Business ideas in start-ups

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Abstract. Start-up is a modern entrepreneurship form designed to realize original business ideas, mostly based on new technologies and the Internet. It evolves in the development cycle, which is determined by the business idea development cycle and the financing cycle. The purpose of the paper is to describe and analyse the business idea. The business idea is characterized by its content, circumstances of its origin, degree of originality and evidence of this originality. Start-ups are dominated by business ideas based on the application of information and communication technologies, the business idea is most often created by combining professional and business experience, but its originality is from the international point of view only average and the level of legal protection is quite rare.

Introduction

The transformation of a business idea into a satisfying need can best be studied on the basis of a start-up which is a small, young, beginning enterprise with a growth perspective [1, pp. 63-72], [2, p. XVII], [14, pp. 27], [17, pp. 10-11]. Its relatively simple structure, frequent metamorphoses and rapid feedback provide real-time living laboratory conditions. Knowing this new business phenomenon should increase the likelihood of business success. The very creation of an idea, its transformation into a product or service, its acceptance by customers is a complex process, it has many dead ends, inefficient turns, returns and reversals, failures topped by destroyed resources, frustrated entrepreneurs, disappointed investors, embittered customers, sometime by moderate success and rarely the business feat of the decade [6, pp.6-35].

Creation of a business idea

Starting a business is not easy and it is even harder to run [13, pp. 1-17]. Although a business person has a good idea, he is discouraged by situational and psychological

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reasons [5, p. 10]. Situational causes are the need for regular income to secure the family, fear of losing capital or lack of capital. Psychological background has risk aversion and doubts about one's own abilities. Despite these hurdles, many people decide to do business because they are driven by incentives that push them situationally into self-employment. The most common are job losses, different opinions on the content and performance of work in the current employment relationship, personal disagreements in the workplace or unemployment, e.g. due to loss of qualification [4]. Other people are drawn into a business for more positive reasons. They desire for independence, recognition, personal development and wealth too. These factors have a psychological origin because they are derived from character traits.

Finding a good business idea is not just a matter of chance and fortune. There are also systematic ways to work out the idea. The entrepreneur must have the skills, abilities and knowledge necessary for the business. Experience with an industry is very valuable [8, pp.1-17].

Good business ideas are based on commercial opportunities created by market needs. *Opportunities can be created* through radical or incremental product or market innovations, with little or no evidence of market need. *Opportunities can also be spotted* in finding unsatisfied customer needs. Both approaches are only successful if they are connected with the needs of customers (Fig. 1). The process of creating ideas has three stages:

- 1. An entrepreneur is exposed to as many diverse and different ideas, influences and people as possible and aware of them.
- 2. An entrepreneur recognizes market opportunities at observing the daily lives of customers and asks them whether their needs can be met better or otherwise. He doubts and experiments. He questions the status quo and asks if things can be done differently.
- 3. He formulates and reformulates the business idea to make it a viable business model. Not all products work since their inception, and not all ideas are immediately commercially viable, and therefore an entrepreneur is experimenting to improve a product or service and business model [7, pp. 200-227].

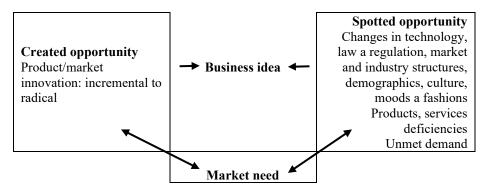


Fig. 1. Generating a business idea [5, p. 52]

Creation of idea and creativity is encouraged by the discovery skills, they are associating, questioning, observing, experimenting and networking. The whole process takes some time. It is a time of thinking, deepening, incubating ideas. Generating ideas is like a number game. The more ideas arise, the more likely one of

them will be viable. It is appropriate to distinguish between techniques that offer quantity and those that increase quality. Some techniques are more suited to spotting opportunities, while others create opportunities. The most common and not too demanding techniques are brainstorming, SLEPT analysis, thinking about the future, mind maps, analogy, attribute analysis and gap analysis.

Best business ideas generate high profits and are burdened with low risk [11]. The occurrence of such opportunities is rare, but they can be assessed according to the following criteria, which are derived from entrepreneur aspirations and capabilities and the commercial viability of the idea [5, p.66)]:

- 1. Identified market need/gap.
- 2. Identified customers and marketing strategy.
- 3. No or few existing competitors.
- 4. Not easily copied.
- 5. Growing market.
- 6. High margins.
- 7. Low fixed costs.
- 8. Low funding requirements.
- 9. Financeable (if not sufficient resources, the project needs to be able to attract finance).
- 10. Identifiable risks that can be monitored and mitigated.
- 11. Managerial skills that can be leveraged.
- 12. Scalability.

