
STUDY ON ECONOMIC TRENDS, DRIVERS AND DEVELOPMENTS OF THE 21ST CENTURY

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Abstract

Predictions, surveys and analyzes on the megatrends of the 21st century and their drivers are ubiquitous. Globalization, digitization, new work, demographic change, climate change and scarcity of resources as well as sustainability are controversially discussed topics of renowned research and consulting companies, organizations, governments, economy and society. The common attributes of those discussions are: the high sense of urgency, the requirement for flexibility, courageousness and vision, and the immediate need for action to secure the economic future and the future of the planet.

In November and December 2017, an online questionnaire on these topics was conducted with selected Chambers of Commerce to benefit from their wide-ranging connections and networks as well as from their extensive knowledge and experience regarding the current trends, drivers and developments. The survey covered the areas of: New technologies and digitalization, globalization and volatile markets, leadership and employees skills, ecology and sustainability.

Keywords

Megatrend, digitalization, globalization, sustainability, Chamber of Commerce, questionnaire survey

JEL Classification

F60, O30, Q0, J0, M20

Introduction

The year 2018 has started and everybody forming politics, economy and society is looking forward to the relevant topics he or she has to deal with. Likewise, well-known research and consulting companies, organizations, governments, notable companies and influencing personalities recently published their outlooks on the trends, drivers and developments for the current and the following years which will have significant influence and effects on economy, society and environment. The relevant questions are, what are bottom line megatrends, how can they be recognized and what effects will they have? Therefore, as a first approach to this study and to gain a general and common understanding, the article starts with a brief definition of megatrends, their primary attributes, and their drivers. Afterwards, the context of the research and the research methodology will be shortly explained. In the central part, the results of the questionnaire will be presented and finally discussed.

Megatrends, their characteristics and drivers

To identify a megatrend, it should be questioned first, what a trend is, and how it can be recognized. According to Horx (2010), a trend in its real sense is no other than a change movement or a transformation process that can occur in the most diverse areas of life - from economy to politics to the consumer world. Based on Pufé (2017) a trend describes space and time spanning changes and currents in all areas of society. In a nutshell, it can be summarized that trends are changes in three characteristics: time, range and strength.

In the literature, trends must fulfil the following premises to be counted as a “megatrend”. They must:

- have a half-life either of 25-30 or 50 years;
- have a global character, which can differ in its strength and specificity;
- have an impact on all areas of life and show effects (economy, politics, consumption, and so on);
- be partially intertwined and influence each other (Zukunftsinstitut, 2016, Horx, 2010).

Straightforward, the term “megatrend” could be based on the definition of “trend” and the synonyms for “mega” - defined as: an enormous change over an extended period with massive impact on all areas of life worldwide. In the following table no. 1, the authors have listed the current trends which are considered to be “megatrends” and the respective influencing drivers. Some of these drivers are contrary to the megatrends and can therefore be considered counter-trends.

Table no 1: Megatrends and their main drivers

<i>Megatrend</i>	<i>Main drivers</i>
Globalization	Economic growth, Outsourcing, Offshoring, Global supply chains, Global competition, Glocalisation & Populism
Technological change & Digitalization	Innovation, Artificial intelligence, Virtual reality, Big data & analytics, Connectivity, Robotics & automation, Cyber security, Attentiveness, De-digitization & Re-analogization
Future of work & Organisations	Economic survival, Knowledge Society, Mobile work, Always on, Generational change, She-economy, Customer centred, Work life balance
Future of mobility	Sharing economy, E-Mobility, Autonomous driving
Demographic & Social change	Population growth, Population aging, Individualisation, Political nationalism, Inequality, Social Media, Social Cocooning
Health & Wellbeing	Wearables, Bio food/ slow food, Veganism, Fairtrade
Urbanization	Rural exodus, Urban growth, Sub-urbanization, Smart Cities, Renaissance of rural life
Climate change & Resource scarcity	Global warming, Greenhouse gas emissions, Natural disasters, Lost of biodiversity, Fossil resources limitation, Water & food shortage
Sustainability & Transparency	Green & Blue economy, Neo ecology, Circular economy, Waste management, Recycling, CSR, Renewable resources

Source: authors' compilation based on Zukunftstark, 2017; Pufé, 2017; PWC, 2016 and OECD 2016

All those megatrends had and will have also in the future worldwide influence on the economy, society, politics and environment. Even if their peakedness is stronger in some areas, regions and at certain times, they are always omnipresent.

