MARKETING COMMUNICATION AND INNOVATION AMONG THE GENERATION-Z

Arpad Papp-Vary¹, Zoltan Szabo², Diana Pacsi³, Attila Kovacs⁴

¹Budapest Metropolitan University, 1-9. Nagy Lajos király útja Budapest 1148, Hungary

²University of Sopron, 4. Bajcsy-Zsilinszky u., Sopron 9400, Hungary

³Hungarian University of Agriculture and Life Sciences, 1. Prater Karoly str., Gödöllő. 2100, Hungary

⁴ONE PR Kommunikáció, Budapest, Hungary

Abstract

Although interest in innovation has declined in recent years, its importance remains crucial. Innovation has really become a part of our lives today; we meet more and more developments every day. As innovation shapes our future, it is important to map how the next generation enters the labor market. In the present study, we examine this, i.e., the relationship between Z-generation and innovation.

In the study, we used the methodology of focus group analysis to answer which marketing channels are most accessible to young people in their 20s, what content they typically consume, and how to motivate them to innovate.

Keywords: innovation, marketing innovation, social media, communication, Z-generation

1. INTRODUCTION

Innovation. Everyone knows the word, the people of the 21st century read a new piece of news related to the word almost every day. It permeates all areas of life, a real magic word in marketing, yet it is surrounded by some mystique. The importance of the term is shown by the fact that it was the most overused word in the United States in 2013, according to O'Brian. (O'Brian 2013)

1.1. The innovation

Globally, the number of Google searches shows that the interest in innovation has not decreased in recent years, in fact, it has actually increased.

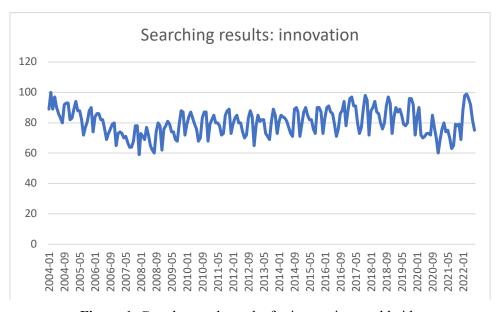


Figure 1. Google search results for innovation worldwide

The Hungarian results, on the other hand, show a more nuanced picture. After the initial enthusiasm, the searches decreased year by year, and today fewer and fewer people are interested in the term. However, this does not mean that the economic and social importance of the activity has decreased.

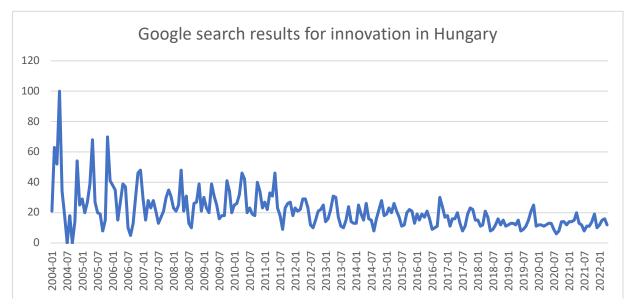


Figure 2: Google search results for innovation in Hungary

But what does the word innovation actually mean? The term used in many fields was first defined by Schumpeter (1993), who defined 5 categories of definition:

- Product innovation: Production of new goods not yet known to consumers
- Process innovation: The introduction of a new, as yet unknown production process in the industry in question, which does not have to be based on a new scientific discovery
- Market innovation: New placement option, market opening
- Procurement innovation: Opening up new procurement sources for raw materials or semi-finished goods
- Organizational innovation: Creation or termination of a new organization (Schumpeter 1939)

However, there was no complete agreement regarding the definition, the term innovation was interpreted in countless ways.

Urabe (1988) writes about innovation: "Innovation consists of the generation of a new idea and its implementation into a new product, process or service, leading to the dynamic growth of the national economy and the increase of employment as well as to a creation of pure profit for the innovative business enterprise. Innovation is never a one-time phenomenon, but a long and cumulative process of a great number of organizational decision-making processes, ranging from the phase of generation of a new idea to its implementation phase. New idea refers to the perception of a new customer need or a new way to produce. It is generated in the cumulative process of information-gathering, coupled with an ever-challenging entrepreneurial vision. Through the implementation process the new idea is developed and commercialized into a new marketable product or a new process with attendant cost reduction and increased productivity" (Urabe 1988).

