



Social credits and security: embracing the world of ratings

How our online activities
impact our lives and
attitudes towards data-
driven services

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Foreword



Prof. Genia Kostka

Professor of Chinese Politics at the Freie Universität Berlin. Her research focuses on China's digital transformation, environmental politics and political economy. Her most recent research project explores how digital technologies are integrated into local decision-making and governance structures in China (ERC Starting Grant 2020-2025).

“Social rating systems are being increasingly used in many locations, tracking the behaviour and actions of individuals, businesses and organizations. There has been much reporting of China’s emerging social credit systems in the media, showing how private and government-run rating systems are already used in the country to govern Chinese society. Outsiders often describe the Chinese scoring systems as a high-tech dystopian nightmare that is unique for China. Yet, when looking into our own circumstances, we quickly find that social rating systems have already crept into our lives – whether we like it or not. We use rating systems on services like Amazon, Uber and eBay in the hopes of improving market and social transactions. Given that social ratings are also increasingly woven into the fabric of everyday life, it is important to discuss the risks and opportunities that go along with them.

The potential opportunities include improved convenience, more trust and security, and an overall increase in efficiency. Yet there are risks, such as privacy violations, discrimination and biases, and the danger of these ratings being used as surveillance tools if put in the hands of malicious individuals or organizations. No doubt, in the past, regulators and policymakers in most countries were not keeping up with the speed at which these technologies and rating systems were widely adopted. Societies need to honestly and transparently discuss if and how they want to use such technologies, and, more importantly by, whom and for what purposes.

This report offers important insights into consumers' beliefs and behaviour in regards to social rating systems. The first interesting finding is that 43% of all consumers are willing to share sensitive private data in order to obtain benefits or for convenience. Second, the survey findings also show a distinct change in people's behavior as a response to these social ratings, despite almost half of consumers (or 45%) having issues in understanding how social ratings work. In addition, only one-in-five respondents have experienced the impact of social credit systems. And finally, the survey shows that there are significant cross-country variations in the findings. While in China citizens are a lot more willing to share private data, in Germany citizens are more sceptical and have shown concerns about privacy issues such systems may cause.

These findings are very similar to my recent two surveys on **social rating systems** and **facial recognition technologies** in China, the US, the UK and Germany that confirmed that people accept social rating systems, but only as long as they are perceived to be fair and transparent. The research also shows that these ratings have influenced citizens' behavior. For instance, in China, 18% of the respondents in my survey reported to have defriended a friend on social media because of their poor social credit score. In China, consumers were often not sure how the scoring was calculated. They still supported the rating schemes, as they perceived social credit systems as an instrument to close institutional and regulatory gaps, leading to more honest and law-abiding behavior in society, and less as a surveillance measure. Overall, making rating schemes more secure, transparent and fair are important in order to secure consumer support.”



Prof. Chengyi Lin

Affiliate Professor of Strategy at INSEAD and a leading expert on digital transformation. His research and teaching focus on the strategic impact of digital technologies and business and organizational transformation in the digital era. Professor Lin serves on multiple boards and consults for multi-intationals on digital strategy and innovation. He is the youngest standing member of the European Executive Council.

“Human beings are social animals by nature. We have always been looking for social cues to determine whether, and how, to interact with each other. Historically, these social cues may include: appearances (such as clothes and accessories), words and voices, facial expressions and body language, to name but a few. Despite many efforts, we were not able to develop an effective numeric system to measure how ‘good’ or ‘bad’ a person is’. We mainly rely on our individual judgements for social interactions to assess one’s trustworthiness. In certain countries and sectors, for example, financial systems and criminal justice systems, some limited records and metrics are available. But they can only provide ‘scores’ or records on a handful of life’s many aspects.

That was before the digital revolution. Nowadays, digital interactions and social media have made much more data and information available about various aspects of an individual’s life. Digital platforms host data ranging from individual preferences (e.g. Facebook and Pinterest accounts.) to consumer behaviors (e.g. Amazon, Netflix, and Google activity), and from individual expressions (e.g. Twitter, TikTok and Instagram.) to offering our thoughts to a wider online audience, such as aggregated peer reviews and recommendations (e.g. LinkedIn, Uber and Reddit).

