

Using Megatrends as a Navigation Tool for the Future Library - Andreas Mittrowann¹

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Abstract:

The author first discusses the informative value of forecasts and then focuses on 12 so-called megatrends developed by the German Zukunftsinstitut in Frankfurt/Main ("Future Institute"), which claim long-term informative value for themselves: Knowledge Culture, Connectivity, Neo-Ecology, Urbanization, Mobility, Globalization, New Work, Individualization, Silver Society, Health, Security and Gender Shift are presented with their various facets and the respective relevance for libraries is discussed in bullet points. In addition, the 20 topics of the IFLA Trend Report 2021, updates are assigned to the respective megatrends to round them off. The original version of this article appeared in issue 25 (2022) No. 6 of the German library journal b.i.t. online.

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Why write about the future?

Does it make sense at all to publish articles about the future of libraries in times of "polycrisis"? The current wave of innovation, comparable only with the invention of printing in the 16th century or the invention of the steam engine also has a fundamental, transformative significance for libraries. In addition to the digital revolution, social changes, beginning with the emancipation movement of the 1960s in Western countries, play an essential role: they question the old certainties such as gender roles or redefine classical authorities. Finally, the fall of the Iron Curtain in 1989 and the resulting reshaping of political space have led to a multipolar world order with changed actors, not least with the emerging world power China.²

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² Link, Werner: *Germany in the Multipolar Balance of Great Powers and Regions (2002)*: <https://www.bpb.de/apuz/25572/deutschland-im-multipolaren-gleichgewicht-der-grossen-maechte-und-regionen?p=all> [12 January 2022].

Using megatrends as a navigation tool for the future library

These influencing factors have brought us into the "VUCA" world, whose acronym in stands for volatility, uncertainty, complexity, and ambiguity: We increasingly live in an environment characterized by multi-causal causes and significantly less predictability than before. As Nick Horney and Tom O'Shea put it, "Today's daunting, ever-increasing speed of change is rapidly altering the relatively simple environment of the late twentieth century into a world of exponentially increasing turbulence. Being successful in this environment requires a transformation in how an organization operates, how it thinks about itself, and how it is led. Each of the VUCA factors contributes significantly to the turbo turbulence in the operating context for leaders."³

As an amplifier of these developments, the Corona pandemic was added in spring 2020. Worldwide restrictions in library operations have led to limitations in the newly discovered quality of the library as a "third space". On the positive side, the digitization push that accompanied the pandemic has also opened up new possibilities for libraries in terms of service quality, for example in the areas of online registration and e-payment. If vaccination certificates can be displayed in an app using a QR code, why not the library card and the associated registration processes?

But if we could not foresee many of these developments in the 1970s and the world is changing faster and faster anyway, why even think about the future? Matthias Horx, one of Germany's most prominent futurologists with his Zukunftsinstitut, has the answers: "The future will be. That's it! And it will not be a dystopia, because that is not a future, but it will always be a stumble and a crisis event. Crises are parts of the corrections that are necessary. (...) If you want to do serious futurology, you have to understand that we create our future ourselves. That is constructivism. (...). That's why hope is an important element of self-discipline, so that things can succeed at all. And an unbelievable number of things succeed in this world, but unfortunately, no one is aware of it."⁴

That is exactly what this article is about: To whet our appetite for the future and make ourselves capable of shaping it by actively dealing with trends and developments, weighing them up and drawing conclusions from them, developing goals, and taking the right measures. After all, many of the developments in recent years were certainly "conceivable and foreseeable", such as the ever-increasing digitization and even the internet with its basis of hyperlinks was already thought ahead in 1945.⁵

3 Horney Nick / O'Shea, Tom: *Focused, Fast and Flexible: Creating Advantage in a VUCA-World*. Indie Books International, 2015

4 Matthias Horx: *The essence of the future is non-simultaneity*. <https://berlinvalley.com/interview-matthias-horx-zukunftsforser> [12 January 2022]. Translated by the author using www.deepl.com

5 Vannevar Bush: *As We May Think* (1945). <https://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881> [12 January 2022].