1 year later, Twiss (1989) saw innovation as a combination of science, technology, economics and management aimed at achieving novelty. He believed that innovation covers the entire process from the appearance of the idea to commercialization. (Twiss 1989)

Drucker (2003) later gave a shorter and more concise definition that "innovation is a purposeful, focused effort to change the economic or social possibilities of an enterprise." (Drucker 2003) He concentrates on the change-causing effect of innovation, which is where he sees the essence of the concept. However, according to Chikán, the latent need is the driving force of innovation. As Chikán (2008) puts it, "consumer needs can never be fully satisfied." (Chikán, 2008, pp. 244). Since it is an ever-present niche, efforts to make life easier for consumers always call for innovation.

However, most people always think of innovation as something completely new that did not exist before. However, the reality is that the meaning of innovation is much more than that. Radical innovation can require a lot of resources, which companies often don't have at their disposal. (Kahn 2018)

Chikán (2008) examined the concept from the perspective of the company and established 3 main categories: innovation can appear in the form of a new product/service, new technology or new organizational solution. (Chikán 2008)

In contrast, Prahalad (2009) focuses on the experiential environment. He explained the concept like this: "Instead of products and services, the next forms of innovation should focus on the experiential environment, with the support of a network of companies and consumer communities, which aims to create unique value together with each consumer." (Prahalad 2009)

It is also clear from the above definitions that there was not a complete agreement regarding the concept over the years. That is why the OECD Oslo manual was born, which tried to summarize and define what innovation means.

According to this, "innovation is the introduction of a new or significantly improved product (good or service) or procedure, a new marketing method, or a new organizational method in business practice, workplace organization or external relations." (OECD Oslo Manual 2005, pp.46). The manual has gone through several editions, and in the 4th edition the definition became more precise: "An innovation is a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)." (OECD Oslo Manual 2018, pp. 20).

According to the manual, innovation itself is subjective, but its practical application is already objective and comparable. (OECD Oslo Manual 2018)

The manual also specified the forms of appearance of innovation. According to this, product, process, marketing and organizational-organizational innovation exist. Katona (2006) believed that the absence of the term "technology" from the 2005 edition indicates that they are trying to make innovation desirable even for companies with smaller R&D resources. (Katona 2006)

1.2. Economic and marketing - the effects of innovation in Hungary

Marketing innovation is an important area within innovation. Although we might assume that it is already difficult to create something new in this industry, it is still one of the most volatile industries.

According to KSH, "marketing innovation is the introduction of a new marketing method that the company has not used before: significant changes in the areas of product design or packaging, placement, advertising or pricing. The introduction of the new method must be part of a new marketing concept or strategy that is significantly different from the company's existing marketing methods. Seasonal, regular and other routine changes in marketing methods are not included." (KSH 2005)

If we examine the situation of marketing innovation in Hungary, it is clear from the data that the size of the company determines the willingness to innovation in marketing and sales.

Table 1. Proportions of innovative enterprises within all enterprises according to the type of
innovation introduced and the category of staff

mino varion introduced and the energery of starr					
Period	Number of employees	Indicators total	Percentage of enterprises introducing business process innovation in marketing or sales methods (%)		
2018	10-49 employee	23%	8,1%		
	50-249 employee	32%	9,8%		
	250 employee and above	47%	15,5%		
	Total:	26%	8,7%		

Source: KSH 2018

The data also show that a small part of the enterprises, 28.7% to be exact, deal only with innovation. However, it is promising that 2020 was a real record year for innovation. We measured the highest value of the last 30 years, R&D expenditures accounted for 1.61% of GDP. (KSH 2020)

But why is it important that marketing is constantly renewed? As technology and the world change, so do the needs of generations. The habits of Generation Z are already completely different from those of Generation Y, just as Generation Y differs from Generation X. The appearance of new consumer groups creates new channels, new communication and new methods are needed for effective marketing.