Each digital platform may own a specific set of data. Based on that data, they could develop a deep understanding of our behaviors with respect to those aspects of our lives. Once all of the available data is put together, a more integrated picture starts to emerge – a new concept called a ‘digital twin’. A digital twin is a digital representation of the physical individual in terms of their data. This integrated historical data could describe how we behave as a person. Taking it one step further, this historical data could also be used to measure our trustworthiness or even ‘predict’ our future behaviors.

The concept of a social scoring system is born. This evolution from a narrowly-focused credit system to a much broader social scoring system was mostly driven by emerging needs – such as our need for safety and trust in both the physical and digital worlds. The accelerated speed of this process, however, was enabled by digital technologies, such as the Internet of Things (IoT) and Artificial Intelligence (AI). These technologies connect and integrate the physical and digital world through data. A new system that can better understand our social behaviors is already in the making. Now, the question is, should we pursue it?

One aspect of answering this question is how to weigh the trade-offs, both explicit and implicit, of such a new system. But it is easier said than done. Many digital benefits could be immediate and attractive, such as convenience and cost efficiency, while the risks remain hidden, such as privacy and security. Up until now, we have seen a continuous increase in digital adoption across sectors. What is unclear is whether the consumers are always making informed and conscious choices.

A second aspect is science and technology. Because of the large amount of input data, the social scoring system will rely on deep learning or even more advanced general AI technologies to process the data and generate insights. Do we have enough scientific research to feed the algorithm with ‘the right sets of data’? What are the mechanisms to make sure the results from these algorithms are reliable and explainable?

A third and critical aspect is the governance of the social scoring system. Who should operate the system? Who and how can we effectively govern the operating body? What could the measurements be to evaluate the system itself? In this case, output measures, such as the number of individual scores provided, penetration of the total population, or the profit margins will not be sufficient. We need to continuously evaluate the operating body and make sure it has integrity, benevolence and competence, which are the three core components of trust.

The bottom line is, trust is both the foundation and outcome of a social scoring system. Our ultimate goal is to better understand and build trust in the new world that by integrating the physical and digital.

Trust varies across countries and cultures. The Edelman Trust Barometer 2020 showed an overall increase of one point in the global trust index. But the top 26 vary significantly on the same trust index. We have observed similar results in Kaspersky's own survey results. For example, with the exception of Japan, individuals in general would trust government and businesses to store their data. However, each country varies on how much they trust these two bodies.

Whether or not it is appropriate to design and implement such a system requires careful consideration. The decision will depend on the trade-offs that society is willing to make, who society is willing to entrust with their data, and how the system will be governed and operated.

We have seen this decision made by each country during the COVID-19 crisis. Whether to enforce confinement, whether and how to implement digital tracking and tracing systems; the answer to these questions vary by country.

Similarly, given the variation in each country's context, a global social scoring system may not be feasible. It will fall on each country, at least in the short term, to make their own decisions based on their unique context. For individuals, it is important to make informed decisions about your own data: who can store and use it, who can share it, who it is shared with and under what circumstances, and what the impacts are on your life. Beyond data itself, it also important to be prepared and consider whether and how to participate in a social scoring system should it be implemented in your country."

Methodology

An online survey of 10,500 consumers was carried out on behalf of Kaspersky by Toluna. Respondents came from 21 different countries, including Australia, Austria, Argentina, Brazil, Chile, China, Colombia, Germany, India, Indonesia, Italy, Japan, Mexico, Peru, Portugal, Saudi Arabia, South Africa, Spain, Switzerland, Turkey, United Arab Emirates, the United Kingdom, the United States and Viet Nam. The sample from each country consisted of adults aged 17 or over with nationally representative quotas set for gender, age and region. All respondents had to have online access to take part in this survey.

Introduction

The impact that our digitalized world is having on us is growing day by day. More than ever, we rely on smart devices, whether for remote working, training or education, and we depend on interaction via social media to stay connected with our friends, family and colleagues. Things have also changed significantly in a time where social distancing and self-isolation is becoming vital to protect people across the globe.

The digital evolution has taken us to the point where our personalized services – ranging from Uber accounts to Facebook profiles – could be used power to social ratings and influence an individual's life in the future.

And nowadays, these systems, which were once ideas of dystopian science fiction, are very much a modern reality.

