

The importance of strategic autonomy in the digital era

Society increasingly relies on technology. Wilbert Jan Derksen considers the importance of strategic autonomy in ensuring national security

Digitalisation has transformed our society on a fundamental level. Since the introduction of the personal computer in the 1980's and the internet in the 1990's digital technology has gradually become an integral part of our daily lives.

This became clearer than ever during the COVID-19 pandemic, where digitalisation provided the means necessary for our economy and society to keep functioning, despite everybody having to stay home due to lockdown measures.

Digital technology has enriched our lives in innumerable ways, but at the same time has made us highly dependent on it. That applies to our personal lives, but in a broader sense also to the whole of society.

Hospitals, banks and power plants are only a few examples of vital service providers that are reliant on digital technology for carrying out many of their respective activities. That means that any disruption of these applications can have serious consequences.

This is especially worrisome in the context of the rising geopolitical tensions we are seeing in the last years. Russia's invasion of Ukraine has once and for all shattered the illusion of a peaceful post-Cold War international order.

In addition, China has also made clear that it wants to challenge the West in order to become the new global superpower. Cyberspace has become a crucial battleground in this new geopolitical reality. Cyberattacks targeting critical infrastructure could paralyze an entire country.

Furthermore, they are a relatively easy and cheap alternative to traditional means of warfare. The current disastrous Russian military campaign in Ukraine might convince policy makers worldwide that future conflicts will be fought largely, if not exclusively, in the digital realm.

The combination of digital dependency and growing geopolitical antagonism means that 'strategic autonomy' in the area of digitalisation is becoming more and more important.

Strategic autonomy means that in critical areas a country is free of any unwanted dependencies on foreign powers, allowing it to pursue its own interests and not be vulnerable to pressure coming from hostile foreign states.

This entails that security interests should take priority over financial gains and that trustworthiness is most important factor in determining what actors are allowed to play a role in providing vital services. Strategic autonomy in general can apply to many different policy fields, but here we are focusing on the digital component of this concept.

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In a European context this means that EU member states have to make sure that they prevent unwanted digital dependencies on countries that are seen as strategic opponents, such as Russia and China.

According to liberals, providing security is the most important task of the government. Hence, EU governments (and by extension the European Union) have a crucial role to play in achieving strategic autonomy, as it directly concerns national security interests.

Most recently we have seen a big debate about the importance of strategic autonomy with regards to the 5G telecom network that will be unfolded in the upcoming years. 5G will allow data to travel at never seen before quantities and speed. It will form the basis of new exciting technologies such as autonomous vehicles and virtual reality.

However, the installation of a 5G network is quite an expensive undertaking and there are only a few corporations that have the know-how to do so. A key player in this field is the Chinese tech company Huawei. It can offer high quality 5G technology for a relatively low price, making it the most interesting player on the market from a financial point of view.

However, there are serious allegations against Huawei concerning spying activities carried out on behalf of the Chinese government. Although Huawei presents itself as a privately owned company, its vague ownership structure seems to be a disguise for the fact that in reality it is a state-owned enterprise.

Inviting Huawei into the heart of our telecom network could therefore pose a serious threat to national security, as this would allow the Chinese government to have direct access to sensitive communication lines by installing so-called hidden backdoors in their equipment.

For instance, they could peek into confidential information shared between intelligence agencies or steal valuable trade secrets from important European companies in the area of high-tech and defence.

Hence, many countries have decided to impose restrictions on Huawei products. The United States (as well as some its closest allies like Canada and Japan) has decided on a total ban.

However, this rigorous measure can't be seen as separate from the current trade war that is going on between China and the US. EU countries don't need to base their respective policies on the economic interests of the US, which leaves more room for flexibility. For example, the Netherlands has decided not to impose a total ban on Huawei, but to keep the company out of the core of its network.

This should be sufficient to avoid any unwanted security risks, while also not hurting competition on the market by eliminating a mayor player. After all, strategic autonomy is solely about safeguarding national security interests and should never be a disguise for economic protectionism.

It is very important to make sure that foreign companies and investors that can't be trusted are not allowed to have direct access to our critical infrastructure. But we also need to take a look at the entire supply chain in order to prevent any damages that could arise indirectly.

Not only vital service providers can be targeted by cyberattack, also the logistic companies that they work together with can for example be attacked. If vital products like medicines can be produced, but not delivered, this would also cause major problems for society. Thus, strategic autonomy requires taking into account the entire supply chain.