1.3. Generation Z - The emerging generation

It is difficult to precisely define the boundaries of the generations, as they differ from author to author. In this study, we rely on the KSH definition, according to which generation Z is defined as those born between 1996 and 2007. (KSH 2018)

Since the age of the research participants also determines their characteristics, it is advisable to rely on recent research to identify their characteristics. Based on what was previously defined, today's generation includes 15-26-year-olds.

The most important characteristic of Generation Z is that, compared to previous generations, they were surrounded by the digital world and grew up in the age of the Internet. "They were born in the 1990's and raised in the 2000s during the most profound changes in the century who exists in a world with web, internet, smart phones, laptops, freely available networks and digital media" (Singh-Dangmei 2016, pp.2) They have been using high-tech devices since childhood at a skill level. (Szabó-Szentgróti et.al. 2019)

According to Csobanka (2016), social media is closely intertwined with the life of Generation Z. "The active social media users have many contacts and they mainly live their everyday relations through these channels (personal meetings are also important to them, however, keeping the online contacts have an equally important role)" (Csobanka 2016, pp.68)

They are not unfamiliar with the feeling of FoMO, they are afraid that they might miss something due to the lack of internetconnection, that they will not be able to provide help or that they will fall behind in their studies due to the lack of information. Facebook and Instagram are important platforms for them. (PASZTOR-BAK, 2020) The rise of TikTok can also be observed in recent years, which has caught up with the biggest social networking sites. Influencers have a great influence on the generation, although they are capable of quick, independent decision-making. (Pop 2020)

Due to digital addiction, concentration, memorization and precision are more difficult for them. They are characterized by visual thinking. According to Annamária Tari, this is an intelligent age group, but despite this, their emotional intelligence is less developed. They often struggle with lack of sleep caused by the feeling of FoMO. (Tari 2011)

^{*}The data refer to a three-year monitoring period (2018 data for the three years between 2016-2018)

2. RESEARCH PURPOSE AND METHODOLOGY

We conducted the research together with the NKFIH in order to get to know the motivations of the target group of university students better in relation to innovation, so that the NKFIH could match it with its strategic goals. NKFIH's mission is to "support the scientific and innovation ecosystem in building a competitive Hungary with the responsible and credible work of its excellent employees."

With the help of the research conducted for the NKFIH at the Budapest Metropolitan University, we looked for the answers to achieve the above goals, so that the communication and other strategic actions of the Office fit the characteristics of the target group as perfectly as possible.

Focus group interviews were used to prepare the study. This is the interview technique, during which properly selected members of the target group participate in a joint conversation. For methodological reasons, a group usually consists of eight people. The advantage of the method, compared to an individual interview, lies in the interaction of the participants with each other, which takes place in a realistic group situation. In a group situation, we can get an idea of how the group members relate, what they think and feel about an "object", product, service or concept.

In addition to the specific answers of the interviewees, the comments attached to the answers, the gestures, and the characteristics of the group dynamics all carry valuable information. One of the main virtues of the focus group study is that it is more suitable than other methods for "modelling" the formation of opinions and discussions. The in-depth focus group interview is one of the most suitable tools for clarifying an exploratory research question or formulating hypotheses.

Furthermore, it is recommended to use the method:

- To create a general picture and collect background information
- To formulate initial hypotheses
- To promote the birth of creative ideas and new thoughts
- To filter out potential errors of any draft
- To collect associations related to a research question
- 2.1. Composition of the group and places of data collection

In order to take into account, the different life situations of the members of the target group and the resulting differences of opinion, the test sample was filtered according to the geographical location of the training university and the field of university education.

- According to the geographical location of the training university, we distinguish 3 groups:
- Western Hungary (University of Sopron)
- Budapest (Budapest Metropolitan University, Budapest University of Technology and Economics)
- Eastern Hungary (János Neumann University, Kecskemét)

From the point of view of the field of university education, the research covers 3 groups

- Participants in economic training courses
- Participants in technical training courses
- Participants in specialized social science courses

In order to get to know the widest possible spectrum of feedback and attitudes, it was necessary to hold 4 groups. In this way, the relevant aspects of the university students could be explored and the effects of possibly appearing opinions distorting the results could be controlled.