There are already examples of social ratings being implemented on a national level. Thanks to the **substantial amount of data being created and shared online**, in a number of countries, people are now subject to an official reputation score that can influence nearly any aspect of their lives. The better your rating, the easier it is to get credit, buy insurance, rent an apartment or even find a job.

However, something else is going on too, as a different type of unofficial social ratings is being adopted by wider society. The idea of our digital lives directly affecting our physical activities and expectations is already upon us. Social media profiles, such as LinkedIn, primarily serve to present us to potential employers, but perhaps still hold on to too much of your personal information.

Moreover, with the outbreak of the COVID-19 pandemic, living life offline can be challenging, and getting out of the house is now a risk, one that the government has taken full control over to make sure people don't spread the coronavirus. Governments and businesses have started to think about changing the ways people carry out their lives in cities, and even whole countries are putting limits on time spent with other people for the greater good of society. This includes the implementation of automated systems to control people's movements, their ability to buy goods, and their access to social services.

On the one hand, with the growing development of digital technologies, social media and new services make our lives much easier, yet on the other, people may not want to share their sensitive information if they know that this may affect their access to banking, healthcare or insurance services. There is also a security aspect to consider, because if we are all willing to share more information, then there are more opportunities for hackers and fraudsters to steal and manipulate our data.

A new Kaspersky survey has been conducted to understand how social ratings may be impacting people's lives and consumers' attitudes towards the services that rely on our data. This report will present an overview of people's perception of social ratings, their readiness for being part of such a system, along with their fears and desires for their digital lives.

Key findings



66% Facebook

54% YouTube

45% Instagram

40% Twitter

These are the most common "traditional" social media platforms being used by consumers

46% of consumers have heard of a social credit system

45% of consumers have experienced issues in understanding how a social credit system works

43% of survey respondents would share sensitive private data to secure better rates and discounts

49% of survey respondents have tried to secure finances for education, vehicles or housing based on previous financial behavior

51% said they are happy for the government to monitor social media activity to keep its citizens safe

21% have experienced a social credit system rankings. 42% have experienced a social credit system in public services

49% of survey respondents have tried to secure finances for education, vehicles or housing based on previous financial behavior

52% consumer would share a social media profile so that they could fast track through travel security

18% of consumers say they have experienced issues getting a loan or mortgage due to information collected about them from a social media account

24% of consumers say they do not trust the government with their data

Living the digital life



Being online is now a necessity in modern life. From social media to bank accounts, there is a digital service for everything and without internet access, many of the processes and activities that people sometimes take for granted would otherwise not be possible. New data from the **Digital Report 2020**, conducted by We Are Social, reveals, that **4.54 billion** people now use the internet, and this number has grown by seven percent (**298 million** new users) since January 2019.

The same report uncovered that **3.8 billion** of us have social media accounts. This does not come as surprise, with a wide range of channels and messengers available to suit nearly any demographic. In fact, Kaspersky's own global survey has revealed some discrepancies between how different generations access social media and communicate with others.

According to the Kaspersky survey, when it comes to "traditional"* social media, the most common platforms being used by consumers are Facebook (**66%**), YouTube (**54%**), Instagram (**45%**) and Twitter (**40%**). These results may be expected, as Facebook and YouTube are used on a range of devices and there is high usage of these platform across all age groups, while Instagram can only be used effectively on a smartphone.

When asked which "traditional" social networks they use 'most often', Facebook (**47%**) is still well ahead of its rivals, with YouTube again being the runner-up, but this time favored by less than a third (**31%**) of responses. Men are also more likely to favor YouTube (**35%**) compared to women (**28%**). Instagram scores well compared to over services, with more than a quarter (**28%**) of consumers using it the most often – yet Twitter (**18%**) and Pinterest (**8%**) are not as popular.

Mobile-centric apps, like Instagram, are not as frequently adopted by older respondents. For instance, just **26%** of those aged over 55 use the platform, compared to **65%** of age 16 to 24-year-olds. What is also interesting is that despite **consumers' appetite for sharing and posting images online**, they only really want to do it using one service, with Instagram having nearly double the amount of users as Pinterest (**23%**). The networks mentioned above are often used for both communication and entertainment.

These results offer interesting insights into people's social network preferences, with the biggest platforms still seeing the widest audiences. Consumers are still more likely to use social media to stay connected with each other, rather than rely on these services to keep them up-to-date with breaking news. Yet while sharing updates and photographs with family and friends may seem innocent enough, social scoring systems are using this information to influence everyday lives.

