retrieved from: http://www.scielo.cl/scielo.php?script=sci_arttext
- Přínosy klastrů. *Czech Invest* [online]. Praha, 1994-2016b [cit. 2016-09-27]. Retrieved from: <http://www.czechinvest.org/prinosy-klastru>
- SALEM, Lionel. *Reklamní slogany: nejlepší světové slogany a příběhy stojící za jejich vznikem*. Brno: BizBooks, 2013. ISBN 978-80-265-0064-3.
- SÁLOVÁ, Anna, Zuzana VESELÁ, Jana ŠUPOLÍKOVÁ, Lucie JEBAVÁ a Jiří VIKTORA. *Copywriting: pište texty, které prodávají*. Brno: Computer Press, 2015. ISBN 978-80-251-4589-0.
- SKOKAN, Karel. *Konkurenceschopnost, inovace a klastry v regionálním rozvoji*. Ostrava: Repronis, 2004. ISBN 80-7329-059-6.
- TAYLOR, David. *Brand management: budování značky od vize k cíli*. Brno: Computer Press, 2007. Business books (Computer Press). ISBN 978-80-251-1818-4.
- The European Secretariat for Cluster Analysis* [online]. Praha, 2016 [cit. 2016-06-15]. Retrieved from: <http://www.cluster-analysis.org/>
- Typy klastrů. *Czech Invest* [online]. Praha, 1994-2016c [cit. 2016-06-15]. Retrieved from: <http://www.czechinvest.org/typy-klastru>
- U.S. Cluster Mapping: Mapping a nation of regional clusters* [online]. Harvard Business School, 2014 [cit. 2016-06]. Retrieved from: <http://www.clustermapping.us/>
- Understanding Brand and Brand Identity. *Brand identity* [online]. 2014 [cit. 2016-12-09]. Retrieved from: <http://designandi.co.uk/brand-design-articles/understanding-brand-identity/>
- VOLNÝ, Ondřej, Hana POKORNÁ and Robert MIKULÍK. *Průvodce cévní mozkovou příhodou pro pacienta a rodinu*. Brno: Fakultní nemocnice u sv. Anny v Brně, 2016. ISBN 978-80-906616-0-8.
- Výzkum a vývoj ČSÚ. *Český statistický úřad* [online]. 3016 [cit. 2016-11-18]. Retrieved from: https://www.czso.cz/csu/czso/statistika_vyzkumu_a_vyvoje
- What are Industrial Clusters?* [online]. San Diego, 2001 [cit. 2016-07-1]. Retrieved from: http://www.sandag.org/rta/transfer/industrial_clusters.pdf
- What is Brand Awareness? *Management Study Guide* [online]. 2016c [cit. 2016-12-02]. Retrieved from: <http://www.managementstudyguide.com/brand-awareness.htm>
- WHEELER, A. *Designing brand identity: an essential guide for the whole branding team*. 3. ed. Hoboken, New Jersey: John Wiley & Sons, 2009. 310 s. ISBN 978-0-470-40142-2.
- Who we are. *FNUSA-ICRC* [online]. Brno, 2016 [cit. 2016-11-17]. Retrieved from: <https://www.fnusa-icrc.org/en/about-us/who-we-are.html>

WOOLF. *The Meaning of Translational Research and Why It Matters* [online]. In: . s. -
[cit. 2016-11-18]. DOI: 10.1001/jama.2007.26. ISBN 10.1001/jama.2007.26.
Retrieved from:
<http://jama.jamanetwork.com/article.aspx?doi=10.1001/jama.2007.26>

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Attachments

A Questioning Route

Introductory points:

- expressing my thanks to the participants for their time
- introducing myself
- asking for an oral permission with audio/visual recording
- introducing the purpose of the focus group
- defining the term *cluster*

Questions for group No. 1 – Students:

1. Tell us your name, what are you studying and what do you enjoy apart from studying?
2. Are you interested in research itself? How exactly?
FOLLOW UP:
2. a) Which research field fascinates you most? And how is that?
3. Are you motivated to do research? Please elaborate.
4. What would motivate you to work at research?
PROBES
 - money
 - prestige
 - possibility to work in a well-known institution
 - participate in discoveries
 - other aspectsFOLLOW UP:
6. a) Which of these mentioned would be the greatest motivation? Why?
5. What influences you in choosing your specialization?
PROBES
 - perspective field
 - idol/mentor
 - CR is good at this research field
 - money
 - other aspects
6. What are in your opinion generally strengths of current research in the Czech Republic?
7. Do you perceive any problems of current research?
8. Is it attractive for you that all kinds of research you would do within the cluster have an impact on the patient?