Table 2. Arrangement of a qualitative, focus group study

1. group (Sopron)	2. group (Budapest: METU, BME)	3. group (Kecskemét)
18-24 year old	18-24 year old	18-24 year old
<u> </u>	The composition of the university education is mixed	The composition of the university education is mixed

- Mixed men and women
- Even age distribution within the age zone in each group
- At least 2 people per group who participated in TDK
- At least 2 people per group who work alongside their studies
- At least 2 people per group who have their own business or participate in a family business

3. RESULTS

3.1. Characteristics of the generation

The previously presented characterization of Generation Z was also supported by the focus group. They described themselves as a selfish and self-willed age group who focus on their own goals, pushing family formation into the background. They find it difficult to assume responsibility, but they still hope for rapid advancement in the labour market. They prefer more comfortable workplaces, so traditional jobs seem less attractive to them.

As we explained earlier, this generation was born into the digital world. At the same time, they live in a world of gadgets, and the older age group is considered backward when it comes to new things. According to their own admission, digital and social media addiction is characteristic of them, and this reduces their ability to be independent.

Parental indulgence is very typical in this age group. they have a comfortable life, many still live at home, and are reluctant to break out of their comfortable addiction.

We are talking about a real generation of pathfinders, which is also a characteristic that comes with their age. They described themselves as lonely and superficial, which affects their social relationships.

They don't like constraints, according to their confession, because they are stubborn, difficult to adapt, they don't easily come to terms with hierarchical relationships. Instead, they prefer freedom and a fast-paced lifestyle. They feel that the other generations don't really understand them, which they see as the reason for their fast-paced lifestyle with frequent job changes.

They do not consider their generation to be religious. This has its advantages and disadvantages. A disadvantage is that they neglect important spiritual things. Advantage e.g., greater openness. They tend to experience religion as a limitation. Atheism is associated with greater responsibility. The research career is not attractive to them at all, they do not consider it financially rewarding. The situation is characterized by ambivalence, because they find research activity interesting and attractive, but it involves a lot of work, which can only be done out of dedication. In the past, the interviewees spoke of their generation as those who take a lot of work and existential uncertainty very badly.

3.2. The generation's knowledge regarding innovation

Previously, when defining innovation, we saw that the concept is multifaceted, and its interpretation varies from author to author. It is no wonder that the results of the research also confirmed that the interpretation of innovation causes confusion for those interviewed. During the definition, the participants were uncertain. It was mostly characterized as a novelty and development, which holds further possibilities. The participants of the focus group considered the development of services or products to be an innovation only if it represents some kind of positive change and exceeds the previous

state. It is interesting that the concept of start-ups was also associated with the concept. In their opinion, innovation should not only be new, but also useful and continuous. A positive change in UX, i.e. customer experience, is also classified as innovation, although this may be perceived differently in some cases. The respondents believed that innovation also helps to achieve economic growth and competitiveness.

The following opinions were expressed regarding the innovation:

- "If there were no innovation, we would not progress anywhere, this supports both intellectual and material development."
- "We discover something new, and then we do it accordingly, or we accomplish the goal we set."
- "Yes, it actually takes us forward, if we get stuck in one place, life stops, it spins."
- "The cycle of the world should not stop; we should always move towards something new.
- "Maybe we can find better solutions."
- "Convenience is not a prerequisite, but progress compared to the previous one from any point of view. It may be frugality, so in any way it is an improvement over the previous concept."

This shows that innovation is considered important because of novelty, progress, progress in the right direction, and the achievement of goals. Both positive and negative emotions are associated with the word. Feelings of success, joy, sustainability, curiosity, excitement and desire for adventure appear as positive returns, while fear of novelty, constraint, fear of falling behind and questioning the necessity appear as negative. That is why it is worth building on positive feelings in materials promoting innovation, and it is also worth reducing negative feelings by providing appropriate information.

When we asked the participants about the characteristics of innovation, they cited maintenance, model updating, the modernization and development of devices as examples, and also stated that an important determinant of innovation is that it is based on untapped opportunities.

According to the subject and areas of innovation, it can cover anything, not only tools, but also the human factor itself, which influence the quality of production and services.