* excluding messaging apps (WhatsApp, Facebook Messenger, etc.) and TikTok

Social ratings

“For individuals, it is important to make informed decisions about your own data: who can store and use it, who can share it, who it is shared with, and what the impacts are on you. It is also important to get prepared and consider whether and how to participate in a social score system should it be implemented in your country.”

Prof. Chengyi Lin

47% of respondents around the world have heard of a social credit system

For example, [online rental marketplace Airbnb has an AI algorithm](#) to scrape their users' wider internet activity to ensure they are adhering to their conditions. These measures may seem extreme and offer consumers a warning that any online activity has potential consequences.

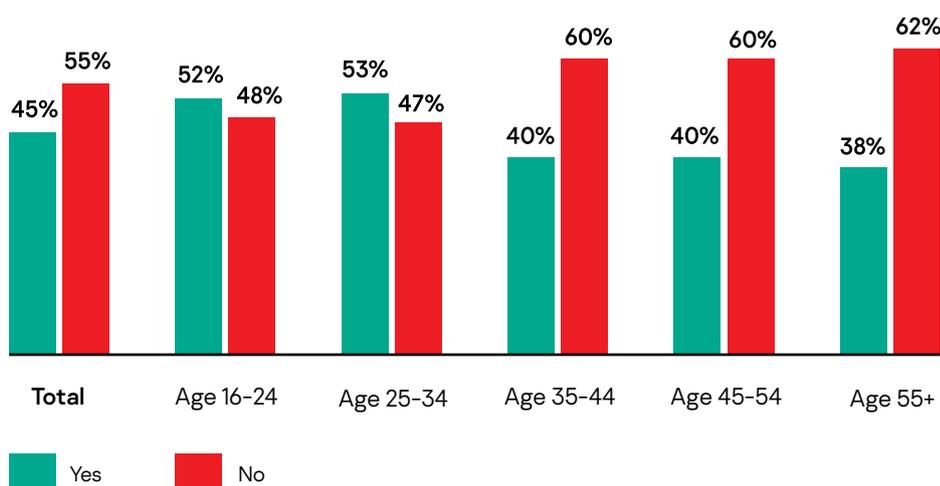
The growth and popularity of social media networks and online services has led to a new reality – the social ratings system – or in other words, the categorization or differentiation of people based on their behavior and influence on the internet. Initially, the case that financial institutions were widely integrating consumers' assessment algorithms to decide whether to provide them with services or not, but today such systems are applied in many other spheres and segments.

Governments and organizations can now assess which people are eligible for a wide range of real-world services, as well as who is more influential than others – and some have put this to practical use. Nearly half (**46%**) of those surveyed around the world have heard of a social credit system, and this is only expected to rise in the coming years. E-commerce and similar service providers have already been relying on different algorithms to offer their customers what they want, even before they realize it themselves. To make automated systems work, they need more personal data, such as social media posts, unique biometric data, credit card debt, online shopping habits and more. In fact, thousands of data points are analyzed to score consumers. Based on these scores, systems make decisions for us or about us, from travel destinations and the associated cost, to whether we are allowed to access the service itself. Interestingly, the percentage of people that have heard of the system is highest in the Asian countries, with **71%** in China, while the lowest – **13%** – was found in Austria and Germany.

There are already numerous examples of how both official and unofficial social scoring systems have impacted individuals. A particular trend to take note of is how activity on one social media network could lead to a person being removed from another.

However, despite these systems being put in place and becoming more well-known, there is some ambiguity over how they operate and how effectively they are being implemented. For instance, nearly half (**45%**) of consumers Kaspersky surveyed said they have experienced issues in understanding how a social credit system works. This was highest among younger generations with 16 to 24-year-olds (**52%**) and 25–34-year-olds (**53%**) having more trouble than their older counterparts. Just **38%** of those aged over 55 said they have had an issue.

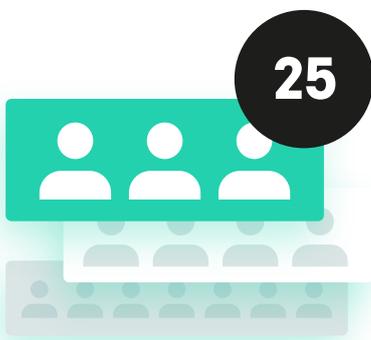
Table 1. Have you experienced issues with understanding how a social credit system works?