9. Do you think that research promotion is important nowadays? Why?
10. Would it be attractive for you to work in a well-known group with good research results?
FOLLOW UP:
a) What would be the motivation?
PROBES
- meeting top researchers
- work in multidisciplinary team
11. PRESENTING CLUSTER'S NAME, MISSION, VISION AND SLOGAN SEPARATELY.
11. a) Do you think the mission/vision/slogan is correctly formulated?
11. b) Does it catch the cluster essence?
11. c) Which way would you reformulate it?
12. PRESENTING THE WEB SITE with an introductory speech what is included.
12. a) Please use several adjective to describe what the web page evokes in you?

Now, I will hand you out papers with rating table. Please rank the web according to given criteria.

Rating table for web page attributes:

WEB PAGE RATING, please use numbers from 0 (worst) to 5 (best)	
Design	
Colour scheme	
Clarity	
Information content	
Representativeness	

Then elaboration of rating.

13. PRESENTING SEVERAL OPTIONS OF LOGOS AT ONCE
13. a) Which logo do you like most and why?
13. b) What does the logo no. 1, 2, ... and 6 evoke in you?
14. I would like to summarize our conversation.
GIVE A SUMMARY
Did I correctly describe what was said?
15. Is there anything else you would like to add?

Questions for group No. 2 – the Stroke Brno Members (Researchers):

1. Tell us your name and describe your work position, daily work tasks and what do you enjoy apart from being researcher?
2. Describe problems of your work position which you have to deal with?
PROBES:
 - Can you give me a concrete example? (administrative support, funding, lack of money, lack of facilities)
 - How do you feel about that?
3. What brings you cooperation with several research partners?
FOLLOW UP:
 3. a) How do you evaluate it?
 3. b) Benefits/Negatives?
4. Do you think that research promotion is important nowadays? Why?
5. Do you feel your research results are presented sufficiently?
FOLLOW UP
 5. a) Are you satisfied with the way in which they are presented?
6. Is your work regionally and internationally recognizable?
7. How can the cluster be useful for you? Which of your needs can be covered/solved by a cluster?
8. PRESENTING CLUSTER'S NAME, MISSION, VISION AND SLOGAN SEPARATELY.
 8. a) Do you think the mission/vision/slogan is correctly formulated?
 8. b) Does it catch the cluster essence?
 8. c) Which way would you reformulate it?
9. PRESENTING THE WEB SITE with an introductory speech what is included.
 19. a) Please use several adjectives to describe what the web page evokes in you?

Now, I will hand you out papers with rating table. Please rank the web according to given criteria.

Rating table for web page attributes:

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Design	
Colour scheme	
Clarity	
Information content	
Representativeness	

Then elaboration of rating.

10. PRESENTING SEVERAL OPTIONS OF LOGOS AT ONCE

- 10. a) Which logo do you like the most and why?
- 10. b) What does the logo no. 1, 2, ... and 6 evokes in you?

11. I would like to summarize our conversation.

GIVE A SUMMARY

Did I correctly describe what was said?

12. Is there anything else you would like to add?

B Single web pages of the cluster

Homepage



The Catholic Church doesn't trust women with their own bodies and medical decisions. Why would anyone expect the Church to trust women to become decision-making leaders in any way, shape or form?

LET'S JOIN US

WE WANT TO WORK WITH YOU

StanBio uses cutting edge technology and a very useful tool for easy integration from web projects.

HELP US TO FIGHT WITH STROKE

It's awesome tool for doctors and developers. The looks are well crafted & very easy to integrate into your projects.

ARE YOU INTERESTED IN OUR RESEARCH?

With tools like StanBio help manage a custom list of items better than the year. It's a 20-30% increase.

LET'S TELL THE WORLD ABOUT US

The StanBio user-friendly app with the latest and greatest for those projects. It's been just what you don't have to be an SVG wizard to start using StanBio.

AMAZING STORIES



Despite being on two completely different teams and having a variety of teammates and competitors, the 12-time All Star has joined past the Eastern Conference into the NBA Finals for the past six years.

LET'S JOIN US

LOOK WHAT WE CAN DO

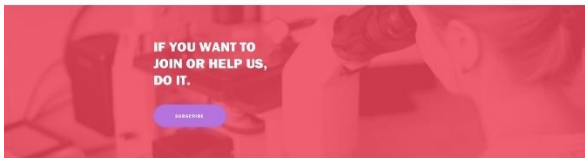
The Catholic Church doesn't trust women with their own bodies and medical decisions. Why would anyone expect the Church to trust women to become decision-making leaders in any way, shape or form?