General context of the research

It is undisputed that globalization and the internationalization of the economy imply many opportunities, but before companies can go global, they have to deal with local law and tax regulations, local resources and infrastructure, as well as security requirements in diverse countries. Those trade and entry obstacles make it increasingly difficult for companies around the world to enter a local market and pose a risk. Here the Chambers of Commerce come into play: they should help their members in the respective destination country with all the necessary information, contacts and consulting. Generally spoken, the role of the chambers is to promote the foreign trade with their home country and to consult, support and represent the companies of their home country within the state where they reside. Therefore, they establish international networks with local companies and members, support and run fairs and events and provide additional local services like legal and tax consulting, market entry and on-site support, market analysis, recruitment and hiring support, and accounting service.

Due to the chambers activities, services and international networks it can be assumed that they have a wide-ranging expertise, extensive knowledge and experience regarding current trends, drivers and developments. In addition, they maintain close contacts with governments, NGOs, education and research facilities as well as to all sectors of the economy.

Objectives and research methodology

The goal of this article is to outline the current trends, drivers and developments and how their impact and significance is seen and rated by internationally operating Chambers of Commerce. Furthermore, the outcome of the questionnaire is counterpointed to contrastable results of surveys and predictions from well-known consulting and research companies and organizations. To gain the needed primary data an online survey was conducted between November - December 2017 among 30 selected Chambers of Commerce from five home countries located in seven different countries. The selection of chambers was based on linguistic and personal criteria, and the questionnaire was available in German and English. The participation was voluntary with the promise to treat the given data confidentially and largely anonymously. As for the structure of the questionnaire, it consisted of five sections and a closing demographic part. It included 21 multiple-choice rating questions using a 3 to 4 level Likert-style rating scale. 37% of the Chambers of Commerce answered the survey. All in all the sample can be clustered by the home country of the chamber as follows:

- Austria 36%;
- Germany 36%;
- The United Kingdom 18%;
- The United States of America 09%.

Research results and discussion

The results of the questionnaire were analysed and statistically processed with different descriptive and interpreting statistics (e.g. arithmetic mean, standard deviation and variance). The significant findings and their relation to current predictions and results from other surveys will be presented in the following sections.

Technological change & digitalization

It is unarguable that the world is changing ever faster and the innovation cycles, in which the technical development progresses, get shorter. Digital technologies are one of the main drivers of this century and have a striking influence on society and economy. Therefore the chambers were asked to select five out of 16 technologies that, according to their opinion/

experience, will be of the highest importance for the companies in the upcoming years. In the following chart the top six results are presented.

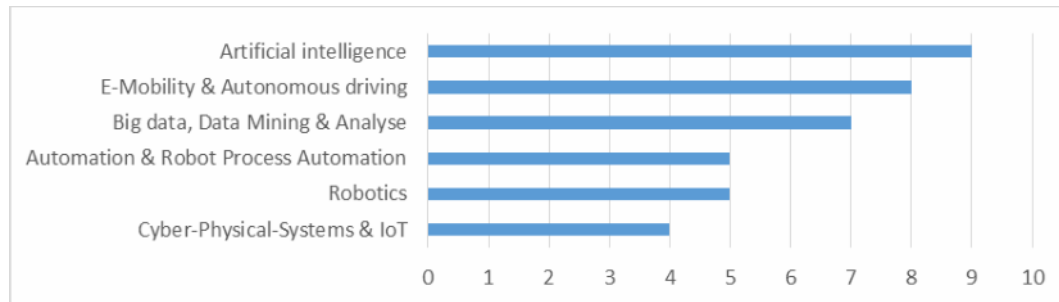


Figure no 1. Top 6 selected technologies

Source: authors' calculations based on dataset

Likewise, McKinsey (2017), PWC (2018a), Gartner (2017) and many other renowned consulting and research companies and organizations consider artificial intelligence (AI) as the top subject for the current and future years. AI will change the economy and society and is regarded as the motor of growth as well as the source of excitement and concern. On the second and third place, the chambers selected E-Mobility & Autonomous driving and Big Data, Data Mining & Analyzsis with only one respectively two points less than AI. The mobility of the future is driven by the trends towards electromobility (due to environmental issues, such as reducing CO2 emissions), alternative energies, and digital transformation. Electric vehicle sales increased by 52% worldwide in 2017 (PWC, 2017) and more and more countries and governments have announced that they will sponsor and push the change and ban cars with combustion engines within the next few years. It is also expected that Big Data and Analytics will gain a stronger foothold in all areas of the economy as the evidence of their positive effects on business results and customer satisfaction becomes more and more valid (Homsy, 2018). Big Data is also on the top of the lists from other well-known consulting and research companies like PWC, KPMG and Forrester.