Additionally, far fewer consumers have actually experienced the impact of a social credit system. Only a fifth (21%) of those Kaspersky surveyed have experienced one so far, with 25-34 year-olds (38%) the most likely to be affected.

As organizations become more aware of how social scoring systems could benefit their business, consumers may be encouraged to become more vigilant with how they use social media. While there are societal and professional pressures to use social networks in the right way, any greater impact could see a distinct change in people's behavior where they become less likely to share social updates online.

Are we oversharing our information?

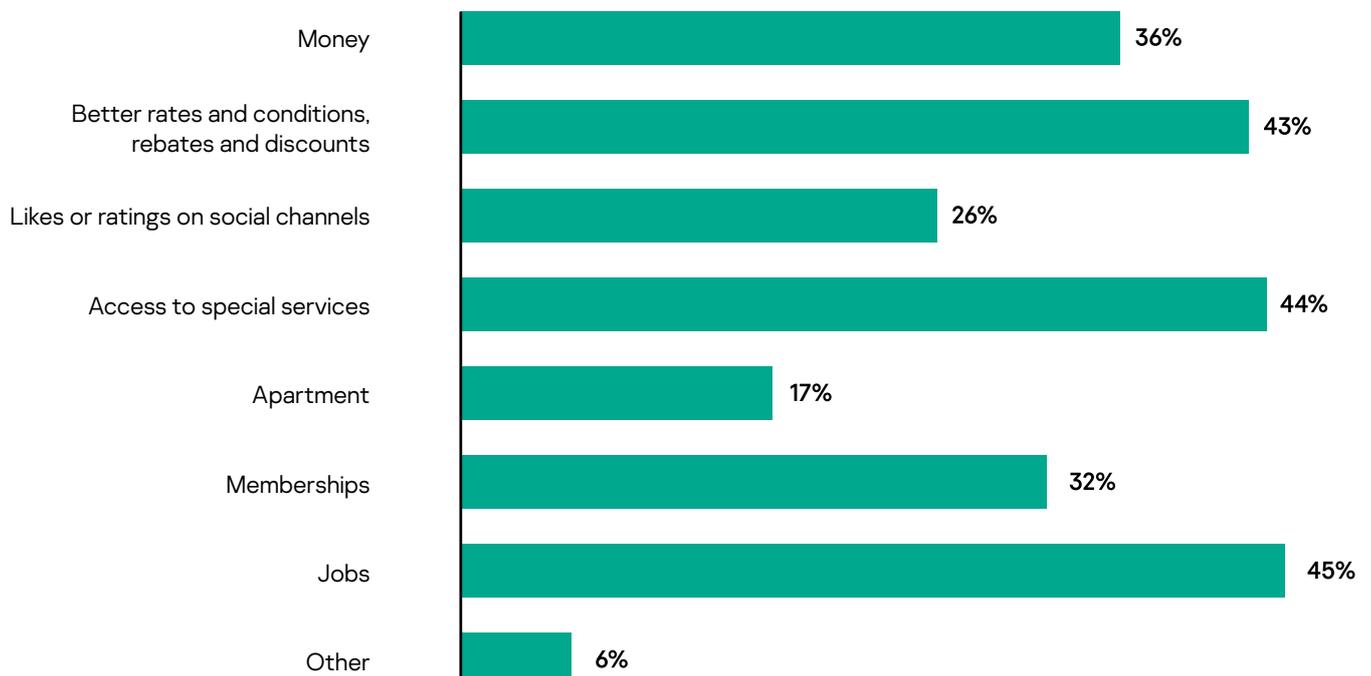


It cannot be denied that sharing personal, and quite often private, information only has become essential in modern life. Nearly every service we rely on is data-driven and parting with details like our home address, telephone numbers and email accounts makes people's lives easier. Online services become more streamlined and customer experiences become seamless.

From streaming services to mortgage lenders, there is a wide range of businesses that ask for personal information. However, has this necessity gone too far? Has sharing information become habitual or are consumers still being cautious about which organizations they share data with?