...



ARE YOU INTERESTED IN OUR RESEARCH?
DON'T MISS OUR NEWS

YOUR EMAIL



About us web page (because of its length cut in half)

THE UNIVERSITY OF CHICHESTER

HOME ABOUT US PARTNERSHIP RESEARCH LEARN OUR LIFE WORK CONTACT US

MISSION

“ We are connecting experts from different fields to perform joint research leading to improving stroke prevention, diagnosis and treatment. ”

VISION

“ Everybody stays healthy after stroke. ”

WHO WE ARE?

Imagine you're that patient with cancer. You really want health insurance, and you're probably willing to pay a lot to get it.

That's the law's carrot.

Now imagine you're a young health professional without any health insurance. Your employer might not have health insurance in your area. You might not be able to afford to buy health insurance. If you can't afford to buy health insurance, you're probably not going to get it.

Learn from yesterday

The health law attempts to broaden the pool by offering financial assistance to middle class people. By offering financial assistance to the middle class, the law is making it more attractive for middle class people to get health insurance. That's the law's carrot.

WE WANT TO WORK WITH YOU

AMBITIOUS SKILLED

LET'S MEET

OUR GOALS

The health law attempts to broaden the pool. By offering financial assistance to middle class people, the law is making it more attractive for middle class people to get health insurance. That's the law's carrot. The law says that if you don't buy insurance, and you could have offered it, you have to buy it. That's the law's carrot to encourage people from getting the system.

WHO'S IN?

Imagine you're that patient with cancer. You really want health insurance, and you're probably willing to pay a lot to get it.

INSTITUTE OF BIOPHYSICS

Ph.D. Karel Novák
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Sophie Williams
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Alberta Fields
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

INSTITUTE OF SCIENTIFIC INSTRUMENTS

Leonard Harris
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Zachary Atkins
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Paul Mack
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

VETERINARY RESEARCH INSTITUTE

Lenora Bailey
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Patrick Gibson
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

INTERNATIONAL CLINICAL RESEARCH CENTER

Michael Hopkins
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Lettie Mendez
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Sean Reynolds
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Vincent McCarthy
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

SUPPORT

Elva Ramsey
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Robert Thomas
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Howard Wheeler
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

Brett Brewer
I work from yesterday, but for today, hope for tomorrow. The important thing is not to stop questioning.”

IF YOU WANT TO JOIN OR HELP US, DO IT.

JOIN US

HOME ABOUT US PARTNERSHIP RESEARCH LEARN OUR LIFE WORK CONTACT US

THE UNIVERSITY OF CHICHESTER

Institutions

HOME ABOUT US RESEARCH NEWS JOBS US CONTACT US

FOUR INSTITUTIONS AND ONE GOAL.

"We connect the best."

- 1 MIT** MIT is a world leader in the field of brain research. We have the resources and expertise to help you advance your research.
- 2 UCAS** UCAS is a world leader in the field of brain research. We have the resources and expertise to help you advance your research.
- 3 UN** UN is a world leader in the field of brain research. We have the resources and expertise to help you advance your research.
- 4 INFLUX KPC** INFLUX KPC is a world leader in the field of brain research. We have the resources and expertise to help you advance your research.

WHEN YOU TAKE SLOW

INSTITUTE OF BIOPHYSICS

When you take slow, steady breaths, your brain gets the message that all is well and activates the parasympathetic response, said Dr. Brown.



After 12 weeks of daily yoga and coherent breathing, the subjects' depressive symptoms significantly decreased and their levels of gamma-aminobutyric acid, a brain chemical that has calming and anxiolytic effects, had increased. The research was presented in May at the International Congress on Integrative Medicine and Health in Las Vegas. After the study was over and discussed in a roundtable on the Science and Religion panel, the subjects were given a questionnaire to better test the intervention.

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FACILITIES

Below Chamberlain, it could be hard to try your own insurance. If you already have a health problem like cancer, the insurance company might even disqualify you from getting coverage. The good news is that you can get a health plan that covers you, but not your cancer care. Or it might have offered you a comprehensive policy, but at a very high price that you can't really have paid. The only way to avoid this is to get a health plan that covers you, but not your cancer care. Or it might have offered you a comprehensive policy, but at a very high price that you can't really have paid. The only way to avoid this is to get a health plan that covers you, but not your cancer care.

IF YOU WANT TO JOIN OR HELP US, DO IT.

RESEARCH

HOME ABOUT US RESEARCH NEWS JOBS US CONTACT US



Research

HOME ABOUT US RESEARCH NEWS JOBS US CONTACT US

RESEARCH

We fight for healthy life after stroke.

