

Natalia V. Ketko¹, Olga E. Akimova²

ANALYSING, EVALUATING AND RANKING OF MOTIVATIONAL PREFERENCES OF ENTREPRENEURS IN SMALL BUSINESS DEVELOPMENT

The article determines the causes for insufficient development of entrepreneurial activity due to low motivation. Convolution of expert estimates via the method of fuzzy preference relations allowed building a structure of entrepreneurs' motives, without considering the impact of the factors of both external and internal environments, and to perform the ranking taking into account the impact of external and internal criteria.

Keywords: motivation; entrepreneurship; the scale of alternatives; expert estimates.

Наталія В. Кетько, Ольга Є. Акімова

АНАЛІЗ, ОЦІНЮВАННЯ ТА РАНЖУВАННЯ МОТИВАЦІЙНИХ ПЕРЕВАГ ПІДПРИЄМЦІВ З МЕТОЮ РОЗВИТКУ МАЛОГО БІЗНЕСУ

У статті визначено причини нерозвиненості підприємницької активності, обумовлені низьким рівнем мотивації. Виконано згортання експертних оцінок методом нечіткого відношення переваги, що дозволило побудувати структуру мотивів підприємців, без урахування впливу факторів зовнішнього та внутрішнього середовища та проранжувати з урахуванням впливу зовнішніх та внутрішніх критеріїв.

Ключові слова: мотивація; підприємництво; шкала альтернатив; експертна оцінка.

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Наталія В. Кетько, Ольга Е. Акімова

АНАЛИЗ, ОЦЕНКА И РАНЖИРОВАНИЕ МОТИВАЦИОННЫХ ПРЕДПОЧТЕНИЙ ПРЕДПРИНИМАТЕЛЕЙ В ЦЕЛЯХ РАЗВИТИЯ МАЛОГО БИЗНЕСА

В статье определены причины неразвитости предпринимательской деятельности, обусловленные низким уровнем мотивации. Выполнена свертка экспертных оценок методом нечеткого отношения предпочтения, которая позволила выстроить структуру мотивов предпринимателей, без учета влияния факторов внешней и внутренней среды и проранжировать с учетом влияния внешних и внутренних критериев.

Ключевые слова: мотивация; предпринимательство; шкала альтернатив; экспертная оценка.

Introduction. Russia's entrepreneurial activity emerged 22 years ago (since 26 May 1988, the day of adoption of the Law on Cooperation); nevertheless, entrepreneurship has become neither a basis for economic growth, nor the main site for implementing innovations. Nowadays, this is resulted in 20% of GDP produced by small and medium business in Russia, as compared to 50% of GDP in Western Europe or the USA. Undoubtedly, this problem is recognized as a priority concern by the state, and its solution partially depends on the studies of entrepreneurs' motivation and on the conditions created by the state to develop entrepreneurship meeting the individual intrinsic motives and needs.

¹ Volgograd State Technical University, Russia.

² Volgograd State Technical University, Russia.

Early empirical studies conducted on Russia's entrepreneurs in 2000 revealed such personal and motivational features as low achievement motivation, low indicators of rationality, and high level of personal risk appetite. As opposed to the aforementioned results, G.K. Bulychkina (2002) suggests entrepreneurs' motivational labor attitudes differ from labor values of other categories of Russian population. At the same time, Russia's entrepreneurs don't place high value on material factors in the general system of labor motivation; however, they demonstrate high achievement motivation and a special structure of motivational hierarchy, multicomponent, flexible and adjustable.

The analysis of entrepreneurs' motivational preferences. The studies of male entrepreneurs showed that, although being highly ranked in motivational hierarchy, pragmatic values are not the only significant values. None of the interviewed entrepreneurs proclaimed "material wealth" as the main motive. "Money could be for business purposes, but they are not the ultimate goal of life" (Kornilova, 2000).