In the recent years, numberless companies, governments and organizations have initiated or realized digitalization projects, and that is why the next two questions focused on the expectations and obstacles which come along with the implementation of digitalization projects. The chambers were asked to rank them by their importance from low to high. The top six results per category are listed in the table below. For both, expectation and obstacles, ten aspects were given. The first place within the expectations had a variance of 0.09 which shows a high level of agreement, on the contrary the first point of the obstacles had a variance of 0.29.

Table no 2: Expectations & Obstacles aligned with digitalization projects

<i>Expectations</i>	<i>Importance</i>
Increase of productivity	2,9
Reduction of costs	2,5
Increased competitiveness & expansion of the market position	2,5
Increase in sales	2,4
Improved integration of partners & suppliers into the value-added process	2,4
Higher flexibility in the workforce (e.g. crowdsourcing)	2,3

<i>Obstacles</i>	<i>Importance</i>
Lack of IT skills of the employees & availability of specialists	2,5
Legal concerns & requirements for data security & protection	2,4
Difficulties in the conversion of existing IT systems & processes	2,4
Lack of organization flexibility to change / agility	2,4
Uncertainty about future technologies & market standards	2,1
High costs & complexity & risk	2,0

Source: authors' calculations based on dataset
 (Scale: 3=high importance, 2=medium importance, 1=low importance)

The expectations and obstacles related to digitalization projects selected by the chambers can be perfectly mapped to the results of the “Global Digital Transformation Survey Report” conducted by Fujitsu in February 2017. In this survey business leaders were asked which digital transformation projects have provided which outcomes, and what have been the factors hindering the progress of digital transformation projects. As the main benefits and the primary obstacles, the respondents selected similar aspects and it proves that the lack of right skilled resources is one of the leading issues within such projects.

Globalization & international Competition & volatile Markets

Globalization describes the increase in traffic of goods, services, finance and people around the world and the global merging of markets. Currently globalization experiences a backlash because some countries and parts of the world start focusing on themselves, like the "America first" strategy of Donald Trump, the Brexit or the strong growth of European populism.

The chambers were asked at the beginning of this section if they believe that globalization has a negative (1), neutral (2) or positive (3) impact on the economy from the viewpoint of their home country and their country of residence. The arithmetic mean for both viewpoints were 2.8, only the chambers of Germany and Austria had an average of 3.0.

At times, the topic of globalization is increasingly controversially discussed in the media. Globalization is said to have stagnated for some years, resulting in an aggravation of the imbalance between rich and poor thus fears are fomented. It is unarguable that globalization does not only have positive effects, as well as it also bears specific risks. The authors compiled a list of possible negative or risky scenarios which are often discussed in the context of globalization and digitalization. The chambers were subsequently asked to judge the likelihood with a 4 level Likert scale of those possible future global developments. In the following table number 3 the highest ranked results out of 13 possible scenarios are listed. The chambers of Germany, the United Kingdom and the USA considered the point “Expert deficit on the labor market leads to increasing international competition for talents” on top priority with a rate of 4.0. Instead, the Austrian chambers gave the highest likelihood to the point “The gap between rich and poor will grow in the world” with 3.8. The point “Rise of international terrorism” had the lowest variance with 0.16 and the point “Creation and bursting of a speculative bubble with a stock market crash” had with 0.82 the highest variance which shows an extreme disunity.

Table no 3: Possible future global developments (top 6 results)

<i>Possible future global developments</i>	<i>Likelihood</i>
The gap between rich and poor will grow in the world	3,7
Expert deficit on the labor market leads to increasing international competition for talents	3,6
As a result of wars, poverty and climate change, rise of international refugee flows into industrialized countries	3,6
Rise of international terrorism	3,2
Strengthening of the populism & increasing xenophobia	3,2
Economic influence and importance of India & China is growing and overtaking the position of European Union	3,2

Source: authors' calculations based on dataset

(Scale: 4=most likely, 3=more likely, 2=rather unlikely, 1=very unlikely)

A comparable set of possible future global development trends can be found in the recently published Global Risk Reports 2018 of the World Economic Forum (2018), in the results regarding the concerns about threats of the PwC's 21st CEO Survey (2018b) as well as in many current publications and discussions about economic, ecological and social risks and developments concerning globalization and economy. For example, the issues of trade wars, cyber attacks, poverty and weather extremes are reflected by the latest headlines.