PROJECTS RESULTS

PROJECTS

Stroke Rates Rising in Younger People

Stroke rates have been increasing in older people, but now they're rising in younger people, too. Read more.

What Not to Say to a Cancer Patient

Trying to comfort a patient by saying the wrong things can do more harm than good. Read more.

When the Picky Eater Is a Grown-Up

Some adults have very picky eating habits, and it can be a sign of a health problem. Read more.

Why Gunshot Victims

The incidence of gunshot wounds has increased in the United States, and it's becoming a leading cause of death. Read more.

RESULTS

PUBLICATIONS

Virulence factors and resistance to antimicrobials in *Listeria monocytogenes* serotype 1/2c isolated from food
Soltová E, Pecháček R, Karamanova B
Journal of Applied Microbiology 93: 2086-2092 (2012)

Epidemiological survey of enteric viruses in wild boars in the Czech Republic: First evidence of close relationship between wild boar and human rotavirus A strains
Soltová E, Pecháček R, Karamanova B
Veterinary Microbiology 93: 2086-2092 (2012)

Transcriptomic and metabolic responses of *Staphylococcus aureus* in mixed culture with *Lactobacillus plantarum*, *Streptococcus thermophilus* and *Enterococcus durans* in milk
Pecháček R, Karamanova B, Karamanova E, Karamanova S, Karamanova R
Journal of Applied Microbiology and Biotechnology 93: 2086-2092 (2012)

PRESENTS

Virulence factors and resistance to antimicrobials in *Listeria monocytogenes* serotype 1/2c isolated from food
Soltová E, Pecháček R, Karamanova B
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CONFERENCES

6th International Conference on Innovative Trends in Science, Engineering and Management 2016
Stroke rates have been increasing in older people over the past 20 years — but how do you prevent it from getting worse?
20 January 2014
Doha, Qatar (Arabia Emirate)

3rd International conference on Advance research Methods in Management, Business, Social Sciences and Humanities
Stroke rates have been increasing in older people over the past 20 years — but how do you prevent it from getting worse?
19 October 2012
Ljubljana, Slovenia

International Conference on Research & Innovation in Food, Agriculture and Biological Sciences
Stroke rates have been increasing in older people over the past 20 years — but how do you prevent it from getting worse?
14 February 2013
Pinar, Thailand

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RESEARCH

HOME ABOUT US RESEARCH NEWS JOBS US CONTACT US



News

News single page

STICKEBRO 0


HOME ABOUT US SERVICES RESEARCH NEWS JOIN US CONTACT US

THE LATEST NEWS

26.04.2018

Who First Farmed Potatoes? Archaeologists in Andes Find New Evidence

History lessons previously about the first use of the starchy food ended here. According to archaeologists, there was first likely planting with tubers, harvesting and prepared for use. Potatoes were then a common crop, possibly one of the first crops with tubers, says the report. [Read more](#)



07.08.2016


In Canada, a Direct Link Between Fracking and Earthquakes

In the debate over fracking of oil and gas wells, opponents often cite the risk that the process can set off nearby earthquakes. But scientists say that in the United States, fracking causes earthquakes and is dangerous. [Read more](#)

04.08.2016

Drilling into the Chicxulub Crater, Ground Zero of the Dinosaur Extinction

Some 66 million years ago, an asteroid struck the Yucatan Peninsula in Mexico, triggering the extinction event that obliterated the dinosaurs and nearly wiped out all life on Earth. Curious with the same energy as 100 nuclear bombs, and still buried a 100-mile-wide scar known today as the Chicxulub crater. [Read more](#)



18.11.2016

Your A.T.M. Is Covered in Microbes, but Mostly Harmless

Scientists in New York City used bacterial swabs of 500 A.T.M.s at banks, hotels, and other places across Manhattan, Brooklyn and Queens. They found that 7.8 million germs covered in microbes from human skin, similar to the ones found in bathrooms, on airplanes and on telephones. [Read more](#)


News 1 2 3 4 5 Older

STICKEBRO 0

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News Older

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[SUBSCRIBE](#)

IF YOU WANT TO JOIN OR HELP US, DO IT.