Many starting entrepreneurs mistakenly believe that their ground breaking business idea will be equally understood and accepted by customers, and that innovation is so superior that it will sell itself [10, pp.23-32], [9, pp.564-581]. From the idea to its realization and then the acceptance and purchase of the product or service, however, there is a long way to go. A survey in which 120 starting businessmen have shared their experiences has provided insights into the most common business start-up errors, potential customer objections, and appropriate sales models for start-ups [12]. More than half of the surveyed companies designed the final product before receiving customer feedback. The development of a complete product without confrontation and customer feedback was lengthy and yet did not deliver the expected results. Customer notions and requirements must be taken into account from the first day of product development. Although some entrepreneurs began selling early, their enthusiasm and complacency prevented them from accepting criticism and making the changes demanded by customers. Successful entrepreneurs recommended patiently listening to customers, explaining what they wanted to do, offering them their ideas and constantly verifying them. Block et al. [3, pp.1-32] write that the conditions at the birth of a business tend to affect companies over very long periods. The consequences of initial strategic decisions are usually very lasting.

Objectives, research sample and methods of research

The main objective of the research is to deepen the knowledge on business ideas of start-ups, because based on the studied literature, a business idea that is not matched with market need is one of the main causes of start-up failure. The partial objectives are:

1. Know the content of the start-up business idea.

- 2. To know the causes of origin of the start-up idea.
- 3. Know the originality of the start-up business idea.

The research sample contains thirty start-ups operating in Slovakia. The original sample size was almost a hundred start-ups and was a follow-up to research in 2015, 2016 and 2017 [16], but it had to be reduced due to incomplete data and the reluctance of start-uppers to devote their time to collaborating with researchers. The common feature of the researched start-ups is approximately the same age and location in large cities with developed infrastructure and start-up scene.

The qualitative research of the business idea is based on induction (deducing a general conclusion based on individual knowledge) and exploring unique and non-recurring phenomena. The advantage of a non-numerical solution is high validity, detailed and in-depth knowledge, but it is associated with a disadvantage that may be of low reliability, because the result may not be generalizable. The qualitative data are studied to find some structure and regularity.

Research results

Nearly half of the start-ups are active in the ICT industry. The rest of the star-ups operate in very diverse industries, e.g. industrial production, agriculture, other research, production of machinery, services, arts, entertainment, recreation and others.

The business ideas of the studied start-ups are implemented as software applications (66%) and products (33%), which are predominantly material in nature. They can be divided into the following groups:

- collecting, pooling and producing specific information and fact sheets, e.g. support for the compilation of CVs, the search for human resources with specific skills and capabilities for temporary use,
- associating things and various objects with information on their properties, operation and use, e.g. information on the status and location of delivery of ordered goods,
- meeting traditional needs in a simpler, faster and more convenient way, e.g. cashier system for restaurants
- convenient, simple and safe access to objects, buildings, apartments, cars, e.g. e-key,
- promoting and developing ideas from other authors, e.g. providing infrastructure for start-ups,
- an original, usually tangible product that satisfies an existing need in a new or more efficient way, e.g. a highly sensitive personal earthquake warning device or a new version of the old service.

The circumstances and causes of origin of the idea are reflected in the content of the business idea. They are very diverse, but here are a few examples:

- the original idea did not have sufficient business potential and has therefore undergone one or more changes (pivot), e.g. one application carries several similar services; from hot water wells to deep wells for oil and gas; from photovoltaics to emobility,
- the need for extensive and readily available information, e.g. on operated technology, machinery, devices,
- demand for specialists, e.g. for HRM

- establishing a sense of security, e.g. face and character identification, earthquake warning,
- non-transparent situation in some environment, e.g. real estate market, logistics of orders and deliveries of ready meals,
- personal experience of the entrepreneur, e.g. physical or mental discomfort; urgent lack of something, e.g. information, HR,
- the original services are lengthy, inconvenient, complicated, unautomated and not linked to other services or information systems.

The originality of the business idea is predominantly implicit, officially unconfirmed, and considerably fictitious (90% of the sample). The founders' arguments in favour of the originality of the idea are diverse and based mainly on personal experience, guesses and imperfect knowledge of the competition:

- recognition of an industry and entrepreneurial experience which suggests that the start-up under examination is the only company in the industry,
- the first company of its kind in a certain area, e.g. Central Europe,
- national originality, the only company in country,
- the originality of the idea is small, but the idea is implemented quickly and consistently,
- considerable interest of foreign clients,
- very low price, even 100 times lower than the competitive price,
- technological complexity, but without patent,
- great adaptation to customer needs,
- there are several competitors, but the start-up has strong and loval customers,
- the product is similar to competing products but just is different,
- the product is complex and complicated or hybrid.

Explicit, officially confirmed originality, patent protection occurred only in 10 % of start-ups in the examined sample. The degree of originality of the whole set of business ideas measured on a five-point scale is 3.87, thus approaching originality at European level.