Using megatrends as a navigation tool for the future library

So in the spirit of this article, let's keep it with the French criminologist Alphonse Bertillon and his observation: "You can only see what you focus your attention on, and you only focus your attention on things that already occupy a place in your consciousness."⁶

The challenges of forecasting:

At a dinner on the occasion of the annual, Icelandic library conference in Kópavogur in 2012, the inspiring Phil Bradley, then chairman of the British library association CILIP, told of an interesting illustration of the library of the future: it was a publication in the Chicago Tribune from 1959, which he sent to the author a few days later. The color drawing depicts a supposedly private library in the distant future in an idealized manner typical of the time. In it we see a (white) US-American "norm family": father, mother, a daughter, and a son obviously spend their free time in a kind of "living room library". Outside it is recognizably winter. The mother in the left foreground is astonishing: she is lying relaxed in a kind of modern reclining reading chair and studying a virtual text projected onto the living room ceiling, which covers the entire surface of the ceiling. The daughter is standing in front of a classical wall of books and is obviously selecting the next reading material; the wall also contains various film reels and magnetic tapes. A being in front of a tube TV shows the father, who is also "sitting" in an armchair, something in her / his hand - it could be a book, but also a new type of mobile device or simply a photo. It is not quite clear whether the being could also be a robot, it looks as if it is standing on a metal base. The son sits pensively in front of the fireplace and investigates the fire.

This illustration exemplifies the exciting perspective framework of a forecast: who would have thought that the virtualization of texts for libraries would be foreseen so early and even the possible role of robots would be recognized? The fact that books will continue to play a role but will be supplemented by other media formats and even the importance of the quality of stay factor - recliners, open fires - was also recognized. But the risks of future extrapolation, i.e. extrapolating current conditions into the future, are also clear: film reels and magnetic tapes, physical carrier media in general, play almost no role today. Television still exists, but no longer as a tube model - but the ever-increasing screen diagonal was foreseen. It is not clear on what basis the illustration was created - in any case, it serves to deal with individual aspects of the development and to be able to develop one's own position on it. This defines the goal of this contribution: We want to develop a "future image" of libraries based on current forecasts and developments, or at least describe some possible image fragments so that our readers can develop their own opinions.

Megatrends as navigation aids for the future:

Forecasts and especially the temporal "extension" of current trends into the future

6 Source: <https://www.aphorismen.de/zitat/122575>

Using megatrends as a navigation tool for the future library

should therefore always be treated with caution. The Zukunftsinstitut in Frankfurt/Main with its founder Matthias Horx has therefore developed the so-called "megatrends" in a year-long process with the collaboration of an interdisciplinary team. These are formulated with the claim to show a broad - one could say - "theme road" with a period of 25 years. The following graphic shows an overview of the 12 megatrends that have been developed:

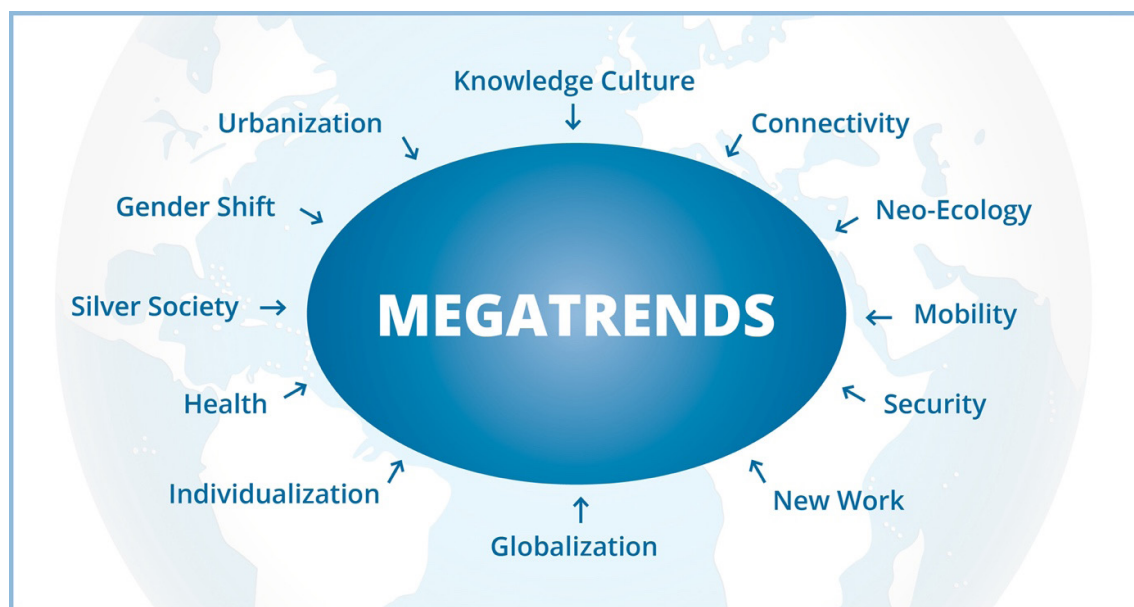


Figure 1: The megatrends defined by the Zukunftsinstitut in Frankfurt/Main. Illustration: Andreas Mittrowann

The Zukunftsinstitut states: "Megatrends name and describe extremely complex change dynamics and are a model for the transformation of the world: a method that helps to make the complex and diverse change dynamics of society in the 21st century understandable and tangible. By reducing complexity to a comprehensible level, megatrends prove to be valuable navigational aids through the jungle of current and future changes."⁷ However, trends are not simple predictive tools: Opposing developments are also possible within a trend and serve as facets of the broad, thematic stream. An example: The megatrend "individualization" describes the ever-increasing expression of individual needs in a developed society, such as the desire of more and more people in Western countries to live alone, at least for a while (single-person households). However, the pandemic and its forced isolation have led to the "new us": The desire to come together again more in common places and to celebrate the encounter. Both of these almost opposing developments together belong to the megatrend "individualization" and thus reflect the waxing and waning of facets in this thematic stream.

⁷ Zukunftsinstitut: *The Megatrends*. <https://www.zukunftsinstitut.de/dossier/megatrends/> [19 November 2022], Translation by the author using www.deepl.com

Megatrends are characterized by the following aspects, among others: They...

- "have a duration of at least several decades.
- show effects in all areas of society, in the economy, in consumption, in the change of values, in the way people live together, in the media, in the political system, etc.
- are global phenomena. Even if they are not everywhere at the same time and to the same extent, they can be observed sooner or later all over the world.
- are multi-layered and multi-dimensional trends. They generate their dynamics and evolutionary pressure also and precisely through their interactions."⁸

The 12 defined megatrends and their respective potential significance for the future work of libraries are presented below. Facets of individual trends may well form intersections. Some of the text modules mentioned below were taken from the corresponding page of the Zukunftsinstitut and supplemented or adapted. On the one hand, they are enriched with current data from German reality; on the other hand, topics from the IFLA Trend Report are assigned to the respective megatrend for professional supplementation.⁹

Megatrend 1: Knowledge culture:

The importance of education and knowledge continues to grow: in the last 10 years, the proportion of people who have a higher educational qualification in Germany increased by five percentage points to 26 per cent: a positive trend can be observed both in the development of the educational level of the total population and with regard to the values of individual age groups. The significant proportion of young adults with high vocational or academic qualifications has a clear impact on the corresponding proportion in the population as a whole.¹⁰

Unfortunately, equal opportunities in education do not exist in Germany, as studies by the OECD and the Federal Government's Education Report show, for example, in the area of reading skills and the need for language support for 5-year-olds. The PISA study 2019 has even shown that the scores of pupils from educationally disadvantaged families in particular have deteriorated further.¹¹ The Corona pandemic has exacerbated

8 *op. cit.*, Translation by the author using www.deepl.com

9 International Federation of Library Associations and Institutions: IFLA Trend Report 2021 Update. <https://trends.ifla.org/update-2021> [19 November 2022].

10 Education in Germany 2022 <https://www.bildungsbericht.de/de/bildungsberichte-seit-2006/bildungsbericht-2022/bildung-in-deutschland-2022> [18 November 2022]

11 PISA - Reading Literacy. <https://www.bpb.de/nachschlagen/zahlen-und-fakten/soziale-situation-in-deutschland/135811/pisa-lesekompetenz> [18 November 2022]

this: a study by the Technical University of Dortmund in March 2022 shows that the proportion of primary school pupils who can read well to very well has fallen by around seven percent to 37% compared to 2016.¹² Reading skills are also associated with higher life satisfaction beyond formal educational attainment: the higher the reading skills, the higher the life satisfaction in adulthood.¹³ In this context, reading is seen as an entrance into the world of knowledge.