[SUBSCRIBE](#)

C Respondens' answers

Evaluation of mission and vision

Karolína: *"The mission is clear, quick and precise."*

Tereza: *"I agree, it involves everything important...that it involves more institutions, it's about stroke and that it's focused on diagnosis and treatment. There's not much space for creativity."*

Ondřej: *"The vision is nice, but a bit out of reality."*

Lucie: *"The vision is too optimistic."*

Václav: *"But why do think it's not realistic? We managed the heart attack so well that we are nearly the best in world. So this vision could be once true as well."*

Tereza: *"Concerning the vision I'd prefer something with improving quality of life after stroke."*

Evaluation of clustre's name

Václav: *"I like it very much and finally something is directly connected with the city of Brno!"*

Albert: *"I really like it. It's rememberable."*

Tereza: *"It reminds me of Žít Brno¹⁸, but I don't know if it's good or bad."*

Evaluating the logo

Jiří: *"As for me, number 3 and 4 are the best."*

Peter: *"Number 1 is not bad, I also like logos 3 and 4, but I miss veins here."*

Jana: *"Number 1 looks rather like a tree, it's like a symbol of an ecological organization... Number 3 is the best."*

Jan: *"For me it is 5, 3, 4, 6, 2, 1. I think that the brain is a better symbol than veins, but I'm not sure if people imagine the brain like this. Don't do they know it rather from profile?"*

¹⁸ Žít Brno is a political movement

Moderator: *"And how do you like logo number 6?"*

Andrea: *"I don't think the test-tube is so much connected with our thing. The central symbol should be definitely the brain."*

Tereza: *"Number 2 reminds me of the Big Bang Theory and number 6 absolutely doesn't catch the essence of the project. In my opinion the best is number 3 and 4."*

Lucie: *"Yep, logo 2 is like a space...like a confused researcher."*

Lucie: *"The first logo is like some eco-thing – like a tree in head... I like the most number 5 because it's dynamic."*

Tereza: *"But it looks like two logos in one."*

Václav: *"Logo 3 is totally exclusive, I'd be happy to place it on a T-shirt...and the text below is also absolutely great."*

Lucie: *"But the notch in the brain irritates me..."*

Václav: *"No, the notch is cool. Without the notch the logo is too boring"*

Kathrina: *"As for me, logo 1, as it is simple and different from other logos I have seen."*

Andreea: *"The number 3 is nicely done, clear and eye catchy. I like this one the most."*

Evaluation of website

Jana: *"Oh, there is just really too much of pink. I don't mind pink in some extent, but this is too much. What's more it's a conflict color, I mean poisonous, someone could really hate it. And the pink text on the pink background is terrible, I can't read what is stated here."*

Jiří: *"I think you should keep it simple, as few colors as possible. For example, the combination of grey and white is not bad and pink can just stress important things."*

Lucie: *"I find it very clear, I like the pictures, but I don't like the combination of pink and purple. It's like something for woman, connected with gynecology."*

Albert: *"I think these colors are nice, it's better than just a white boring page."*

Jan: *"Is the font size fixed?"*

Moderator: *"What do you mean by fixed font size?"*

Jan: *"Well, if it adapts to the size of the screen. Now it's on a big screen and I can't barely read some parts."*

Jiří: *"I'd prefer one unifying element on every page. For example, the circle, like on the homepage. The contact page looks different from the others, I wouldn't know that I'm on the cluster page...the unifying element is just missing here, to remind me of the fact that I'm on my favourite website."*

Karolína: *"The web page is very nice, only the menu text could be bigger. Anyway the font is very nice, the colors as well, everything is unified, it looks fine."*

Tereza: *"I'm really nicely surprised because usually the websites of hospitals are a pure disaster."*

Lucie: *"I find it very clear, I like the pictures, but I don't like the combination of pink and purple. It's like something for woman, connected with gynecology."*

Albert: *"I think these colors are nice, it's better than just a white boring page."*

Václav: *"It's really pure, like if we were some Scandinavian university."*

Evaluation of slogan

Ondřej: *"Wow, it's quite courageous – but good."*

Jana: *"It's not bad, it's a kind of American style of promotion."*

Moderator: *"What do you mean by American style?"*

Jana: *"Well, a bit puffy and arrogant, but anyway I like it."*

Jiří: *"For students it's perfect... But why is here the statement that stroke is fast? Do we have to stress that stroke is a terrible disease? It's too negative. I think the slogan should be more positive."*

Jan: *"And what about Stroke is fast, our research as well?"*

Tereza: *"The slogan is super. I really like that you incorporated the "FAST". The people who are involved will know that it's a mnemonic for stroke symptoms and they will discover another slogan dimension. I like it very much"*

Raúl: *"I like it very much, it is short and easy to remember."*

Moderator: *"The Monday's group told me that the slogan is too negative through the statement "stroke is fast". What do you think about that?"*

Albert: *"I definitely wouldn't change it. I think it's important to stress that stroke is fast, that it's no joke."*

Tereza: *"Absolutely! It stresses that stroke is serious problem and this is the point, right?"*