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Entrepreneurship from the perspective of the Generation Z (Gen Z)

1. Introduction

Entrepreneurship plays a key role in shaping the economy, innovating and creating new jobs. Each generation brings its own unique characteristics and approach to entrepreneurship, influencing the way business is conducted. In the context of dynamic technological and social changes, it becomes particularly interesting to examine the entrepreneurial attitudes of Generation Z, who are just entering the labor market. Although Generation Z entrepreneurship has been widely discussed in the global literature, the unique cultural, economic and educational context of Poland - particularly Poznań - remains under-researched. Focusing on students from Poznań University of Economics and Business makes it possible to analyze specific regional factors influencing entrepreneurship, such as the dynamics of the local labor market, the role of higher education institutions and economic conditions specific to the Wielkopolska region.

Generation Z, or those born after 1995, grew up in the digital age, which significantly affects their approach to work and private life. Representatives of this generation, also

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known as “digital natives,” are determined to use modern technologies in their daily lives and work. They are open to innovation, willing to take risks and highly adaptive to changing market conditions. Their entrepreneurial spirit is shaped by unique experiences and values that differ from those of previous generations.

This article analyzes the characteristics of entrepreneurial people, which were assessed by representatives of Generation Z, taking into account the theoretical and practical context. The purpose of this article is to identify and evaluate the factors that, according to representatives of Generation Z, determine their entrepreneurial attitudes. The study of these factors is particularly important due to the unique set of characteristics and values that characterize the generation in question, and thus influence their attitudes and behavior in the context of entrepreneurship. It should be noted that among the most important characteristics of Generation Z are the ability to use technology effectively, innovation, flexibility, a global approach to business, and a high social and environmental awareness. These specific characteristics create a unique entrepreneurial climate that supports the creation of new companies and the introduction of innovative changes in various sectors of the economy.

2. Entrepreneurial qualities of generation Z - theoretical approach

According to Strauss and Howe’s (1991) theory, people who were born in a specific 20-year interval are categorized as belonging to a specific generational group. Their distinctiveness is based on a number of factors that influence their attitudes, values, behavior and expectations, and this is true both in their personal lives and in the entrepreneurial sphere. Szopiński and Grzybek (2018) point out that the indicated characteristics are formed under the influence of political, legal, economic, cultural, social, psychological and communication conditions. According to the authors, the predisposition of entrepreneurs is also of great importance, which should be equated with the ability to cope with stress, overcome problems, or adapt to changing conditions. Together, the aspects indicated create an entrepreneurial climate that is conducive to the formation of new companies and the introduction of pro-development structural changes (Kaliszczak & Pawlowska-Mielech, 2018). For example, in the 1990s in Poland, as a result of the political transformation, legislative changes and the introduction of a market economy, there was a rapid explosion of entrepreneurship. In just a few years, a large number of companies appeared on the market, mainly in the service sector, such as trade, transportation,

telecommunications, banking, finance, tourism, catering, hospitality and many others. Entrepreneurs were mainly from the Baby Boomers (BB) generation and Generation X, who took advantage of economic opportunities and changes in the business environment. Their experience, determination and ability to adapt to new market conditions significantly contributed to the development of entrepreneurship in Poland.

Great entrepreneurial potential is also demonstrated by the generation currently entering the market, whose entrepreneurship is shaped primarily by a technological prism (Cora, 2019). Young people, representing Generation Z, often referred to as the digital society, digital generation, media, children of the Internet, dot.com children, .com generation, instant online (Levickaite, 2010), or the ipad, iphone generation (Kulka & Nowacka, 2019), grew up in a world dominated by the rapid development of information technology, the Internet and social media. This has resulted in representatives of the generation having a natural ability to navigate the digital world, which allows them to easily use modern tools to develop their own business ideas (Saiyed, Srivastava, Gupta, 2022). Their approach to entrepreneurship differs from that of previous generations. In fact, they focus primarily on innovative solutions, using technologies such as artificial intelligence, blockchain, virtual reality, cloud technology, etc., to create new products and services. Being able to navigate the digital world has made them more willing to take risks and explore unfamiliar market areas, which contributes to the rapid development of new economic sectors, such as financial technology (fintech), e-commerce (e-commerce), online education (edtech) or green technology (cleantech) (Cirstea & Anagnoste, 2023). In addition, today's generation of entrepreneurs is characterized by greater flexibility and openness to global markets. With widespread access to information and global communication platforms, they are able to adapt quickly to changing conditions and take advantage of international business opportunities. Their business is not limited to local markets, but often has an international dimension, which promotes global competitiveness (Saiyed et al., 2022). The authors further point out that Generation Z is highly aware of social, environmental and ethical issues. In practice, they place a high value on social equality, justice and sustainability, often engaging in initiatives to improve society and protect the environment (Mihelich, 2013). Their consumer and professional decisions are often motivated by a desire to make a positive impact on the world, which translates into supporting companies and projects that share their ethical values. As a result, Generation Z has the potential to make

significant changes in the way they do business, guided by principles of social and environmental responsibility (Djafarova & Foots, 2022).

To expand their business opportunities, Generation Z entrepreneurs often seek to establish and develop collaborations and partnerships. To do this, they actively use social networks and digital platforms, where they seek out like-minded people with similar views and beliefs. This enables them to build the right collaboration platform that fosters innovation, creates a solid support system, and helps them cope with the challenges of the modern market (Redford et al., 2023).