How motivational expectations have changed during these 13 years? If we divide entrepreneurs into 3 groups, Group 1 is comprised of those who emphasized the increase of revenue as the main motive, Group 2 states independence as the primary motive. Group 3 consisted of those who used entrepreneurship opportunities to secure stable income. In fact, this last group is closely related to that of forced entrepreneurs. Aside from dividing entrepreneurs into groups, it is worth saying that socio-psychological motives of entrepreneurial activity are of great importance. Entrepreneurs themselves associated their main goals with the realization of their creative abilities, economic freedom, and strengthening national economy (similar to the findings back 2000) (Figures 1–2).



Figure 1. The structure of voluntary motivation in Russia, 2013, %
(Global monitoring of..., 2014)

In the course of the research in Russia, a stable motivation structure was being observed – about 70% of the entrepreneurs reported they exploited newly arising opportunities to start a business.

Even those entrepreneurs who associated the motive for entrepreneurial activity with exploiting opportunities weren't always focused on increasing profit or gaining advantages related to running own business. In 2013, some "unforced" entrepreneurs specified stable income as the primary motive – 39.8% of the early-stage entrepreneurs and 34.8% of the experienced entrepreneurs gave the same answer, and 16.8%

of the early-stage entrepreneurs and 9.1% of the experienced entrepreneurs showed mixed motivation. They were unable to determine precisely what induced them to launch and manage own business.

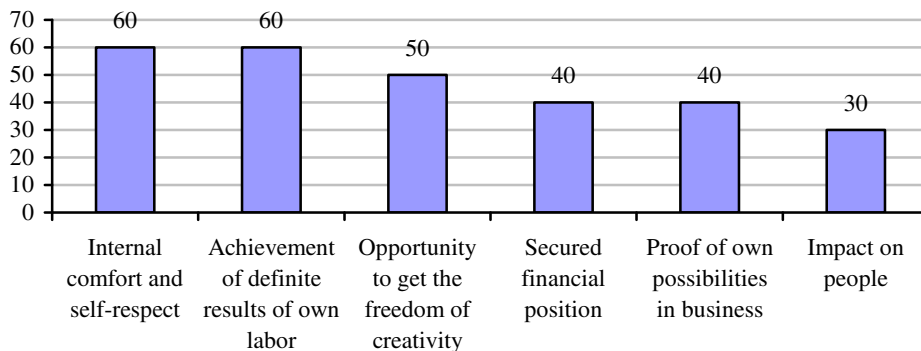


Figure 2. **Motives for entrepreneurial activity, 2000, %**, systematized by O. Akimova in accordance with the findings of her own research (Akimova, 2010)

Entrepreneurs and general population had similarities in "gaining the respect of others" (the 5th and 6th places), "power" and "public service" (the 20th and 21st places), and "commitment to the norms of religious morality" (the last, 22nd place) (Motivation..., 2009).

Potential entrepreneurs are a rather heterogeneous stratum of society. They are associated with those who have already had some negative experience of entrepreneurial activity, and those who are taking their first steps towards launching a business, and those who are just thinking whether they are able to be entrepreneurs. We think special interest should be paid to those who have had some negative experience of running a business and who have refused to proceed, as the analysis of the reasons that have convinced these people to leave entrepreneurial activity would contribute to better understanding of the problems.

It should be noted that the main reason for the closure of entrepreneurial structures has nothing to do with personal features; i.e., the lack of entrepreneurial talent. Only 13.8% of those who made no attempts to restart their own business were convinced that being an entrepreneur "wasn't really their thing". The majority of the respondents (51.7%) simply lacked funds.

As the primary reasons for the collapse of their undertakings, 29.9% considered the lack of useful relationships with public bodies; 25.3% of those who left their attempts to do business after their first failures complained about the pressure of supervising and regulatory authorities (fire inspection, sanitary-epidemiological services etc.); 13.8% mentioned the lack of special knowledge in business management, HR management, marketing, financial planning as the primary reason of their failures. Perhaps, the same reason gave rise to another problem of the absence or poor development of plans for business promotion (Chepurenko and Tikhonova, 2004).

Overall, the analysis of the reasons for business closure (Table 1) showed that, according to the respondents, the main reason most often was the lack of funds.

