Strategical technology projects are a double-edged sword for all businesses. On one hand, technology reflects an opportunity to improve productivity. On the other hand, new technology also creates new threats. Therefore, executives are under constant pressure to keep up with the stream of innovation to stay relevant.
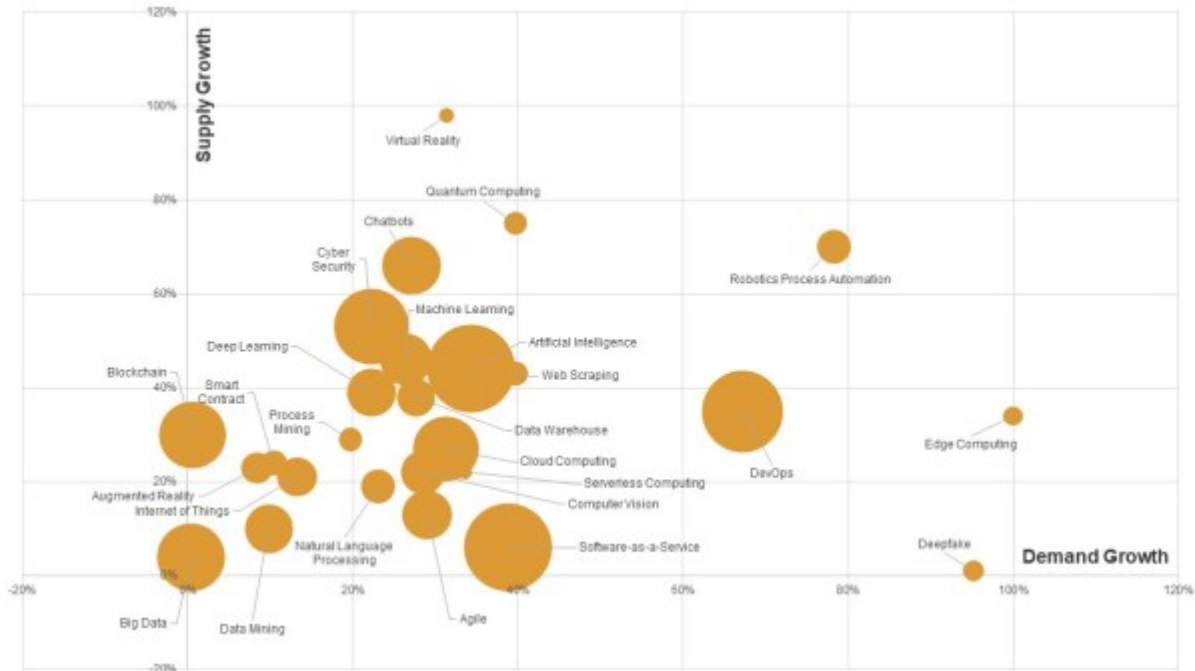
When it comes to choosing the technology you want to invest in, the key problem that arises is: Where do I place my "bets"? If you bet on the wrong horse, you might end up losing the race. If you bet on the right horse, you will find yourself as one of the fore-runners of this innovation wave.

To answer the question for you with data, I have conducted an analysis of paid-traffic information to identify the current state and the dynamics of technological trends. And the findings send a clear message for strategical technology projects: there are new threats, there are chances, there are lost bets and there are winners.

Table of Contents

Solution: Strategical Technology Projects and the Right Bets

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Strategical technology project trends

The figure presents the main results of the analysis I have conducted. It has the following components:

- **The "Supply Growth"** on the y-axis indicates how strongly the supplier-side interest for the technology is developing. A strong development indicates that the suppliers are strongly engaged in bringing out new offerings and indicates that the maturity of the technology will increase.
- **The "Demand Growth"** on the x-axis indicates how strongly the demand-side interest for the technology is growing. A strong growth indicates that companies are actively looking for these technologies and that they are seeking our offers and consultation with respect to these technologies
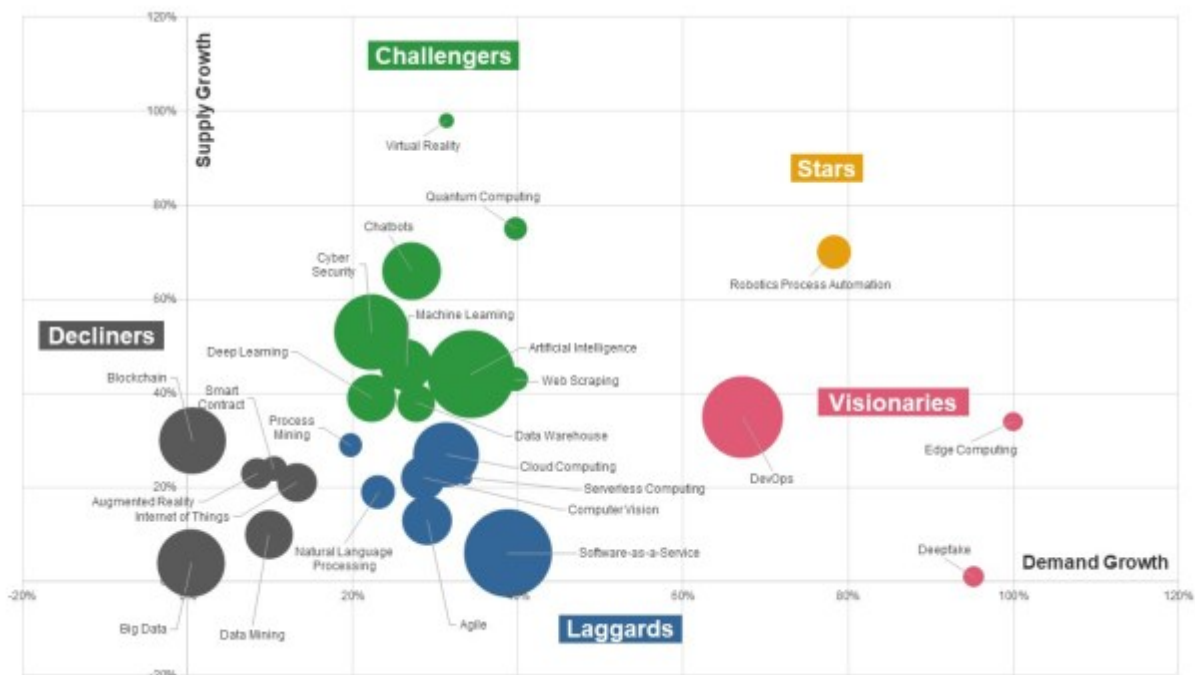- **The bubble size** is an indication of the market size for the respective technology.