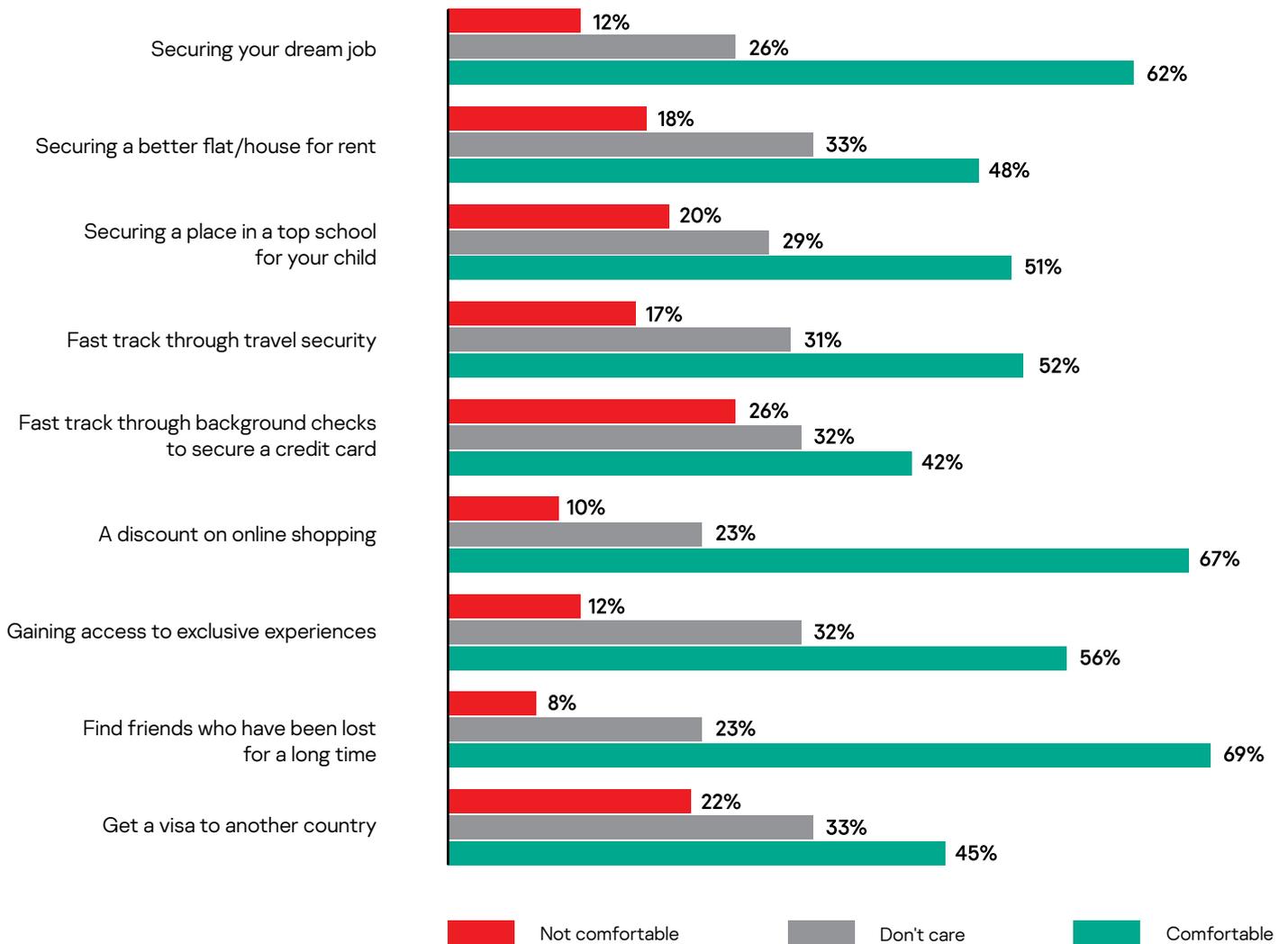
Kaspersky's survey found that more than two-fifths (43%) of respondents would share sensitive private data to secure better rates and discounts. A similar number (44%) said they would do so to receive special services. These figures highlight how preferential treatment acts as a strong incentive for consumers to share data and organizations are prepared to reward their customers for doing so.

Table 2. What would be a reason to share sensitive private data?