However, if the figures of the two lines describing the role of authorities (the lack of relationships and the pressure of inspecting bodies) are summed up, the impor-

tance of administrative factors will even exceed the importance of funds availability (over 80%). The obtained result shows that the main barrier for starting a new business is the lack of financial resources and the level of their availability, while, in the course of running business, the main obstacle is the existence of high administrative barriers.

Table 1. If you tried to start your own business in the past but failed, what were the main reasons? (Chepurenko and Tikhonova, 2004)

Answer	% of the sample (Total number = 1756)	% of the number of ex-entrepreneurs (Total number = 80)
I was convinced that being an entrepreneur was not really my thing	0.7	16.3
Lack of funds to promote business	3.6	78.6
Lack of useful relationships with municipal, urban, regional authorities	1.9	41.2
Pressure of criminal structures	0.8	17.6
Pressure of inspecting and controlling bodies (e.g., fire inspection, sanitary-epidemiological services etc.)	1.9	41.2
Lack of contacts with or support of other entrepreneurs	0.4	8.8
Absence or poor development of plans for further business promotion	0.9	18.8
Failed to find consumers for goods and services	0.6	12.6
Lack of special knowledge	0.9	20.1
Failed to find industrial/office premises	0.5	11.3
Failed to find necessary equipment	0.2	4.9
Failed to find professional staff/workers	0.3	7.5
Failed to pass the registration procedure	0.3	7.5
For health reasons	0.4	3.5
For personal reasons	0.6	8.8
Lack of prospects	1.0	21.3
Other reasons	0.6	12.6

Having considered the opinions of the early-stage and ex-entrepreneurs regarding the motivational impact of various factors on developing entrepreneurship, let us compare it with the analysis of expert interviews.

In 2013, Russia's expert sample was represented by 36 experts. The experts estimated the structural conditions for entrepreneurship development, using the 5-point scale, and revealed the factors influencing the development of entrepreneurship in a positive or negative way (Figure 3). According to the experts, 4 structural factors – market dynamics, the availability of physical infrastructure, the development of commercial infrastructure and professional education – didn't have negative impact. These factors exceeded 2.5 on the 5-point scale. All other estimates were in the zone below 2.5 points, which is the evidence of poor conditions of these factors, thus preventing both new business start-ups and the development of the existing businesses.

Since the subject area of motivation shows high level of uncertainty, and motivation itself is the indicator which has no direct quantitative estimates, the only way to directly assess its significance is expert estimation, which only partially prevents uncertainty (Global monitoring of..., 2014).

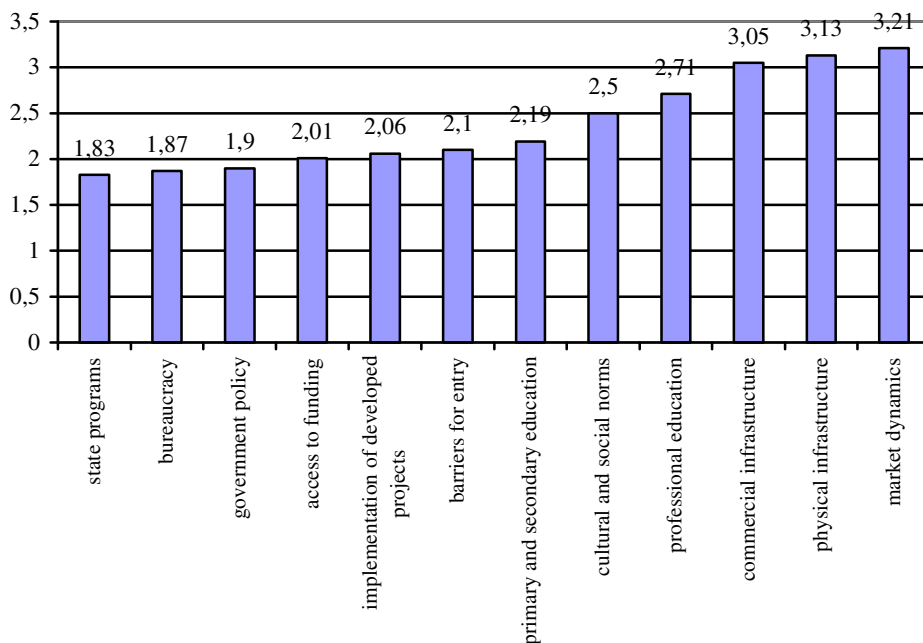


Figure 3. Average values of expert estimates regarding the structural factors of entrepreneurship development in Russia, 2013, points
(Global monitoring of..., 2014)

Evaluation and ranking of entrepreneurs' motivational preferences.