Ecology & Sustainability & Responsibility

Recently there have been more and more news of natural disasters, such as storms, earthquakes, floods and drought, so it is not surprising that society's call for environmental awareness and sustainable environmental protection is growing louder. Similarly, issues such as scarcity of resources, demographic change, and food security are forcing politics, business, and society to increasingly address sustainability and safeguard the planet for future generations.

Asked about the importance of the three dimensions of the sustainability triangle (economy, ecology and social) as well as about the corporate culture in a sustainable and responsible company the chambers assigned ecology and corporate culture with 2.8 the highest importance (max. 3-very important). Economy closely followed with 2.7 and social with 2.6, and both of them also showed a higher variance. All chambers ranked the question about the general importance of sustainable and responsible behavior/acting of companies at 3.6, only the Austrian chambers ranked it higher with 3.8.

It is undeniable and generally accepted that companies nowadays should bring economic, ecological and social goals into line. For this purpose, politics must provide the appropriate framework and fix sustainable behavior into law and regulations. Though many studies have shown that sustainable behavior has a positive impact on the results, the market value and the future of companies, there are still companies that consider sustainability to be a burden rather than an opportunity. Therefore, the next two questions focused on either the reasons for a commitment to sustainable business engagement or for barriers / obstacles hindering the usage of measures for sustainable management. For both, the top six results based on their importance are listed in the following tables 4 and 5. For both questions, a 4-level scale was used, ranging from very high importance (4) to no importance (1).

Financial aspects (cost reduction and increased revenue) and risk mitigation were surprisingly ranked last to be reasons for sustainable business engagement. Usually financial and risk aspects have a higher significance when companies change their strategies.

All three, top listed “pro sustainability” issues can be associated with company market value, reflecting the great importance of branding, marketing and innovation in the volatile and competitive market environment.

Table no 4: Reasons for a commitment to sustainable business engagement (top 6 results out of 13 options)

<i>Reasons</i>	<i>Importance</i>
Increasing the attractiveness of the company (e.g. for new employees)	3,5
Image, Marketing, Advertising effect	3,5
Competitive advantages through the development of innovative products & services (e.g. electric drive)	3,5
Employee motivation & retention	3,4
Requirements from clients & customers	3,2
Ethical, moral motives, personal values, tradition	3,1

Source: authors' calculations based on dataset

Table no 5: Barriers/obstacles hindering the usage of measures for sustainable management (top 6 results out of 9 options)

<i>Barriers / obstacles</i>	<i>Importance</i>
Lack of financial resources /high costs to implement appropriate measures	3,2
Lack of knowledge about implementation of measures for sustainability or the development of a sustainability strategy	3,1
Lack of personal conviction about the value of sustainable economy	2,9
No state sponsorship, no attractive incentive systems	2,9
Lack of interest of stakeholders (customer, employee)	2,8
Lack of human resources or suitable employees	2,8

Source: authors' calculations based on dataset

The first place of the barriers reflects the widespread mistaken belief that the costs of placing sustainability into company’s business strategies would outweigh the benefits. Overall the results are very similar to other comparable surveys and publications like “The innovation bottom line”, a global executive study from MIT Sloan Management Review and The Boston Consulting Group (2013) and “The UN Global Compact-Accenture Strategy CEO Study” (2016). To sum it up, it can be stated, that companies integrating sustainability into their corporate strategy recognise the benefits of loyalty and support from all internal and external stakeholders. They make a decisive contribution to secure and create a better future for themselves and their future generations.

Conclusions

The results of the survey differ in some respects from the general ranking in forecasts or other survey results, sometimes there are also different ratings between the chambers of the respective home countries. Due to the number of participants and the significance, these differences could not be fully considered in this paper. Nevertheless, the main trends, drivers and developments and their significance for the 21st century could be acknowledged by the results of the survey and are also be substantiated by the latest headlines. Globalization and its interlinked other megatrends must be considered to be a logical consequence of legitimate development, whereas the policy makers needs to establish the

general framework and binding regulations. Based on the “iron economic law” each performance process must have an adequate management process. Therefore, it is necessary to stop the small-scale way of thinking and promote the international management and allocation of the capital, like the European Union and UNICEF are requesting. Only then, the whole world can get the positive results out of the globalization, and equality for all could be established. Research about these topics and related actions of companies are still needed, mainly because they have to deal with risks and utilise the opportunities from those trends. Therefore, a next step could be the verification of the findings through an expert survey or a second questionnaire for internationally operating companies.

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