The most typical examples of the innovative tools used by the respondents are the following:

- Smart devices
- IT tools
- Mobile payment
- Digitization in various areas of life e.g., GPS, cryptocurrencies
- Online education

QR code applications, mobile payments and e-recipe are mostly used. It was mentioned that the continuous monitoring of innovations is depressing, but necessary in order to move forward in the world. It is not surprising that when hearing the word innovation, the members of the focus groups associated it with healthcare services, because they also mentioned later that Covid-19 brought about more innovations. This is current, the influence that most influences their lives at the moment. It is worth making it easier to follow continuous innovations in the future! It is important that the goal in communicating about them is to arouse internal motivation, so that following is not associated with the negative experience of complying with oppressive external pressure!

The age group considers scientific discoveries, innovations related to environmental protection, and new, practical solutions to be the most valuable, but the novelties of digital communication are less exciting for them. Thus, in their opinion, a multitude of Social Media platforms is not a serious step forward, and digital development can contain a lot of negative dangers. Solutions related to environmental protection and social responsibility, such as sharing leftover food with those in need, are considered to be the most useful innovations.

3.3. Communication of innovation

The research pointed out that the innovation environment plays a big role in the life of Generation Z. Since their birth, they have lived with continuous technological development, and since it is handled on a skill level, it is naturally part of their lives. Regardless, the pressure to innovate weighs heavily on their daily lives. Despite the fact that the presence of innovation is natural for them, there is also a lot of uncertainty about the concept. That is why it is important to develop a suitable communication strategy, which promotes the development of a positive attitude and motivation towards a career as a researcher.

As we have already presented, innovative solutions related to the online space are considered less important by the respondents. Yet, when communication channels have to be selected, Social Media platforms are the first to be selected. TikTok influencers and YouTube channels are considered the most effective, but they also highlight the effectiveness of websites and applications. While creating a website is a more cost-effective investment, applications require more serious technological knowledge and a larger budget. Communication at the university level is also considered important: training, courses, and practical knowledge should form an important part of the communication of innovation.

3.3.1. Content of the communication:

Suggestions were also received for the content of the communication: content about technical development, the presentation of individual life paths, and the path leading to innovation itself - with particular attention to the content before and after - have a motivating effect on young people. The age group prefers media content that shows how the idea will become a success, so for example, the show Between the Sharks, which is still running, was highlighted by several people.

It is important that the contents are received in a short and concise manner, as the rapid consumption of information is characteristic of this generation. Light and easy-to-digest information, accompanied by visual illustrations, is the most preferred. TikTok videos perfectly meet these criteria, it's no wonder that the site is hugely popular. In addition to learning, entertainment also plays a role, they like information that they can process in a direct style.

They particularly like the algorithms of social media, they like the fact that the sites recommend posts and videos to them according to their own taste, but this is also why they fear addiction.

According to them, a good TikTok video is:

- Creative;
- High-quality, edited, it shows the work and time invested in it;
- Uses effects;
- Energetic;
- It features TikTok "stars". These mostly affect the age group after Generation Z;
- Funny, entertaining;
- Targeted, fast access to information;
- Have characters, not just narration;
- Be dynamic, colourful, moving.

In addition to TikTok channels, the importance of e-mail communication, podcasts, thematic YouTube channels, and Facebook and Instagram pages was also raised. This shows that the communication strategy must be 360°, paying great attention to online channels.

The research clearly shows that young people are less aware of marketing innovations. They clearly experience the negative effects of the online space, and they feel that the Internet should primarily serve as a bridge in the communication of those who are geographically distant. This is also interesting because we are talking about a generation for whom the Internet is an integral part of their lives, and the world before the Internet is an unknown concept to them.

4. DISCUSSION AND SUGGESTIONS REGARDING THE COMMUNICATION OF INNOVATION

Summarizing the results of the focus group interviews, we came to the conclusion that it is worth building primarily on positive associations and feelings in the communication of innovation. Uncertainty and fears must be dispelled, and the characteristics of innovative thinking must be based.

The fears expressed in the group regarding innovation were as follows:

- follow-up, fear of missing out
- forced renewal
- the fear of the new
- leaving the comfort zone
- fear of losing job

These fears should be dispelled with targeted communication, showing that innovative solutions are for us and not against us. Fears most often stem from a lack of information, which is why it can help if we make knowledge materials related to innovations easily accessible. It is worth emphasizing the social benefits that a development can provide, for example in the areas of environmental protection or social responsibility.