Entrepreneurial motivation is important due to not only internal needs that motivate people start their own business but also environmental factors that have impact on how a person estimates both the probability to meet own needs and the achievability of goals. Evaluating the influence of these factors is possible via expert estimates.

To obtain final results, it is necessary to bring estimates to their quantitative form for further comparison and analysis. In this case, the authors propose to use a group of the methods for expert estimates convolution as a tool for assessment of expert judgements. In this research, the authors use the elements of the method of fuzzy preference relations.

For this purpose, it is necessary to generate input parameters, i.e., alternatives as both indicators requiring the determination of their significance and criteria influencing such indicators and their significance.

Such alternatives will be the motives presented as:

- A1 – internal comfort;
- A2 – self-respect;
- A3 – achievement of definite and appreciable results of own work;
- A4 – opportunity to gain the freedom of creativity;
- A5 – opportunity to achieve the maximum personal fulfillment;
- A6 – financial security for oneself and the family;
- A7 – proof of entrepreneurial skills;
- A8 – impact on people;

- A9 – respect of others;
- A10 – gaining knowledge and new experience;
- A11 – power;
- A12 – social services.

The aforementioned criteria influencing the significance of the alternatives (motives) will be the factors presented as:

- K1 – taxation;
- K2 – corruption;
- K3 – bureaucracy, administrative barriers;
- K4 – poor legislative basis;
- K5 – unavailability of sources for initial capital formation;
- K6 – economic policy of the state;
- K7 – lack of government support;
- K8 – high tariffs for utility services;
- K9 – unstable economic situation in the country;
- K10 – high interest rates on loans;
- K11 – high competition;
- K12 – criminal situation;
- K13 – low level of entrepreneurs' competence;
- K14 – laziness;
- K15 – fear.

For more simple calculations, the authors developed a point-based scale for assessing both alternatives and criteria. On such scales, the percentage values obtained in polls should score relevant points (whole numbers), and one of the advantages of the approach of fuzzy preference relations deals with no limits of such point scales; e.g., as presented in the hierarchy analysis method. This provides the opportunity to set any grading interval of the scale, thus achieving the fine correspondence of the data of the survey with the points of a scale.

The following scale was developed for alternatives (motives):

Since the lowest percentage (7%) was found in alternative A11 (power), it scored the lowest point (1). The next one was A10 (gaining knowledge and new experience) amounting to 20%. In order to choose the point, the authors relied on the relative deviation of the percentage values from each other. Thus, since 20% was 3 times more than 7%, A10 and other alternatives amounting to 20% scored 3 points. Alternative A8 (30%) got 4 points. The alternatives with the values of 40%, 50%, and 60% scored 6 points, 7 points, and 9 points, respectively.

Based on the authors' evaluation scale, the alternatives were rated, as follows: A1 – 9 points, A2 – 9 points, A3 – 9 points, A4 – 7 points, A5 – 7 points, A6 – 6 points, A7 – 6 points, A8 – 4 points, A9 – 4 points, A10 – 3 points, A11 – 1 point, 12 – 1 point.

In the next step, the authors developed a scale for criteria, basing on the same principle, for relative deviations of the estimates from each other. The lowest points were scored in correspondence with the criteria having the lowest percentage value (1% = 1 point). On the basis of this specific correspondence, there occurred the following criteria evaluation scale: K1 – 23 points; K2 – 17 points; K3 – 11 points; K4 – 6 points; K5 – 5 points; K6 – 3 points; K7 – 3 points; K8 – 3 points;

K9 – 3 points; K10 – 2 points; K11 – 2 points; K12 – 2 points; K13 – 2 points; K14 – 1 point; K15 – 1 point.