An important feature shaping the entrepreneurial attitudes of Generation Z is the desire for independence and autonomy. This manifests itself in managing one's own time, work schedule, and deciding one's future, which is not provided by the traditional work model. In addition, people representing the generation in question value the ability to make decisions on their own, which allows them to better align their work with their personal needs and values, and thus maintain a work-life balance (Rahayu, et al., 2023).

It should also be noted that Generation Z, which grew up in an era of crises and economic instability, attaches great importance to proper financial management. Their approach to finance is dominated by a desire for stability and economic security. They place great importance on saving, investing and minimizing financial risks. As a result, Generation Z prioritizes financial stability and seeks sustainable and profitable business ventures when running their own company. They emphasize long-term benefits and profitability in their operations, which allows them to build a sustainable and solid financial foundation (Ensari, 2017).

Another key characteristic of Generation Z's approach to entrepreneurship is their propensity to develop unique business solutions. With analytical skills and a creative approach, they are able to identify business gaps and respond innovatively to consumer demand. Unlike previous generations, which often stuck to tried-and-true methods and concepts, Z entrepreneurs are not afraid to seek out and implement innovative products and services and new forms of customer communication (Cirstea & Anagnoste, 2023).

A very important factor in determining the scope and form of business is also the personal brand, which is a key element of the professional and social identity of the youngest generation entering the labor market. In the era of ubiquitous social media, skillful personal branding allows you to effectively manage your image and communicate your values and competencies. For representatives of Generation Z, a personal brand is a tool that allows you to stand out in the competitive labor market, as well as build a network

of professional contacts, (Vitelar, 2017). Thanks to professional branding, young entrepreneurs can gain the trust and loyalty of their audience, which is reflected in dynamic opportunities for business development. Personal branding thus provides the foundation for entrepreneurial activities, enabling them to effectively promote their own ventures and gain investors and customers (Saiyed et al., 2022).

It is also worth pointing out that Generation Z, growing up in a rapidly changing world, demonstrates great adaptability and considerable resilience to external stimuli. The ability to adapt quickly to new conditions stems from frequent experience with dynamic technologies and global social and economic changes (Cirstea & Anagnoste, 2023). In the face of unpredictable changes, Z entrepreneurs are able to effectively modify their business strategies, which allows them to remain competitive and achieve their goals. It should also be noted that the adaptability of Generation Z is also manifested in their approach to business management, where flexibility and rapid response to changing circumstances are key elements of success. Thanks to these qualities, representatives of Generation Z are well prepared to face modern market challenges and conduct innovative business activities.

Generation Z entrepreneurs also value the process of continuous learning and self-improvement, recognizing them as key elements of professional and personal success. Their drive to acquire new knowledge and skills manifests itself primarily through intensive use of online courses, workshops and other available educational resources. Through various forms of education, they are able to quickly adapt to the changing demands of the labor market and develop their interests in various fields. The knowledge they gain is then applied to entrepreneurial ventures, allowing them to innovate with solutions and ideas. As a result, Generation Z is more prepared to meet the challenges of today's economy, while promoting a culture of continuous development and adaptation. Their innovative approach to education and self-improvement puts them at the forefront of modern professional and social trends, which can benefit both them and the wider business environment (Saiyed et al., 2022).

The indicated traits make Generation Z extremely entrepreneurial and are not limited to traditional forms of business, but also include innovative business models such as e-commerce, technology startups, freelance work, subscription platforms, Crowdfunding, on-demand services, education platforms, green ventures, as well as gaming and esports.

One of the most popular business models for Generation Z is e-commerce, which relies on dynamic online stores that offer a wide range of products

tailored to consumers' needs and preferences (Gen Z Entrepreneur Report 2023; Vitelar, 2017). Many of these stores specialize in niche markets such as apparel, electronics or cosmetics which allows them to stand out from the competition. Generation Z values personalization, so these stores often offer the ability to customize products to suit the individual buyer's needs. Also, key is the use of social media for promotion and sales, allowing direct interaction with customers and building an engaged community. Additionally, these stores place a strong emphasis on speed of delivery and convenience of shopping, which is important for a younger generation accustomed to instant gratification.

The second popular business venture of Generation Z is technology startups, which develop cutting-edge technologies. Among them, mobile applications, which make everyday life and communication easier, occupy a special place. Advanced artificial intelligence solutions are also being developed, which are revolutionizing many industries by introducing automation and intelligent data analysis. In addition, Z entrepreneurs are actively exploring the potential of blockchain technology, which provides secure and transparent transactions and new opportunities in the area of finance. Within startups, the Internet of Things (IoT) is also of great importance, opening up new perspectives in the field of smart homes, cities and industries, enabling better management of resources and optimization of processes (Papp-Váry et al., 2023).

A popular business model for Generation Z is also freelance work, i.e., providing services on commission. Freelancers specialize in a variety of fields, such as graphic design, programming, digital marketing, copywriting or business consulting, which allows them to flexibly adapt to market needs. This work model allows them to manage their own time and choose the projects that best suit their interests and skills. This allows them to develop their creativity and gain diverse work experience. It should be noted that working as a freelancer often leads to building a strong personal brand and provides the opportunity to work with clients from all over the world (Miller, 2016; Anggarini, 2022).