Yet, when it comes to sharing social media profiles, consumers may not consider letting organizations peek into their personal lives. For instance, a quarter (26%) of respondents said they would not share a profile so they could fast track through credit card background checks. This figure rises to 35% among those aged over 55 and drops to 19% for 25 to 34-year-olds. However, consumers are much more prepared to share their social media profiles for other aspects of their daily lives, such as online shopping discounts (67%), securing a dream job (62%) and getting a better flat or house to rent (48%). Remarkably, every second (52%) respondent would share a profile for a fast track through travel security.

Table 3. What would you be comfortable sharing your social media profile for?



There are reservations about how information is used by companies to generate tailored and personal communications. For example, less than half (46%) of respondents are happy to receive targeted adverts via social media based on their preferences. Overall, just half (50%) of all respondents are happy to log into their online accounts through their social media profiles. However, this figure does rise to 63% among 25 to 34-year-olds and 59% with 16 to 24-year-olds.

51% of consumers globally are happy for the government to monitor social media activity to keep its citizens safe

These findings show that older consumers are much more comfortable with keeping services, such as social media and online retail, separated with neither having an impact on the other. Meanwhile, younger people do see the benefits of companies being able to personalize their experience and are more willing to share their information to reap potential rewards.

At the same time, governments have also held an interest in their citizens' personal information. This has been dictated by security reasons in our ever-changing world, as well as in consideration of the general, widespread digital transformation. Half (**51%**) of consumers globally are happy for the government to monitor social media activity to keep its citizens safe. While this indicator is higher in Asian countries, with **73%** in Vietnam, respondents from Latin American countries share the opposite opinion, for the most part. For example, the lowest findings come from consumers living in Mexico (**25%**) and Chile (**21%**). Even the reason of societal safety is not seen as a way to justify any possible interference from governments into personal lives.

However, the COVID-19 situation has not only raised health issues, but the use of state monitoring, with citizens being tracked around the world, can be considered a good measure to protect humanity. But a question still remains – how can we ensure there is still a clear line between public safety and public control?

Who controls your data?

70% of respondents agree that bad behavior should limit people's access to public resources

As personal data becomes a more valuable currency around the world, organizations are stepping up their interest in collecting information from their current and potential customers. Sometimes, this is happening without consumers even being aware of what is going on.

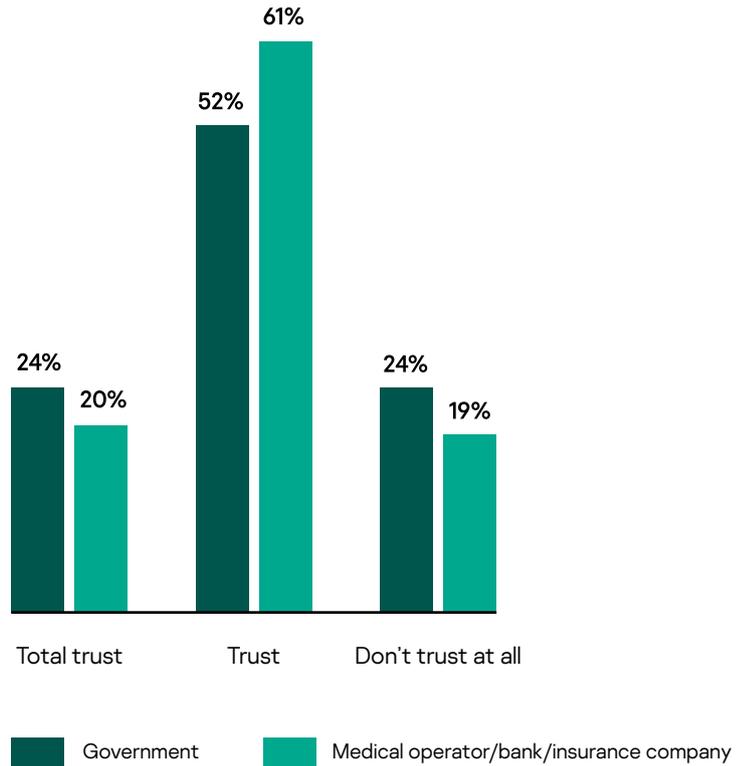
Overall, consumers believe that bad behavior should limit people's access to public resources. In fact, **70%** of respondents to Kaspersky's survey said they agreed with this sentiment and this would affect people being able to benefit from accessing real estate, transportation, education, and even curb their ability to travel.

