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Do we know what is important when establishing new business?

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Abstract

Most of new businesses fail to succeed and one of the main reasons is inferior knowledge about business characteristics (like profitability) and their predictive validity when analyzing and setting initial business plan. Four groups (students without experience, students with administrative experience, managers with less than 12 years of experience and managers with more than 12 years of experience) were tested for their knowledge about predictive validity of business characteristics (profitability, price, etc.). This knowledge is not taught at Slovakian business universities, but it is expected that it will be acquired by practice. Although with rising practical experience, knowledge about predictive validity also rose, the comparison of all groups showed no significant difference. In four most predictive business characteristics (profitability, payback period, potential sales, and size of investment) we also did not find significant difference. Therefore, we conclude that years in business have positive effects on knowledge, though not sufficiently enough. Special care has to be invested to teach students and practicing managers what is important and what not.

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1. Predictive validity of business cues

Establishing new successful business is not easy task and most of new businesses will bankrupt before reaching maturity. Bankruptcy is for owner costly in money, time, effort, psychical stress and brings also many other negative effects. It is also costly for all other stakeholders, such as banks, national state, business partners, customers and

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employees, leaving debts and broken relationships. Therefore, if we were able to downsize level of bankruptcy of new business, all involved parties would significantly benefit. Managing and establishing new company is similar with managing IT businesses, which means careful and exact processes together with perfect knowledge to avoid failing project (Bodiš, 2009, Černý 2013, Hamranová, 2013).

There are many reasons causing new established business to bankrupt, but in this article we will concentrate only on one of them. Knowledge about product and its place in business environment together with knowledge about business processes are crucial. This knowledge could be defined and transformed into specific characteristics like profitability, payment time, potential market, existing competition and many others. Canadian Invention Assistance Program (IAP) since 1982 to 2000 investigated more than 13 000 business projects and successful ratio and specified business characteristics by which any business project could be characterized. They identified 37 business characteristics and for our research we selected 25 of them. Of course, different business characteristics have different effect at business performance. Some are highly influential and others are minor or negligible. Their relationship with future success is demonstrated with their predicative validity. Predictive validity for our 25 selected specific business characteristics is listed in Table 1 (Åstebro, Elhedhli, 2006). As we can see in Table 1, each of these characteristics has, in fact, different predictive validity for business success. Whereas profitability is crucial for future success and has highest predictive validity, demand predictability has much lesser impact.

Table 1. Business characteristics and their predictive validity as correlation with success of the company (Åstebro, Elhedhli, 2006)

Business characteristics, cues	Predictive validity of cues
Profitability	0.64
Payback Period	0.55
Potential Sales	0.54
Size of Investment	0.50
Development Risk	0.47
Function	0.45
Functional Performance	0.41
Appearance	0.39
Protection	0.36
Research and Development	0.35
Price	0.32
Tooling Cost	0.28
Existing Competition	0.24
Distribution	0.24
Durability	0.23
Marketing Research	0.22
Product Line Potential	0.19
Dependence	0.19
Service	0.18
Duration of Demand	0.16
Demand Predictability	0.16
Legality	0.14
Potential Market	0.12
Environmental Impact	0.11
New Competition	0.09

Before starting business, rational potential entrepreneur has to know perspectives of his or her new business. She or he has to analyze all characteristics of the product and its status in business environment (Jankelová, Mišúnová Hudáková, Mišún, 2013). In Slovakia, predictive validities of these cues are mostly unknown for managers or business students. In university management education students do not have any courses where they could be informed about specific values of predictive validity for certain business characteristics. When we think about this upsetting status, we realize that future entrepreneurs rely on their intuition instead of knowledge based on throughout deliberation and analysis. On one hand, intuition cannot be taken only as negative -- in fact, in many business or life situations it has positive effect compared to rational, analytical behavior (Čavojová, 2013). On the other hand, this is that type of situation, where relying on intuition could be very misleading with bad consequences (Ballová Mikušková, 2013). There are many ways how to induce intuition and one of them is limiting the time available for judgment and decision. In time stress respondents have to rely on their intuition, because there is no time for behaving rationally and analytically.

It is frequently expected that when coming to praxis former student will learn everything, what he or she has not learned in formal education. It is also presumed that knowledge what is crucial and what has minor or minimal effect on business success comes with experience. In other words, that working in field in "real" business environment will lead to acquisition of this knowledge.