Similar in nature are subscription platforms that offer services based on a subscription model, such as streaming music and movies. Subscription boxes and educational platforms are also popular. The former regularly provide users with beauty, health or cooking products tailored to individual needs and preferences, while the latter offer access to a wide range of online courses to develop skills and acquire new qualifications. The subscription model provides users with convenience and access to quality services and products on an ongoing basis, while enabling companies to generate stable revenue and customer loyalty (Anggarini, 2022).

One of the most popular models among Generation Z is the use of social media influencers, who build their personal brand through social media activity. Influencers create compelling and authentic content that attracts a large number of followers, which enables them to monetize their business. They earn money from ads, sponsored posts and partnerships with brands that want to reach their engaged community. In addition, influencers often develop their own product lines, such as clothing, cosmetics or online courses, which allows them to diversify their sources of income. Due to their authenticity and close relationships with their audiences, social media influencers have a significant impact on the trends and purchasing decisions of their followers, making this model extremely effective and profitable (Iwanicka, 2022; Jarrar et al., 2020)

Another business model, crowdfunding is a method of funding projects and ventures by raising funds from a large number of people, usually via the Internet. Crowdfunding platforms allow entrepreneurs, creators and innovators to present their ideas to a wide audience and gain financial support in exchange for various rewards or shares. Thanks to crowdfunding, many creative and innovative projects that would have had no chance of traditional funding can be realized and succeed in the market (Prakash et al., 2019).

Entrepreneur Z can also develop a business based on the organization of on-demand services. The indicated model makes it possible to introduce new, unique services tailored to the specific needs of local markets or niche customer groups (van der Burg et al. 2019). For example, an entrepreneur can, on the one hand, develop mobile applications to facilitate ordering services such as food delivery from local restaurants, transportation, cleaning, pet care, etc., and, on the other hand, focus on developing platforms that connect service providers with customers in a transparent and efficient manner, ensuring a high level of service and user satisfaction. Moreover, an additional asset to attract conscious consumers can be attention to the environmental and social aspect, actively promoting sustainable practices, as well as supporting local entrepreneurs. The on-demand service model gives young entrepreneurs the space to think creatively and experiment with different solutions, allowing for dynamic growth and adaptation to changing market needs.

The model for creating and selling online courses, webinars and e-learning platforms is also becoming increasingly popular. They offer a wide range of training courses from language learning to personal development to advanced programming. It allows experts to share their knowledge with a global audience while generating passive income. E-learning platforms provide flexibility in learning, allowing participants to learn at a time and pace that is convenient for

them, making education more accessible to people from different backgrounds (Ouadoud et al., 2019).

A recent popular business model among Generation Z is gaming and esports activities. This includes creating computer games that attract gamers, and streaming on platforms where streamers earn money from subscriptions, donations and advertising. Also gaining in popularity is the organization of e-sports tournaments, which attract huge crowds of viewers and sponsors (Rukat, 2022). Additionally, a key component of this model is the sale of gaming-related products and services, such as gaming accessories, apparel, and training and coaching.

Thus, it can be noted that entrepreneurship from the perspective of Generation Z is characterized by the dynamic use of modern technologies and innovative business models. Young entrepreneurs are determined to create valuable, sustainable and socially responsible businesses that respond to the changing needs of the global market. Their approach to business is based on flexibility, creativity and the ability to adapt to rapidly changing conditions. Through the use of digital platforms and social networks, Z entrepreneurs have the ability to establish extensive collaboration and build global communities around their projects. This approach allows them not only to achieve success in their professional field, but also to make a positive impact on society and the environment.

3. Survey methodology

An empirical study on assessing the importance of factors determining being entrepreneurial was conducted in June 2024, on a sample of 262 students of the University of Economics in Poznań (table 1). The research was conducted using a survey questionnaire. On the basis of the literature study and our own observations and experiences, 31 factors were identified that count as elements indicative of entrepreneurship. The selection of subjects for the study was based on the method of non-random, purposive selection of typical units. The basic criterion was membership in Generation Z, that is, the generation that was born after 1995 and before 2012. The selection of students from Poznań University of Economics and Business was deliberate, as this group represents a key segment of Polish youth with access to a variety of educational programs and entrepreneurial opportunities. Poznań, known for its strong academic environment and entrepreneurial culture, provides unique insights into the attitudes and motivations of Generation Z entrepreneurs

in Poland. Moreover, the city’s economic and social dynamics, shaped by its history as a commercial center, influence the specific entrepreneurial attitudes observed in the study.

Table 1. Characteristics of the survey sample

No.	Characteristic	No. of indications N=262	Share (in %)
Gender			
1.	Female	155	59.16
2.	Male	105	40.08
3.	I will not give an answer	2	0.76
Study degree			
1.	I Degree	119	45.42
2.	II Degree	143	54.58

Source: own study based on empirical data

The processing of empirical data was controlled. The collected empirical material was verified, reduced and then processed into alphanumeric form using specialized software. For this purpose, the statistical package Statsoft Statistica 12 was used, as well as an auxiliary Microsoft Excel spreadsheet. The collected and processed material was then analyzed using descriptive statistics and factor analysis methods.