New demands on the labour market and innovative forms of knowledge acquisition are shifting the focus toward lifelong learning. Libraries are one of the central, communal places for actively shaping the local knowledge culture. Facets of this trend are, for example, lifelong learning, open knowledge, overcoming the digital divide or the increase in the importance of science for example Corona pandemic.

Associable topics from the IFLA Trends Report 2021 Update:

- The rise of soft skills
- Lifelong learners
- Information literacy recognized
- "Open" raises questions about libraries' unique selling point.
- Inequalities deepen

Megatrend 2 - Connectivity:

The role of digitalization and technology in everyday life has increased significantly: 74% of Germans already regularly use videos or TV content via the internet, 42% regularly access streaming services. 59% use social media, and among 14- to 29-year-olds the figure is 91%. One in eight households in Germany has a "smart" speaker powered by artificial intelligence.¹⁴ At the same time, however, general digital literacy is poor: Differences between disinformation, information, advertising, and opinion are sometimes difficult to recognize. Respondents to a study conducted in March 2021¹⁵ sometimes find

12 *TU Dortmund University homepage: "Pupils missing half a year of learning due to the pandemic". <https://www.tu-dortmund.de/nachrichtendetail/detail/schuelerinnen-fehlt-durch-die-pandemie-ein-halbes-lernjahr-18646/> [18 November 2022]*

13 *Education in Germany 2022, op. cit.*

14 *ARD/ZDF online studies 2019 and 2021. http://www.ard-zdf-onlinestudie.de/files/2019/0919_Beisch_Koch_Schaefer.pdf, https://www.ard-zdf-onlinestudie.de/files/2021/Beisch_Koch.pdf [12 January 2022].*

15 *Stiftung Neue Verantwortung: "Source: Internet"? Digital news and information skills of the German population in a test. https://www.stiftung-nv.de/sites/default/files/studie_quelleinternet.pdf [12 January 2022]*

Using megatrends as a navigation tool for the future library

it difficult to distinguish between advertising, information, disinformation, and opinion. For example, 56 % of the respondents mistook advertisements in the presentation of an editorial article - despite advertising labelling - for information. Only 23 % correctly recognized that it was advertising. Misinformation on Facebook also caused problems for the respondents: it was recognized by only 43 % of the respondents, while 33 % also mistakenly saw it as information.

The principle of digital networking is already strongly shaping social change. Digital communication technologies are changing our lives and people need new skills all the time. Facets of this megatrend are the digitalization of everyday life, social media, the development of a net-based, globalized world economy (Apple, Amazon, Microsoft), e-commerce or artificial intelligence.

Associable topics from the IFLA Trends Report 2021 Update:

- Virtual is here to stay
- An analogue backlash
- Data domination
- Search transformed
- A single, global collection
- The privatization of knowledge

Megatrend 3: Urbanization

This megatrend also makes it clear that these thematic strands may well involve partly opposing developments. While more and more megacities are emerging around the world, such as Delhi or Mexico City, or in Germany "swarm cities" such as Munich and Hamburg, rising real estate prices and the Corona pandemic in Germany have led to life in rural regions becoming much more attractive again ("progressive province") - here also in connection with the megatrend "connectivity", because the slowly improving broadband connections and working in the cloud have made more working from home possible. Facets of this megatrend include urban agriculture (bee colonies or vegetable gardens on rooftops), living in very small flats or houses (Tiny Living) or the theme complex of the Third Place.

Associable theme from the IFLA Trend Report 2021 Update: Scale matters

Megatrend 4: Neo-ecology

With the 2030 Agenda, the United Nations adopted a global sustainability strategy in 2015. At the national, regional, and local levels, the international sustainability goals are adapted to the respective framework conditions. In a survey, 85 % of German

municipalities stated that the topic of sustainability was important or very important and that sustainable action had become more important in recent years.¹⁶

Environmental awareness and sustainability are increasingly developing from an individual attitude to life and from a consumption trend to a social necessity and a central factor for urban development. The United Nations 2030 Sustainability Goals can also be mentioned in this context, as well as the "Green Library" movement. Facets of this megatrend include the organic boom in the food trade, the energy transition, the climate crisis, or the increase in environmentally friendly lifestyles.