During communication, it is important to reach the target group online in addition to offline channels. 360° communication must be carried out, and instead of a scientific tone, young people must be spoken to in an easy, understandable language. The message reaches its target even more easily if humour is also used. The best channels are podcasts, websites, social media (Instagram, Facebook, YouTube, TikTok) channels, giving an important role to influencers.

In the case of content, human-focused messages may be the most suitable: personal examples, presentation of life paths, description of exact processes. They like "how it was - how it turned out" content, so it is worth focusing on these in the communication strategy.

5. CONCLUSION

In the communication of innovation, we cannot think with a "scientist's head". For Generation Z, concise, to-the-point content is the most effective, presenting the specific field in an interesting and humorous way. We have to adapt to the content and tone they follow. That is why it is necessary to submit to the rule of the latest trends: we must produce direct, simple, understandable, but at the same time informative content. The research pointed out that Generation Z should also be included in the communication, and their opinions should be heard so that the messages addressed to them can really hit their target. Innovation is a common interest, so a bridge must be formed between science and the young generation in order to increase their motivation to participate in research and development projects. We need a world where Generation Z can also find their own role in the academic career.

This study is part of a research series that will later examine the relationship between the generation and start-ups, as well as the entrepreneurial attitude of Generation Z.

REFERENCES

- 1. Chikán, A 2008, Business economic, Aula kiadó, Budapest pp. 246 -250
- 2. Csobanka, ZE 2016, The Z Generation. Acta Technologica Dubnicae, vol.6, no.2, pp. 63–76.
- 3. Drucker, PF 2003, Possibilities of innovation, *Harvard Businessmanager*, 2003. May-June. pp.28-34

ISSN 1314-7242, Volume 16, 2022

- 4. Google Trends 2021, Innovation https://trends.google.com/trends/explore?geo=HU&q=innov%C3%A1ci%C3%B3
- 5. Kahn, B. Kenneth 2018, Understanding innovation, Business Horizon, vol.61, no.3, pp. 453-460
- 6. Katona, J 2006, Interpretation of innovation based on the third edition of the Oslo manual published in 2005, Magyar Innovációs Szövetség, Budapest
- 7. KSH 2005, Marketing innovation (until 2018), Központi Statisztikai Hivatal, Budapest.
- 8. KSH 2018, Internet usage habits, Központi Statisztikai Hivatal, Budapest.
- 9. KSH 2020, https://www.ksh.hu/tudomany-es-technologia, Központi Statisztikai Hivatal, Budapest
- 10.O'Bryan, M 2013, Innovation: The most important and overused word in America, Wired Magazine
- 11.OECD 2005, Oslo Manual Guidelines for collecting and iterpreting innovation data, 3th edition, pp.46
- 12.OECD 2018, Oslo Manual Guidelines for collecting, reporting and using data on innovation, 4th edition. pp.20
- 13. Pasztor J Bak G 2020. Generation Z online Correlations between social media use, FoMO and social relationships, *XXIII. Tavaszi Szél Conference*, Budapest
- 14.POP RA 2020, The impact of trust in social media influencers on the travel decisions of generations Y and Z, *Forum on Economics and Business*, Kolozsvár, 23 (142), pp.51-72
- 15.Prahalad CK 2009, Towards new management paradigms, Alinea Kiadó Rajk László Szakkollégium, Budapest
- 16. Schumpeter, JA 1939, Business Cycles. McGraw-Hill, New York.
- 17. Singh, AP Dangmei, J 2016, Understanding the generation Z: the future workforce. *South-Asian Journal of Multidisciplinary Studies*, vol.3, no.3, pp. 1–5.
- 18. Szabó-Szentgróti, G Gelencsér, M- Szabó-Szentgróti, E- Berke, Sz 2019, Generational effect in workplace conflicts, *Vezetéstudomány Budapest Management Review*, vol. 50, no.4. Budapest pp.77-88.
- 19. Tari, A 2011, Z generation, Tericum Könyvkiadó, Budapest
- 20.Twiss, B 1989, Goodridge M., Managing Technology for Competitive Advantage: Integrating Technological, Trans-Atlantic Publications, Philadelphia