Research concerning experts came to conclusion that experts (beside many other things) differ from novices in their knowledge of factors which influence final exam. Experts know better what is important, what "works" and what not, they are better aware of single weights of specific factors and rules under which are they implemented. We found (Hanák, Sirota, Juanchich, 2013) that personal managers know better which selection methods (interview, cognitive test and others) have better predictive validity than others.

Therefore, the aim of this study is to test if managers differ from students in their knowledge about predictive validity of business cues. In other words, does the real business practice measured by years in field "teach" what characteristics are important in business and what have minor role?

2. Method

2.1. Participants and procedure

151 participants (55 men) took part in the study (M_{age}= 31.34 years, SD=9.45). They were divided according their working experience into four groups. By forming four groups we tried to measure difference made by working years in business and financial experience. First group (n = 38) was formed from students (external student of Slovak business college) who had no practical experience and never have been in business (M_{age}= 24.53 years, SD=5.54). This group could be labeled as *naïve group* and has 0 years of experience. Second group (n = 59) was formed from students who had experience as administrative workers, but had no experience in finance or management (M_{age}= 31.25 years, SD=8.23). They have M_{years} = 9.21, SD_{years} = 7.01 years of experience. Last two groups were formed from people with financial and managerial experience. In general, they spent 12 years in business managing and working with finance. We used mean split method and divided them into two groups. Therefore the third group (n = 25, M_{age}= 29.82 years, SD=5.06) was less experienced (M_{years} = 5.84, SD_{years} = 2.42) compared to the fourth group. The fourth group (n = 26, M_{age}= 43.15 years, SD=9.36) had most extensive business experience (M_{years} = 20.73, SD_{years} = 6.79), mostly closely connected with finance and therefore we will label this group as *experts*. By comparing first group (naive) and last group (experts) we expect to find the largest differences and this comparison will be important part of our analysis. In second and third group we expect rise of knowledge about predictive validity and they are viewed as steps from novice to expert group.

2.2. Procedure and measures

Respondents were asked to rate business plan which was described by 25 characteristics (Table 1) in two conditions. These were selected from original 37 business characteristics. We selected first 10 with highest

predicitive validity, then 9 with lowest levels of predictive validity plus remaining 6 from middle which were chosen randomly. We wanted most extreme characteristics in terms of predictive validity, which means those which well predict and those which poorly.

In time stress condition they had 3 minutes for completing the task. In the second condition, without time stress, they had no time constraints. Business characteristic were presented in form of table with listed words. Each word represented one business characteristics. Content behind these words was hidden so they did not see value of characteristics, only label (for example profitability). If they wanted to know how profitability really was (content), they had to assign weight of profitability and write it in an empty cell. After writing specific percentage weight the content showed up. It was usually one or two sentences describing status or level of specific business characteristics. For example, for new competition it was written: "Product will not face any existing competition". They had to divide 100 points to all 25 characteristics according to their best knowledge.

Each business characteristics has different predictive validity (see Table 1) and we ranked them accordingly and divided them into two groups. The first group comprised of the cues with the highest predictive validity (first 12 cues from Table 1); the second group comprised of the cues with low predictive validity (last 13 cues from the Table 1). Then we calculated sum of weights which they assigned to the first 12 most predictive characteristics and to the last 13 less non-predictive characteristics. Based on these sums we made our calculations.

3. Results

3.1. Time stress condition

All groups together (n=151) assigned slightly higher weight to the predictive characteristics (M = 53.97; SD = 13.32) than to non-predictive characteristics (M = 46.04; SD = 13.39). More specific data are in the tables below (Table 3 and 4).

Table 2. Sum of Mean weight for predictive characteristics in condition of time stress.

Group	Mean	SD
Students without experience	53.05	14.71
Students with administrative experience	52.66	15.27
Managers and accountants with less than 12 years in business	51.11	15.08
Managers and accountants with more than 12 years in business	56,92	16.06

Table 3. Sum of Mean weight for non-predictive characteristics in condition of time stress.