Associable theme from the IFLA Trends Report 2021 Update:

- An environmental reckoning

Megatrend 5: Mobility

Germans now spend an average of 80 minutes a day on the road¹⁷. Global mobility has also reached a high level and was only briefly interrupted by the Corona pandemic. The Global Mobility Report from 2017 predicted an increase of 50 percent in the number of passenger kilometers by 2030.¹⁸ For location-based libraries in particular, this megatrend presents a particular challenge, while ever-evolving connectivity presents an opportunity. Facets of this megatrend are once again the "third places", as well as, for example, autonomous driving, delivery robots and the 24/7 society, in which work outside traditional hours and at weekends plays an increasingly important role: People who are on the road lot need libraries early in the morning, in the evening and at weekends.

Associable theme from the IFLA Trends Report 2021 Update:

- A mobile population

Megatrend 6: Globalization

The challenges of a highly dynamically changing, interconnected, and globalized world bring with them uncertainties and challenges to social cohesion: according to a study from 2019, for example, only 46.6 percent of Germans are satisfied with how

16 *Institute for the Public Sector: Study: Municipal Sustainability Governance.* <https://publicgovernance.de/html/de/Kommunale-Nachhaltigkeitssteuerung.htm> [12 January 2022].

17 *Mobility in Germany - MiD (2019). Results report.* http://www.mobilitaet-in-deutschland.de/pdf/MiD2017_Ergebnisbericht.pdf [19 November 2022].

18 *Global Mobility Report (2017). Tracking Sector Performance.* <https://openknowledge.worldbank.org/bitstream/handle/10986/28542/120500.pdf?sequence=6> [19 November 2022].

democracy functions, while 53.4 percent are dissatisfied.¹⁹ As a result, the loss of trust in institutions is partly linked to the turn to populist currents and the emergence of "filter bubbles".²⁰ Another aspect: more people have a migration background: today, every 4th person in Germany has a migration background; 10 years ago it was every 5th person. A good third of these people belong to the 2nd or 3rd generation, i.e. were born in Germany; around 75% of those born here have German citizenship. The share of the population with a migration background in the total population is increasing, especially in the younger age groups: Among the under-6s, it is a good 40 %. Diversity in society is increasing due to globalization and thus opens up many opportunities. Other facets of this megatrend include neo-nationalism, global protest culture, regionalization, and so-called "globalization": "Due to global and at the same time local networking, networks are emerging that are responsible for the formation of transnational production and marketing structures on the one hand and for changing the respective cultures on the other."²¹

Megatrend 7: New working

The world of work is undergoing a fundamental change in connection with the trends of digitalization, self-employment, the balance between work and private life and, for example, the home office in the age of Corona. In the future, libraries can become even stronger places where, for example, new forms of working are made possible through a co-working area. Aspects of this megatrend include the triumph of the service economy (e.g. delivery services like 'Lieferando'), working in the cloud, the shortage of skilled workers and the increase in individual entrepreneurs.

Associable theme from the IFLA Trends Report 2021 Update:

- Qualifications matter

Megatrend 8: Individualization

As described above, this megatrend is becoming more concrete on the one hand through the increase in single-person households and at the same time the resulting need for places of community and networking opportunities. Libraries have the potential to become even more of such a (third) place in the future. Facets of this megatrend include the increase in single-person households, the increased importance of mindfulness and

19 Friedrich-Ebert-Stiftung (2019): *Trust in Democracy*. <http://library.fes.de/pdf-files/fes/15621-20190822.pdf> [12 January 2022].

20 PriceWaterhouseCoopers (2019): *Fake news: results of a population survey*. <https://www.pwc.de/de/technologie-medien-und-telekommunikation/pwc-bevoelkerungsbefragung-fake-news.pdf> [12 January 2022].

21 Wikipedia: *Globalisation*. <https://de.wikipedia.org/wiki/Glokalisierung> [19 November 2022], Translation by the author using www.deepl.com

resilience, new forms of living communities or the topic of volunteering. The other side of the coin is that many people have become more demanding as customers and clients.

Associable topics from the IFLA Trends Report 2021 Update:

- The comeback of physical spaces
- Diversity gets taken seriously
- The impatient user
- Race to the extremes

Megatrend 9: Silver Society

Around the globe, the population is getting older – this is especially true for countries like Germany and Japan. Libraries offer special opportunities for this target group as a place to meet and to participate in social and digital developments. At the same time, this is a special challenge for libraries, because at the moment many libraries only reach a fraction of the people aged 65 and over who actually live there. It is not only a matter of winning this age group as users, but also as active co-creators. Facets of this megatrend are, among others, the increased duration of working life, healthy lifestyles or social engagement in old age.