4. Entrepreneurship in the opinion of Generation Z - survey results

The qualities and competencies that determine being entrepreneurial should not be considered only as tools to support individual development. Decisions regarding their formation and development have broad consequences, both positive and negative. In practice, it is emphasized that these qualities and competencies are essential for achieving a competitive advantage in a dynamic business environment. Nevertheless, striving to develop them as much as possible can, on the one hand, set an individual apart from rivals, but on the other hand, it can also lead to undue pressure and a competence gap that can hinder the achievement of intended goals.

In the context of the above considerations, it is important to examine how these traits and competencies considered entrepreneurial are evaluated by representatives of Generation Z. Their opinions are particularly important because Generation Z, entering the labor market and becoming increasingly influential in the economic context, will shape the future of entrepreneurship. The results indicate that Generation Z who study in Poznań University of Economics and Business values flexibility, creativity and adaptability, which is in line with global trends. However, there are specific regional nuances, such as an emphasis on practical entrepreneurial education and local market opportunities. Over-reliance on global trends in previous studies may not fully capture local challenges and motivations, such as economic uncertainty in Poland or support from academic institutions in Poznań. These findings underscore the need for tailored support programs to foster entrepreneurship in specific local contexts, ensuring their relevance and effectiveness. Understanding which elements they consider key can help to better adapt education and training programs, and better prepare young people for the challenges of today's labor market.

Based on literature studies and our own experience and observations, a number of areas where these elements play a key role were identified. Then, analyzing their cognitive significance, they were classified into groups concerning (table 2):

- Interpersonal and social skills - essential for building relationships and communicating effectively within a team and with clients. Z entrepreneurs must demonstrate the ability to work in a team, negotiate and convince others of their ideas. Such skills are the foundation for effective team management and building lasting business relationships.
- Analytical and cognitive skills - include the ability to think logically, analyze data and make decisions based on available information. Z entrepreneurs must be able to spot opportunities in the environment, analyze risks and make decisions under uncertainty. These skills form the basis for strategic planning, problem solving and innovation.
- Attitudes and personality traits - include aspects such as ambition, self-confidence, resistance to stress and willingness to take risks. Z entrepreneurs are often characterized by a strong motivation to achieve goals, the ability to cope with failure and optimism. These qualities help them overcome difficulties, achieve long-term goals and pursue new opportunities.
- Management and organizational skills - as the ability to plan, organize and manage resources. Z entrepreneurs must be able to set goals, delegate

tasks and monitor work progress. These skills enable them to run their business effectively, manage their teams and complete projects on time and on budget.

- Adaptive and creative skills - include the ability to adapt quickly to changing conditions and think creatively. Z entrepreneurs must be flexible, open to new ideas and willing to experiment with different solutions. These skills are crucial for innovation, developing new products and services, and remaining competitive in the marketplace.

Table 2. Entrepreneurial qualities and competencies according to distinguished groups

Category	Factors
Interpersonal and social skills	<ul style="list-style-type: none">- Communicativeness- Ability to work in a team- Ability to convince others of your ideas and your own- Assertiveness- Highly developed leadership skills- Openness, both to change and to the environment, people- Willingness to compete, competitive spirit
Analytical and cognitive skills	<ul style="list-style-type: none">- Ability to make inferences- Ability to think analytically- Ability to see opportunities in the environment- Ability to act and make decisions under conditions of uncertainty- Ability to manage material resources
Attitudes and personality traits	<ul style="list-style-type: none">- Ambition- Self-confidence, courage- Resilience to stress- Optimism- Being aware of yourself, your strengths and weaknesses- Willingness to take risks- Goal orientation
Management and organizational skills	<ul style="list-style-type: none">- Ability to set goals for oneself- Responsibility, both for oneself and one's subordinates- Well-developed organizational skills- Ability to persuade others of themselves and their ideas

Category	Factors
Adaptive and creative skills	<ul style="list-style-type: none"> - Flexibility, ability to adapt easily to changing conditions - Creativity, resourcefulness, creative thinking - Willingness to continuously develop, deepen your knowledge and improve your skills - Taking initiative - Willingness to take on new challenges - Dynamism in action - A disposition to achieve profit, success - Ability to accept failures and draw constructive conclusions from them - Independence, self-reliance

Source: own study based on empirical data

As part of their research, respondents were asked to rate these factors using a five-point Likert scale. Respondents were allowed to consider a given factor as not important by giving a score of 1, 2 - of low importance, 3 - of medium importance, 4 - of high importance and 5 - of very high importance. To calculate the direction of the evaluation of factors related to entrepreneurship, the arithmetic mean, defined as the significance coefficient, was calculated. Then all variables were ordered in order from the largest to the smallest coefficient. Detailed data including the mean of the ratings for the entire population, the mod (dominant), the mod count and the standard deviation were arranged in order from the largest to the smallest coefficient of significance and are presented in table 3.