Group	Mean	SD
Students without experience	44.66	12.58
Students with administrative experience	46.36	10.46
Managers and accountants with less than 12 years in business	51.75	16.12
Managers and accountants with more than 12 years in business	41.19	15.59

Although experts allocated more weight to predictive characteristics than novices the difference were not significant F (3,147) = .719; p = .542. The same could be said about non- predictive characteristics where F (3,147) = .750; p = .524. Four business characteristics with highest productivity (profitability, payback period, potential sales, and size of investment) were tested between groups. We found no significant differences between groups.

Students and managers with more than 12 years in business were the two extreme groups. We analyzed, whether they differed in each of all 25 business characteristics weight estimation. There were no significant differences, but for one of them, *Potential Market,* where professionals allocated more (M = 9.85; SD =6.94) weight to it than students (M = 5.45; SD =6.08; t(62) = -2.68; p = 0.009). Also, to *Payback Period* professionals allocated more (M = 6.5; SD = 6.31) weight than students (M = 3.92; SD =4.93), but this difference did not reach significance level(t(64) = -.183; p = 0.072).

3.2. No time stress condition

All groups together (n=151) assigned slightly higher weight to the predictive characteristics (M = 53.97; SD = 13.32) than to non-predictive characteristics (M = 46.49; SD = 15.14).

Table 4. Sum of Mean weight for predictive characteristics in condition without time stress.

Group	Mean	SD
Students without experience	55.5	12.55
Students with administrative experience	53.75	10.41
Managers and accountants with less than 12 years in business	48.25	15.94
Managers and accountants with more than 12 years in business	58,42	15.63

Homogeneity test showed that data were not distributed normally, as in time stress condition, therefore, non-parametric tests were used. Krusal-Wallis test showed that there is no significant difference among these four groups, H (3) =3.79, p =.285.

Table 5. Sum of Mean weight for non-predictive characteristics in condition without time stress.

Group	Mean	SD
Students without experience	46.6	14.59
Students with administrative experience	46.75	15.36
Managers and accountants with less than 12 years in business	48.83	14.85
Managers and accountants with more than 12 years in business	43.08	16.06

Krusal-Wallis test showed that there is no significant difference among these four groups, H (3) =4.35, p =.225. In condition without time stress comparison of students and experts showed minimal differences (as was the case in time stress condition). Again, students significantly differed from experts only in *Potential Market,* to which experts allocated more (M = 8.85; SD =6.1) weight than students (M = 6.16; SD = 4.52; t(62) = -2.028; p = 0.047). They differed significantly also in *Legality,* to which professionals allocated less weight (M = 1.69; SD = 2.78) than students (M = 5.11; SD = 5.79; U(64) = 295.5; p = 0.005).

By comparing allocated weight in two conditions we found that respondents acted in all groups differently but in fact differences between them where minor scale. Students changed their mind about *Price* by lowering their percentage value from M = 13.55 in time stress to M = 11.5 without time stress, t (37)= 2.27, p = 0.027, which was principally wrong decision because of its low predictive validity. Experts, managers with more than 12 years in field, changed their mind about *Distribution,* to which they assigned more value without time stress M = 3.19 from M = 1.62 in time stress, t (37) = -2.82, p = 0.031.

4. Discussion

Results showed that knowledge about predictive validity is on miserable level in all tested groups. Students, who had no practical managerial or financial experience and without any course about business establishing, are not significantly different from any other group who has experience in business. In fact, experts with long years in field are at the same level of knowledge than students. Comparison of mean allocated weight for predictive business characteristics with non-predictive for all respondents shows that people do not know what is very important and what has minimal effect on business success. Without this knowledge it does not matter if respondents work in intuitive condition (time stress) or rational condition (without time stress), final results are similarly bad, which was supported by comparing the changes in two conditions.

When examining extreme groups (students and experts) we found only one significant difference from all 25 business characteristics. It was *Potential market,* which has one of the lowest levels of predictive validity. Still worse, experts allocated more weight than students, to non-predictive business characteristics, where they should do the exact opposite. The same could be said about *Duration of Demand,* where experts also do the exact opposite. *Payback Period* was close to significance and experts allocated more weight to this highly predictive business characteristic than students.

This absence of knowledge about predictive validity for specific business characteristic could be one of the major reasons for such high level of failure when establishing new business. When people do not know what is important, they do not allocate their time, resources and effort to domains where they are needed the most and follow false and unimportant goals and activities.

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