Megatrend 10: Health

The aging population in Western countries is on the one hand the result of steadily improving medical care, but on the other hand also the consequence of a growing awareness of a healthy lifestyle. The realization of the connection between mental and physical health - the so-called "holistic health awareness" - also plays an increasing role here. In addition, thematic aspects such as the turn towards self-optimization and healthy nutrition have significance in this thematic strand. Other facets are fitness, sportiness, prevention as well as mindfulness.

Megatrend 11: Security

The German Zukunftsinstitut explains this megatrend as follows: "Our society is on permanent alert. One crisis follows the next and the Corona pandemic has also made it unmistakably clear that our life on this planet is essentially insecure and fragile. Security is thus becoming more than ever the top priority for individuals as well as for society as a whole – and an important selling point. The question of who can and should create security in the first place is increasingly taking centre stage. And: how we can deal constructively with insecurity."²² In this context, libraries will have an increased

22 Zukunftsinstitut: *The Megatrends*. <https://www.zukunftsinstitut.de/dossier/megatrends/> [19

significance in the future: they are considered safe, non-commercial places in public space – an increasingly rare resource in society. Facets of this topic are digital health (an intersection with the health megatrend, here among others smart watches with functions such as an alert in case of an irregular heartbeat or an automatic alarm in case of an accident), cybercrime, the guaranteed basic income, or the big sub-topic of resilience.

Megatrend 12: Gender Shift

Gender roles in most Western countries have changed fundamentally in recent years. It has largely become the norm that the partners in a family or cohabitation both work. Family structures are changing with shifts in time budgets – people work or are in school during the day, leisure time takes place in the evenings and at weekends. The number of single parents has also increased: In 2020, 19% of children in Germany lived in households with one parent.²³ For libraries, this partial issue leads to questions about opening hours and access, because within the traditional opening hours of libraries, fewer and fewer people have time to visit on-site.

Challenge for libraries: Tough times ahead!

The IFLA Trend Report 2021 Update defines a total of 20 future-relevant trends for libraries. Of these, 19 could be assigned to the megatrends of the Future Institute; interestingly, the one mentioned there right at the beginning remains as the overarching trend of the IFLA report: Tough times ahead! Because: Against the background of the consequences of the megatrends described, but also in the aftermath of the Covid pandemic and the Ukraine war, libraries are called upon more than ever to speak up for their cause with the appropriate volume and factually convincing arguments! Active engagement with, for example, the megatrends and the conclusions to be drawn from them for one's own library is one way to prepare even better for the times ahead.

At the same time, it remains to be noted that in addition to the existing possibility of orientation on megatrends, uncertainty will increase in an ever-changing dynamic environment. In conclusion, we would therefore like to return to the concept of the "VUCA world" described at the beginning. How can libraries deal constructively with this increasing security? As an answer to this, the term "VOPA world" can be found in current professional literature. The term was originally developed by the German author

November 2022], Translation by the author using www.deepl.com

23 Federal Ministry of Germany for Family Affairs, Senior Citizens, Women and Youth (2020): Family Report. <https://www.bmfsfj.de/resource/blob/163108/ceb1abd3901f50a0dc484d899881a223/familienreport-2020-familie-heute-daten-fakten-trends-data.pdf> [12 January 2022].

Using megatrends as a navigation tool for the future library

Willms Buhse.²⁴ Through networking, openness, participation and agile working methods, libraries can thus manage to actively shape change:

- Networking with partners, customers and communities to better understand their needs and expectations of the library.
- Openness for dynamic developments in the environment
- Participation of target groups and stakeholders in the design of the library and its services
- Use of methods such as Kanban boards (e.g. a notice board on which the progress of change projects is always displayed transparently for everyone in columns such as "to do", "in progress" and "completed"), design thinking or leadership with objectives and key results.

With the combination of working with megatrends and applying VOPA principles, libraries have excellent tools to actively shape their future!

24 Wikipedia: Willms Buhse. https://en.wikipedia.org/wiki/Willms_Buhse [15 February 2023]