Table 3. The importance of entrepreneurial qualities and competencies

Factor	Descriptive statistics			
	Average	Mode	Mode count	Standard Deviation
Ability to spot opportunities in the environment	4.52	5.00	155	0.63
Ambition	4.43	5.00	140	0.71
Taking initiative	4.43	5.00	141	0.71
Flexibility, ease of adaptation to changing conditions	4.39	5.00	130	0.72

Factor	Descriptive statistics			
	Average	Mode	Mode count	Standard Deviation
Creativity, ingenuity, creative thinking	4.39	5.00	134	0.72
Ability to act and make decisions under conditions of uncertainty	4.37	5.00	129	0.74
Being aware of yourself, your strengths and weaknesses	4.36	5.00	127	0.74
Self-confidence, courage	4.32	5.00	120	0.75
Resilience to stress	4.29	5.00	127	0.80
Ability to accept failures and learn constructive lessons from them	4.29	5.00	120	0.79
Communicativeness	4.26	5.00	122	0.86
Ability to make inferences	4.25	5.00	121	0.89
Ability to set goals for oneself	4.22	4.00	121	0.86
Responsibility, both for oneself and one's subordinates	4.21	4.00	113	0.88
Ability to convince others of themselves and their ideas	4.19	4.00	111	0.85
Well-developed organizational skills	4.15	4.00	108	0.91
Ability to think analytically	4.14	5.00	111	0.98
Ability to manage material resources	4.10	4.00	127	0.85
Openness, both to change and to the environment, people	4.10	4.00	130	0.81
Independence, self-reliance	4.10	4.00	116	0.89
Assertiveness	4.09	5.00	104	0.98
Highly developed leadership skills	4.07	4.00	102	0.93
Goal orientation	4.07	4.00	128	0.84
Willingness to take on new challenges	4.06	4.00	130	0.89

Factor	Descriptive statistics			
	Average	Mode	Mode count	Standard Deviation
Ability to work in a team	3.98	4.00	100	1.04
Willingness to continuously develop, deepen their knowledge and improve their skills	3.98	4.00	108	1.06
Willingness to take risks	3.96	4.00	123	0.81
Dynamism in action	3.86	4.00	113	0.96
A disposition to achieve profit, success	3.82	4.00	107	1.09
Optimism	3.57	4.00	102	1.07
Willingness to compete, competitive spirit	3.48	3.00	91	1.15

Source: own study based on empirical data

Based on the results of the relevance index, shown above, the five highest and five lowest rated traits/attitudes/competencies were analyzed.

The highest rated factor was the ability to see opportunities in the environment (N-4.52), which may be due to the dynamic and changing nature of today's labor market. Generation Z, raised in the era of digitization and globalization, is accustomed to rapid change and ubiquitous information, which may explain their high rating for this trait. Young people are more aware of the opportunities and threats posed by global trends, making the ability to spot opportunities essential for them.

On the other hand, the second factor is ambition (N-4.43). Its high score may reflect Generation Z's aspirations to succeed and achieve their goals. In the age of social media and personal branding, young people are focused on personal and professional development. Ambition allows them to strive for continuous improvement and achieve high standards, which is essential in a competitive business environment.

The third factor, taking initiative, is a trait valued in the context of entrepreneurship (N-4.43), as it enables proactive action and seizing available opportunities. Generation Z, known for its entrepreneurial attitude and innovation, sees this trait as the key to success in a rapidly changing world. Initiative is essential for introducing new ideas and taking risks, which is the basis of entrepreneurial activity.

Another factor is flexibility and adaptability (N-4.39), which are extremely important in today's rapidly changing work environment. Generation Z grew up in a time of economic uncertainty and technological revolutions, which makes adaptability crucial to their career success. Flexibility allows them to deal effectively with unpredictable situations and changes, which is indispensable in entrepreneurship.

The last highest rated factor is creativity and creative thinking (N-4.39). The high rating may be due to the fact that Generation Z is known for its innovation and search for new solutions. In an era of rapid technological advances, the ability to generate new ideas and think outside the box is invaluable. Creativity allows for the development of unique products and services and effective problem solving, which is crucial for entrepreneurs.

The top-rated factors reflect the high value that the surveyed representatives of Generation Z place on adaptability, initiative and the ability to identify and seize opportunities in the environment. This indicates an awareness of the need for flexibility and creative approaches in a dynamic market environment. The high rating for ambition and taking initiative underscores the importance of being proactive and pursuing one's goals, which is crucial for entrepreneurship.

In contrast, the lowest rated factor was the desire to compete, the spirit of competition (N-3.48). The low rating for the desire to compete may indicate a shift in Generation Z's values toward cooperation and collaboration. Today's work environment promotes team achievement and synergy, which may explain the lower importance placed on competition. Young people may value cooperation and relationship building more, which is in line with trends in modern management.

Another low-rated factor was optimism (N-3.57). Optimism, while important, is not the highest rated factor. This may be due to the realistic attitude of Generation Z, who grew up in an era of economic crises and uncertainty. Young people may have a more pragmatic approach to entrepreneurship, where a realistic assessment of the situation is more important than excessive optimism.

The third low-rated factor was profit-oriented, success-oriented (N-3.82). The relatively low rating for this factor may be due to the values of Generation Z, which often values more sustainability and social responsibility. Young people may be more focused on social and environmental impact goals, not just on achieving financial success.

The penultimate low-rated factor was dynamism in action (N-3.89). Dynamism, while important, is not the highest rated factor, which may

suggest that this generation values stability and thoughtful actions more than quick, dynamic decisions. Young people may prefer an approach based on analysis and planning, which provides more certainty and control over processes.

The last low-rated factor was risk appetite (N-3.96). The low risk propensity score may reflect Generation Z's cautious approach to entrepreneurship. Faced with market uncertainty and frequent change, young people may prefer safe and well-thought-out decisions to taking big risks. However, risk appetite is important in its own right, as reflected in an average score close to 4.0.