Taking such necessary precautions in doing business with foreign actors is only half the story though. Strategic autonomy can't only be realised on the demand-side (protecting against unwanted influence from outside), but also on the supply-side. That is to say, stimulating innovation so European tech companies are also relevant players on the market.

Unfortunately, the EU seems to be highly lacking in this regard. Out of the top twenty biggest tech companies in the world, only one is European. The world's tech industry is dominated by American and Asian (mostly Chinese) corporations. For behemoths like Microsoft, Apple, Tencent and Alibaba there aren't any real European counterparts.

Stimulating innovation is therefore necessary in order to change this fact. This would also provide EU countries the opportunity to invest in technologies that have integrated certain values in their design that are important, like privacy, autonomy, transparency and security.

For example, there already exists the French search engine Qwant, that unlike many other search engines like Google, doesn't track its users and respects their privacy.

In addition, open-source software and hardware products allow full insight into their design, thereby ensuring complete transparency. Investing in these type of products would be a perfect complement to EU regulations like the GDPR, Digital Market Act and Digital Service Act.

The question is then how the EU can improve its innovation policy. When we compare this to the US, we see for example that the EU does provide funding, but that vested interests play a stronger role in preventing strong disruptions on the market.

This means that the process of 'creative destruction' – the continuous replacement of older tech by newer, more efficient technologies – can't be fully realised.

From a liberal standpoint this is undesirable, as it contradicts the free market principle of unobstructed competition. Investment therefore ought not to be affected by such interests and allow for an equal playing field.

In addition, it is important that investments are embedded in a broader innovation ecosystem. There the government can play a crucial role, by fostering cooperation between the academic world and business sectors. This can also be realised on an EU level, through close cooperation between the different member states.

In this context we have seen initiatives like GAIA-X and IPCEI-CIS arise, through which EU nations strive for a common European data infrastructure. However, we have seen here that disagreement among member states about the strategy and goals can cause infighting and prevent such initiatives from coming to fruition.

Strategic autonomy therefore will also require willingness among European nations to cooperate and not to let personal ambitions stand in the way of this common interest.

One of the most important reasons why the European tech sector has fallen behind over the years has been the lack of venture capital available on the market. This refers to high risk investments in promising early-stage companies.

Such capital injections can help them to grow rapidly and become successful. Especially in the tech sector such investments are necessary as many businesses only become profitable after a certain critical mass has been reached.

In the US there is almost three times more venture capital available than in the EU. Moreover, investors there are more focussed on growth, than on immediate profits. They are also more willing to kill a business once it becomes clear that it isn't meeting expectations, thereby creating a more dynamic market.

In addition, there is a lot more interaction between businesses, which allows for an exchange of ideas between them. Though it is hopeful to see that European investments in the tech industry have soared during the last couple of years, reaching 100 billion dollars in 2021, it is vital that a sufficient part of this money is allocated as venture capital investments.

What can also help tech businesses to grow is for the government to act as a 'launching customer'. As governments make use of various digital products and services, they can help up-and-coming companies by doing business with them. Having such a major client will allow them to scale up faster.

Moreover, it might have a pull effect on other potential clients. Again, the government can specifically select companies that take into account important values such as privacy and autonomy.

Lastly, it is important to keep investing in education programmes in the field of IT. There is a general shortage in IT personnel in the economy, that not only effects the tech industry, but also other sectors, as many businesses need to undergo certain digital transformations.

This can also be done by offering funds to retrain workers who otherwise might face unemployment in the years to come. The impact of automation on the job market is expected to be massive, as many professions will be partially or entirely taken over by automated technologies.

Offering these workers the opportunity to re-educate themselves in the area of IT will prevent them from becoming unemployed and help businesses to find sufficient IT personnel.

To summarise, strategic autonomy has become a necessity in a world where digital technologies are such a fundamental part of society and geopolitical tensions have caused concerns about unwanted foreign dependencies in this area.

First of all, it is imperative that vital service providers are shielded from any possible digital intrusion by strategic opponents like China and Russia. When it comes to our critical infrastructure, it is important to let security interests take precedence over financial arguments.

Trustworthiness should be the principal factor in deciding who to do business with. That applies to the entire supply chain of these vital services. At the same time it is crucial to improve innovation policy, so that the European tech industry catches up on its American and Asian counterparts.

This can be done by not letting vested interests play a role, fostering cooperation between business and academic actors, increasing the amount of venture capital investments, letting the government be a launching customer and investing in IT (re-)education programmes.

Consequently, strategic autonomy will require a lot of effort, but in the long run guarantee that the EU is able to stand on its own feet. ■

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