According to the algorithm of the method of fuzzy preference relations, all criteria were normalized by the following formula:

$$k_j = \frac{k_j}{\sum_{j=1}^J k_j}, \tag{1}$$

where k_j – the point value of weight of criterion j .

The weight of each criterion was divided by the sum of the weights of all the criteria. Thus, the following normalized weights were obtained: K1 = 0.27; K2 = 0.2; K3 = 0.13; K4 = 0.07; K5 = 0.06; K6 = 0.04; K7 = 0.04; K8 = 0.04; K9 = 0.04; K10 = 0.02; K11 = 0.02; K12 = 0.02; K13 = 0.02; K14 = 0.01; K15 = 0.01.

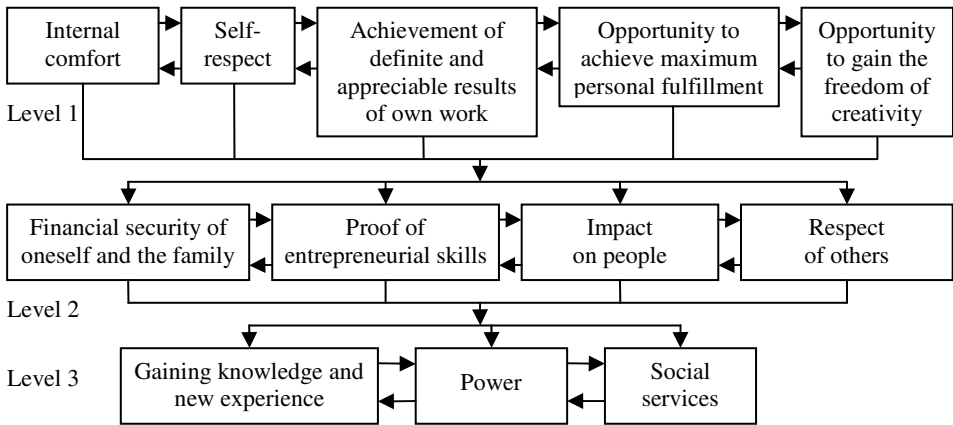


Figure 4. The structure of entrepreneurs' motives in accordance with the polls' results, disregarding the impact of external and internal environment factors, authors'

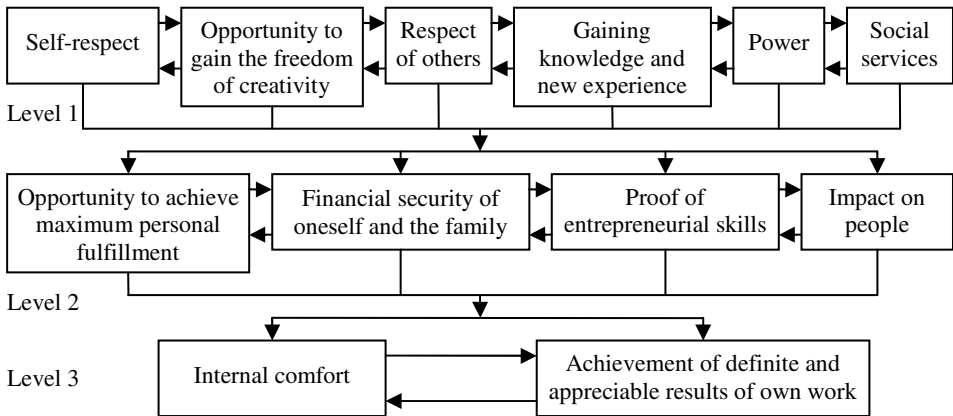


Figure 5. The ranked structure of entrepreneurs' motives taking into account the impact of external and internal criteria, authors'

It would then be necessary to determine the criteria which had impact and the motives which these criteria imposed their impact on. Examining the nature of the motives and the characteristics of their impact criteria, the authors concluded that alternatives A1, A3, A5, A6, A7, A8, A11, A12 were influenced by the criteria K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, and alternatives A2, A4, A9, A10 were influenced by the criteria K11, K12, K13, K14, K15.