Lower scores for traits such as willingness to compete, optimism, and profit orientation may suggest that surveyed representatives of Generation Z may be less focused on competitiveness and individual financial success, and more on values related to cooperation, life balance and sustainability. Risk appetite, while not rated lowest, also received a relatively low average, which may reflect a more cautious approach to entrepreneurship in the face of uncertainty.

However, the analysis does not allow for an exhaustive interpretation and evaluation of the variables that are prioritized. Some of the listed competencies have similar cognitive load and show high and moderate interdependence, resulting in a chaotic and unclear picture presented. This problem should be solved by reducing the primary variables and giving them appropriate ranks. So, in conducting further research, a factor analysis procedure was followed, enabling the complex structure to be simplified into a form that would allow issues to be clarified on the basis of a limited number of relevant mega-factors.

To begin with, it was necessary to determine the number of mega-factors describing the phenomenon under study. For this purpose, Cattell's (1966, pp. 245-276) settlement chart was used, on the basis of which the point of selection of the number of relevant mega-factors is determined. The essence of the criterion manifests itself in the search for a mild decrease in eigenvalues. According to Cattell's concept, to the right of this point, a so-called "factor landslide" is formed. , "factor siphon" containing factors that residually explain the phenomenon under study. In the graph shown (see figure 1), it is clear that between the seventh and eighth points, there is a gentle decline in the eigenvalues. Thus, according to the criterion adopted, seven mega-factors should be classified for further analysis.

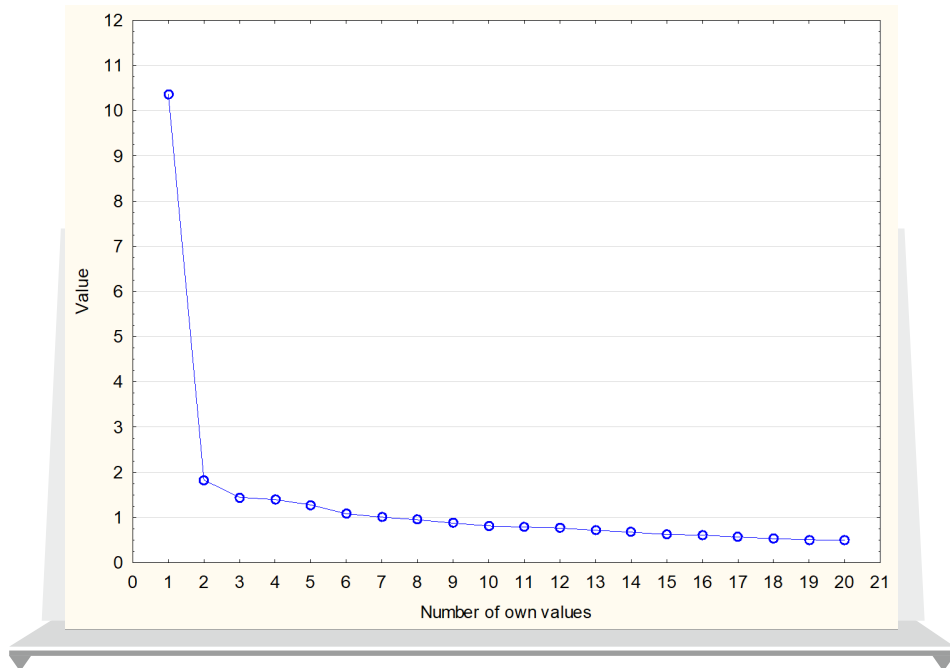


Figure 1. Cattell's scatter plot for assessing factors related to entrepreneurship

Source: own study based on empirical data

In order to confirm the correctness of the selection of the number of mega-factors, the eigenvalues of the extracted seven main variables were checked, as shown in table 4. In sum, it should be noted that the cumulative eigenvalue of all mega-factors was 18.41, of which the first factor obtained an eigenvalue of 10.37.

Table 4. Eigenvalues corresponding to the following mega-factors for assessing factors related to entrepreneurship

Mega-factor	Own value	Cumulative own value
F1	10.37	10.37
F2	1.83	12.20

Mega-factor	Own value	Cumulative own value
F3	1.44	13.64
F4	1.40	15.04
F5	1.28	16.32
F6	1.08	17.40
F7	1.01	18.41

Source: own study based on empirical data

The raw factor loadings were then rotated using the Varimax method, which makes it possible to maximize the variance of these variable loadings (so-called factor cleaning) (Stanisz & Tadeusiewicz, 2007, p. 233). In practice, it is assumed that loadings whose value exceeds 0.7 have a significant impact on the cognitive value. However, in order to better illustrate the problem, loadings with a value equal to or higher than 0.62 were also marked, as they contained a lot of information about the factors. Significant factor loadings representing the correlation between the extracted factors and the primary variables are shown in table 5.