Additionally, I have scaled all values in such a way that they fit on a scale between 0 and 1, where 0 will be assigned to the technology with the lowest value in that dimension and 1 will be assigned to technology with the highest value in that dimension.

Technologies are at the core of any digital transformation. 93% of companies consider innovative technologies as necessary for reaching their digital transformation goals (SAP, 2019). Using the results, you will be able to understand, where you should place your bets

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and which technologies you should keep in mind for your digital journey.

Insights: The 6 Key Insights from my Analysis

Strategical technology trends identified and clustered

With a closer look at the figure, we can identify 6 key strategic insights based on the clusters identified. These insights can help you to design your strategical technology projects.

Trend 1: RPA & intelligent automation is a star and as "must" field of play

RPA remains a highly dynamic field from the demand side as well as from the supplier side and we can anticipate more breakthroughs in this key technology. This is a technology that is mature enough to produce substantial benefits for companies, while it remains constantly developing. Gartner has already detected this trend and coined it "hyperautomation" for 2020.

Action: This is not just a safe bet, but it is a must to keep pace with technological advancement. [Find out more here about how to kick off your digital transformation with RPA](#).

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Trend 2: Watch out for deepfakes, they introduce a new danger

Deepfakes emerged from the advancement of neuronal networks and their application on generative adversarial networks (GAN) to reproduce realistic yet fake photos and videos. Deepfakes have already proven to be a threat to politics with the Financial Times writing "How deepfakes are coming for politics" (2018) and it is just a matter of time until the technology is used against companies. The public interest is high, which explains the demand side.

Action: There is still a void from the supplier side, which you should expect to be filled with new opportunities. Keep an eye on the supplier side until it is mature enough for strategical technology projects.

Trend 3: The decliners – boom, hype and unmet expectations

The decliners comprise of various technology that were expected to bring substantial business benefits, have been heavily promoted and the strategical technology projects with these technologies failed to meet these expectations. One example is blockchain, which has grown to a substantial size. However, its limited scalability and probably lack of maturity have led the demand side to slow down drastically.

Action: These technologies are not mature yet for mass implementation or have a very narrow focus. Redirect your focus on other more promising technologies and keep an eye on the decliners for possible new "breakthroughs" or a new level of maturity in the area.

Trend 4: The challengers – Future bets to get ahead

There are constantly new offerings emerging for the challengers. These technologies have almost achieved a maturity to be able to leave a significant impact on your organization or will very likely reach that level in the future. However, only little businesses have realized that which gives you a chance to become one of the first-movers.

Action: Carefully consider the technologies in this cluster and select the most relevant ones. Place your bets on technologies in this area to reap the first-mover advantage.

Trend 5: The visionaries – Watch them closely to not miss an opportunity

The visionaries are experiencing a strong demand growth and there might be very good reasons for that. However, there is little development from the business side to meet this demand. Either these technologies have achieved maturity and are unlikely to develop in the

future, or they reflect a sudden shift in demand. In this case, you should expect business to become heavily involved with these technologies to meet the demand and to develop new offerings.

Action: These technologies can become very relevant in the future if the supplier side starts reacting to the high demand. Evaluate their potential impact on your organization early on to know how they would impact your organization and keep a very close eye on these technologies.

Trend 6: The laggards – The mature and digital backbone

The laggards tend to already be very mature with little supplier side development and moderate demand side as the adoption rate of these technologies increases. These technologies will unlikely help you become a digital leader in your industry, however, they often serve as the basis for many other strategical technology projects.

Actions: Analyze your current technologies in use and see whether you can use any of the laggards to strengthen your digital backbone. The laggards are safe and sound investments as they have already been implemented in several businesses and are mature enough.

Methodology: Using SEO-Keyword Demand & Supply

To conduct the analysis, I have used various SEO-information underlying the various technological trends. The information used includes the average paid-traffic price, the trend on google trends, the SEO-difficulty, the search volume, the number of search items available on google.

Additionally, I made sure to also include the top 10 related keywords to ensure validity by the law of higher numbers, e.g. to evaluate "Virtual Reality", we would also evaluate "Virtual Reality Examples", "VR development", "VR" … .

The main underlying assumption is that the activities form the real market will be reflected in the online search data. This is true for most of the data but can be inaccurate in some cases. Therefore, one should definitely look at the whole chart with care at the conclusion for strategical technology projects.

So, what are your thoughts on my analysis? I would be very excited to hear more from you now! 🙂

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