Using the elements of the method of fuzzy preference relations, the alternatives were ranked in accordance with the criteria. After the procedure of expert estimates convolution, the following alternatives were obtained: A1 – 0.757; A2 – 0.982; A3 – 0.757; A4 – 0.986; A5 – 0.811; A6 – 0.838; A7 – 0.838; A8 – 0.892; A9 – 0.992; A10 – 0.992; A11 – 0.973; A12 – 0.973.

For improving the perception of the results of the research, as well as for their simpler analysis, the authors represent the results as a hierarchical structure (Figures 4–5).

Conclusion. The comparative analysis of Figures 4 and 5 allows making the following conclusions:

- For an individual, inducement deals with personal motives, which satisfy the needs of the highest levels of the Maslow hierarchy, i.e., the needs for personal fulfillment and public recognition.

- The first level of the motive hierarchy disregarding the impact factors consists of non-material motives, which is the evidence that they are self-sufficient and self-confident people who want to perform independent economic activity.

- The second level consists of the motives contributing to the satisfaction of such needs as stable financial situation and a certain status and position in society (the need for security as a lower level in the Maslow hierarchy).

- The lowest level consists of the motives that contribute to the satisfaction of the need for creativity, i.e., rendering social services, obtaining new knowledge.

- A potential entrepreneur is currently focused on personal fulfillment.

- The conditions created by external environment and by the state emphasize the needs for power, improved financial situation, and stability as the most essential motives.

- Currently, the motives that contribute to satisfying the needs for creation – i.e., rendering social services and obtaining new knowledge – are associated with flagship. This is evidence that both those entrepreneurs who have succeeded in business and respected businessmen are able to perform entrepreneurial activity that is different from their existing businesses.

- Today it is unprofitable to do business for the sake of personal fulfillment and recognition, despite the fact that these are the strongest motives as they allow persons fully reveal their potential.

Thus, the current conditions created by the state for entrepreneurship development in Russia don't correspond to the needs and motives of individuals. The factors of external and internal environments refocus people onto less important motives, thus reducing the interest in independent economic activity. The state policy of entrepreneurship development in Russia appears to be inefficient.

References:

- Акимова О.Е.* Мотивы и стимулы в системе предпринимательской деятельности // Современная экономика: проблемы и решения.— 2010.— №9. — С. 94—105.
- Акимова О.Е.* Мотивы предпринимательской деятельности // Вестник Института Дружбы народов Кавказа.— 2011.— №1. — С. 36—44.
- Акимова О.Е.* Соционика и мотивация предпринимательской деятельности // Инновационное развитие экономики.— 2011.— №5. — С. 9—13.
- Булычкина Г.К.* Мотивация трудовой деятельности предпринимателей // Становление нового российского предпринимательства. — М.: Институт экономики РАН, 2002. — 92 с.
- Акимова О.Е., Волков С.К.* Особенности мотивации предпринимательской деятельности в сфере туризма в сельских территориях // Региональная экономика: теория и практика.— 2013.— №40. — С. 3242.
- Глобальный мониторинг предпринимательства (национальный отчет за 2013 г.). — СПб., 2014. — 64 с.
- Кетько Н.В.* Методы экспертных оценок как инструмент формирования и оценки политики мотивации наемных работников на предприятии // Аудит и Финансовый анализ.— 2013.— №2. — С. 31—39.
- Корнилова Т.В.* Диагностика мотивации и готовности к риску. — М.: ИП РАН. 2000. — 84 с. Мотивация и ценности бизнеса: человек больше богатства, 2009 // www.owl.ru.
- Чепуренко А.Ю., Тихонова Н.Е.* Предпринимательский потенциал российского общества // Мир России.— 2004.— №1. — С. 116—145.
- Шаховская Л.С., Морозова И.А., Акимова О.Е.* Развитие интрапренёрства в системе наёмного труда России // Национальные интересы: приоритеты и безопасность.— 2011.— №14. — С. 2—8.

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