Table 5. Factor loadings matrix after raw Varimax rotation for assessing entrepreneurship-related factors

Variable	Factor loads						
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Being aware of yourself, your strengths and weaknesses	0.23	0.64	0.19	-0.13	0.16	0.23	-0.01
Taking initiative	0.13	0.63	0.17	0.21	-0.07	0.18	0.15
Creativity, resourcefulness, creative thinking	0.09	0.66	-0.03	0.18	0.12	0.03	0.25
Ability to see opportunities in the environment	0.30	0.63	-0.03	0.29	0.20	-0.14	0.09
Self-confidence, courage	0.07	0.28	0.64	0.17	0.20	0.28	-0.05
Goal orientation	0.19	0.11	0.18	0.04	0.77	0.06	0.14

Variable	Factor loads						
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Ability to set goals for oneself	0.20	0.08	0.09	0.14	0.80	0.14	0.01
A disposition to achieve profit, success	0.09	0.01	0.68	0.25	0.29	-0.13	0.10
Communicativeness	0.27	0.21	0.22	0.67	0.02	0.18	0.12
Assertiveness	0.34	0.10	0.10	0.63	0.23	0.09	0.16
Optimism	0.23	-0.01	0.70	0.11	0.05	0.06	0.29
Ability to think analytically	0.68	0.18	0.11	0.15	0.16	0.12	0.26
Ability to make inferences	0.78	0.10	0.11	0.23	0.20	0.11	0.19
Ability to work in a team	0.24	0.14	0.00	0.13	0.04	0.01	0.78
Resistance to stress	0.26	0.04	0.01	0.22	0.08	0.73	0.21

LEGEND: factor analysis with crude Varimax rotation was used, loadings of greater than or equal to 0.62 were used in the construction of the mega-factors. The data presented represent only factors classified as main factors.

Source: own study based on empirical data

The mega-factors identified explained almost 60% of the variance in the research problem studied. The first mega-factor identified was “Strategic Analyst,” which is influenced by the variables: analytical thinking and reasoning skills. For Generation Z, raised in a digital age where data is at our fingertips, the ability to quickly process information and formulate insights is crucial. The ability to be smart and strategic allows you to identify trends, assess risks and make business decisions based on solid analysis. “Strategic Analyst” transforms information into knowledge and knowledge into action, which is the foundation of successful entrepreneurship.

Another mega-factor is the “Innovative Champion,” which is characterized by variables such as self-awareness, initiative, creativity, resourcefulness, creative thinking and the ability to see opportunities in the environment. Generation Z is known for its out-of-the-box thinking and willingness to take risks, which allows it to see and seize opportunities that others may overlook. Out-of-the-box thinking, willingness to take risks and creative

problem-solving make the “Innovative Champion” a true champion of innovation.

The third mega-factor is the “Determined Optimist,” which is described by variables such as self-confidence, courage, a focus on profit and success, and optimism. For Generation Z, who grew up in a time of uncertainty and constant change, the ability to maintain optimism and self-confidence is very important. Confidence and a positive attitude help transform difficulties into opportunities, which is an indispensable part of successful entrepreneurship.

The fourth mega-factor is “Communication Leader,” which is defined by variables such as communicativeness and assertiveness. In the world of Generation Z, where communication takes place on many levels - from face-to-face conversations to social media - the ability to communicate one’s ideas clearly and effectively is essential. “A Communication Leader” is able not only to express his or her views clearly, but also to listen and engage others effectively. Assertiveness allows you to defend your ideas and values, which is essential in a dynamic business environment.

The fifth mega-factor is “Purposeful Player,” which includes variables such as goal orientation and the ability to set goals. For Generation Z, a focus on goals and the ability to achieve them are fundamental in a dynamic and often unpredictable world. “Purposeful Players” know what they want and have the planning and organizational skills to help achieve their goals. Results orientation and mobilization for action are essential in any entrepreneurship.

The sixth mega-factor is the “Calm Promoter,” which is characterized by the variable stress resistance. Generation Z, often faced with high expectations and pressure, values the ability to manage stress. “Calm Promoter” transforms stress into motivation, maintaining focus and productivity under all conditions. Mental resilience allows one to survive difficult moments and emerge stronger from them, which is crucial for sustained success in business.

The last mega-factor is “Team Champion,” which is defined by the variable of teamwork skills. Generation Z, which has grown up in a globalized world full of different cultures and perspectives, values the ability to work together. “Team Champion” is able to integrate different talents and skills to form close-knit and productive teams. The ability to build relationships and work as a team is the foundation of successful entrepreneurship in today’s complex world.

Detailed data including the construction of the factors, their eigenvalues and the degree of explanation of variance are shown in table 6.

Table 6. Summary of mega-factors

Megafactor	Factor loads	Percentage of variance explanation	Cumulative percentage of variance explanation
Strategic Analyst	<ul style="list-style-type: none">- Ability to think analytically- Ability to make inferences	33.46	33.46
Innovative Champion	<ul style="list-style-type: none">- Being aware of yourself, your strengths and weaknesses- Taking initiative- Creativity, resourcefulness, creative thinking- Ability to see opportunities in the environment	5.89	39.35
Determined Optimist	<ul style="list-style-type: none">- Self-confidence, courage- Attitude to achieve profit, success- Optimism	4.66	44.01
Communication Leader	<ul style="list-style-type: none">- Communicativeness- Assertiveness	4.50	48.51
Purposeful Player	<ul style="list-style-type: none">- Goal orientation- Ability to set goals for oneself	4.12	52.64
Calm Promoter	<ul style="list-style-type: none">- Resistance to stress	3.49	56.13
Team Champion	<ul style="list-style-type: none">- Ability to work in a team	3.24	59.37

Source: own study based on empirical data

In summary, entrepreneurship from the perspective of Generation Z is based on various key traits and competencies, such as strategic thinking, creative initiative, self-confidence, effective communication, goal orientation, stress resilience and teamwork skills. These mega-factors reflect the skills and attitudes that young people consider necessary to be entrepreneurial, and thus to succeed in today's rapidly changing business world.