The development of the business idea was captured in the following phases: 1 - idea/ concept/research, 2 - product development, 3 - prototype of product /testing, 4 - first earnings, 5 - growing earnings. Most business ideas are placed in phase 4 (first earnings) or 5 (growing earnings), several ideas are in phase 3 (prototype of product /testing), the only idea is in phase 1 (idea and concept). The average development phase measured on a five-point scale is 4.1, hence at the level of the first income. Phases 4 and 5 are characterized by continuous product innovation and improvement, so far independently and without exit. Sales revenues are growing, but not fast, rather slow, so start-ups ordinarily do not attract strong investors. Start-ups are beginning to penetrate foreign markets and the challenge is not only to maintain growth but also to speed up significantly.

The start-up financing cycle is captured in the following phases: 1 – pre-start-up capital (angel phase, idea, no product), 2 - start-up capital (seed phase, product work, prototype made/realized, interest-finding), 3 - capital for initial development and further growth (series A/B phase, 1st, 2nd round, investment in a company that already has customers, generates revenue), 4 - developing capital (3rd round, mezzanine capital), 5 - IPO (public the market). Most business ideas (44 %) are occurred in phase 3 of the investment cycle (capital for initial development and next growth). 13 % of ideas are in phase 1 (pre-starting capital), 30 % of ideas are in phase 2. (start-up capital), 10 % of ideas are in stage 4. (developing capital) and 3 %

of ideas are in phase 5. (IPO). The average phase of the funding cycle, measured on a five point scale, is 2.6, hence between start-up capital and initial and development capital.

About 20% of start-ups are self-financing and want to do business with their own resources only. The rest relies on angel and venture investors who are expected to have business experience, advice and business contacts in addition to money. Start-ups do not receive any bank loans and grants, except for the start-up, which received loans from the SZRB and grants from EU projects. Flemio accelerator provides prelaunch capital of 50,000 € and the venture investor Neulogy grants a normal tranche of 200,000 €. The process of raising external capital is lengthy. Domestic venture capital resources are very limited and institutional capital from foreign VC entrepreneurs and strong VC funds is almost unavailable. Start-ups invest mainly in development of prototypes and marketing. However, marketing is a proxy term for advertising that serves to promote brand, product, and service awareness. One-off investments from VC investors are not enough and must be continuously replenished according to the results of product development. Income from sales is not enough to finance current operations and product development, so most start-ups need external investment support.

Discussion

Information and communication technologies dominate the business idea. Software applications are easier to "manufacture" and sell as tangible products, they do not need a manufacturing base and many collaborators, and are in line with technology trends, lifestyles and the spirit of the times. The causes of business idea are trivial, e.g. something is missing or not working, some process is lengthy or inconvenient, but an imaginative entrepreneur sees more sophisticated content in some lack, imperfection or absence e.g. lack of specific information or confusing and disordered information. The conditions of origin of the idea are mainly personal experience and sensitive observation of the surroundings, but is it enough for an original business idea? Often declared exceptional originality of the business idea is a fundamental problem of the researched start-ups. Unconfirmed assumptions, impressions, and various subjective arguments prevail, which later cause failure and disappointment. The notion of self-exceptionality is usually the result of a lack of knowledge of the idea/topic and of ignoring real competition on a wider European and global scale.

It takes too long to develop a business idea. Successful start-ups in the world will show their viability within three years of being established and then scale or exit. In almost five years of existence, the examined start-ups have reached the beginning of phase 4 of the business idea development (4.1: first income) and show no signs of exponential growth. In the funding cycle, they arrived between phases 2 and 3 (2.6: between start-up capital and capital for initial development and further growth). There is a clear difference in the progress of the business and investment cycle. The founders are missing a large amount of several million euros and investors do not trust the underdeveloped product, which is not confirmed by market interest.

Conclusion

Entrepreneurship is becoming a form of self-realization of creative and ambitious people to whom traditional employment relationship does not bring personal and professional satisfaction and the desired standard of living. Such people not only contribute to social and economic progress, but also create jobs for themselves and their co-workers. Entrepreneurship then becomes an expertise and qualification of its kind and one of its key themes is the emergence and development of a business idea. However, the degree of recognisability of the process of creating and developing a business idea is questionable. It is a creative process which excessive algorithm would lead to unification of results and thus to a counterproductive solution. Research should focus more on recognizing the favourable conditions that stimulate original and unconventional solutions and on distinguishing "signal-tonoise" [15], hence the ability to perceive principal trends and not slip down into banalities and false opportunities. It is essential for an entrepreneur not to succumb a captivation by the technical and functional excellence of his idea and to distinguish technical advance from commercial applications. The subject of research should therefore also be cognition of how the technical solution is designing, adjusting, adapting for the needs of business use and implementation. It is envisaged that parameters and criteria could be identified that measure the business potential of the idea and be adapted to the specific development phase of the idea and its content.

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