5. Conclusions and directions for future research

This study highlighted key characteristics and entrepreneurial attitudes of Generation Z, with a particular focus on students in Poznań University of

Economics and Business. The results highlight the unique links between generational characteristics and the local context. Poznań, with its historical ties to commerce, proximity to Western Europe and well-developed academic institutions, provides a favorable environment for entrepreneurship. The city's residents, often described as resourceful and pragmatic, further shape the entrepreneurial spirit observed among Generation Z.

Given that the study is about students at Poznań University of Economics and Business, the findings have particular relevance to the local economy and labor market dynamics:

- characteristics of the local workforce - the entrepreneurial qualities of the students indicate that the local labor market in Poznań could benefit from a generation of workers who value adaptability, creativity and problem-solving skills. These traits are particularly desirable in sectors such as technology startups, green technologies and e-commerce, which Poznań can develop as regional centers of innovation;
- increase local entrepreneurship - students' propensity to be entrepreneurial can lead to an increase in the number of small businesses in Poznań. This can revitalize the local economy by fostering innovation and a diversity of business offerings, as well as create new jobs and stimulate the development of neglected sectors;
- universities as catalysts - The results underscore the need for Poznań University of Economics and Business and similar institutions to introduce programs that combine practical skills, digital competencies and knowledge of the local market. Such activities will better prepare graduates for the region's economic challenges while leveraging Poznań's unique strengths. Consequently, with the interests of the new generation in mind, Poznań University of Economics plans to open new degree programs, such as Sustainable Human Capital Management and Digital Transformation of the Supply Chain, to better respond to market needs and support the development of local entrepreneurship.

Not only Poznań University of Economics and Business, but also others universities in Poznan should capitalize on the city's strong entrepreneurial tradition by integrating localized practical learning programs into their curricula. Collaborations with nearby institutions in Western Europe could provide students with access to cross-border markets and modern business practices. Initiatives such as entrepreneurial competitions, local business incubators and regional mentoring programs could capitalize on Poznań's unique advantages, including its dynamic start-up ecosystem and access to international markets.

In addition, city policymakers should prioritize strategies that support local entrepreneurial systems, such as student-led start-up grants and partnerships with successful Greater Poznań companies. Leveraging Poznań's proximity to the German market and its entrepreneurial heritage, these programs can help promote local youth as an engine of innovation and regional development.

The focus on UEP students provides valuable insights, but also points to limitations worth addressing in future research:

- local theoretical contributions - the study highlights the importance of considering regional and institutional factors when analyzing entrepreneurial attitudes. Subsequent research could refine models of entrepreneurship by integrating the specific socioeconomic conditions of cities such as Poznań.
- influence on the regional economy - research should assess how the entrepreneurial activities of UEP graduates influence the development of Poznań's economy, including the creation of new industries or the revitalization of traditional sectors.
- comparative studies in a regional context - to fully understand the impact of UEP students' entrepreneurial traits, it is worth conducting comparative studies with other universities in Poland and similarly sized cities in Europe to highlight differences due to local academic and economic ecosystems.
- monitor long-term outcomes - longitudinal studies tracking the success and sustainability of companies founded by UEP graduates can provide evidence-based recommendations for improving local entrepreneurship support systems.

New research directions and programs of study can provide a basis for further understanding of how regional contexts affect entrepreneurial development and how best to support the next generation of entrepreneurs in a rapidly changing environment.

6. Summary

This article provides a comprehensive analysis of entrepreneurship from the perspective of Generation Z, focusing specifically on students from Poznań University of Economics and Business. The results highlight a distinctive entrepreneurial profile, shaped by both generational characteristics and the region's unique socio-economic context. Poznań's historical ties to trade, proximity to Western Europe and strong academic and entrepreneurial traditions create favorable conditions for the development of innovative business practices among young people.

The study points to the importance of local approaches to education and entrepreneurial support. Factors such as Poznań's links to global markets and the entrepreneurial spirit of its residents, often characterized as pragmatic and resourceful, should be central to the design of educational and policy initiatives. The results also underscore the potential of Poznań's youth to serve as a bridge between local and international markets, thanks to the city's strategic location and cultural openness.

Future research should examine the evolution of Generation Z's entrepreneurial paths in Poznań, comparing them to peers in other regions and analyzing the long-term impact of adapted education and support programs. By deepening the understanding of local entrepreneurship, this research can support strategies that better prepare the next generation of entrepreneurs for the challenges and opportunities of a globalized economy.

Abstract

This article aims to identify and assess the factors that representatives of Generation Z who are studying in Poznań believe determine their entrepreneurial attitudes. Using a combination of literature analysis and a diagnostic survey of students at Poznań University of Economics and Business, the study reveals how local socio-economic conditions and educational opportunities affect entrepreneurial aspirations. The results underscore the importance of tailoring educational and policy initiatives to the specific needs of representatives of generation Z in Poznań, emphasizing practical education, support for local business initiatives and the city's entrepreneurial heritage. The results provide deeper insight into the relationship between generational characteristics and the local context, while suggesting directions for further research, such as comparative analyses with other Polish cities to examine regional differences in entrepreneurial attitudes.

Keywords: *Generation Z, entrepreneurship, entrepreneurial traits and competencies.*

JEL

Classification: L26, Q56, J24

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