Consumers are also considering which organizations can be trusted with their data. As the cyberthreat landscape continues to widen and data breaches become more frequent, protecting personal data is a big challenge and responsibility. Kaspersky has found that consumers are more willing to share data with medical operators, banks or insurance companies. Only **19%** of respondents said they do not trust these companies or services. Comparatively, a quarter (**24%**) of consumers say they do not trust the government with their data.

“Trust varies across countries and cultures. Decades of research has identified three core elements of trust: competency, benevolence, and integrity. In practice, how people give their trust across different countries and cultures varies significantly. This suggests that it may be possible to construct a country-specific social score system, while a globally acceptable standard may be.”

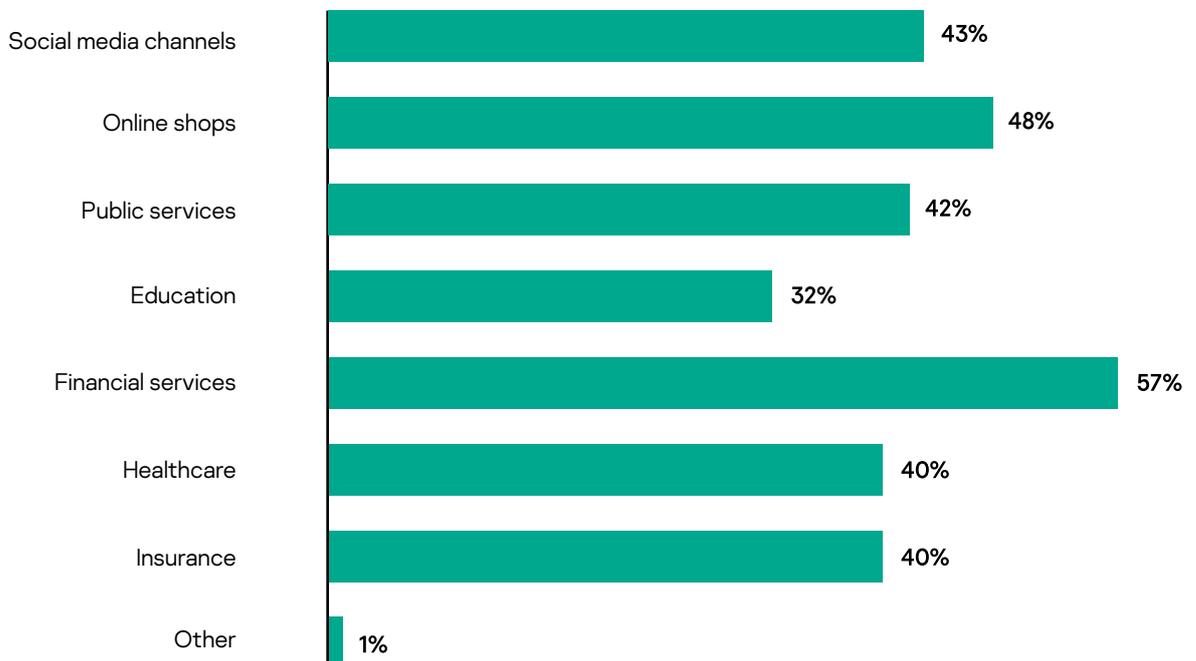
Prof. Chengyi Lin

Table 4. Whom do you trust to store your personal data?



Kaspersky’s survey shows that only around half of its respondents have experienced a social credit system – and this may be come down to organizations not telling them what is happening. For instance, **57%** say they have experienced such a system with financial services. This figure does decline in other industries, but there is still a significant number of consumers who have experienced social credit systems in healthcare (**40%**), insurance (**40%**), public services (**42%**), social media channels (**43%**) and online shops (**48%**).

Table 5 . Where have you experienced a social credit system?



While financial credit scoring is somewhat regulated and its conditions are available to customers, there is no framework we are publicly aware of when it comes to other systems used by organizations and governments to collect our data.

Consumers also shared their experience about specific examples where social credit systems may have impacted them. The most common occurrence is when people try to secure loans. Nearly half (**49%**) of survey respondents have tried to secure finances for education, vehicles or housing based on previous financial behavior. This figure rises to **65%** among those aged 25-34.

Financial and housing services take social media activity into consideration too. In fact, nearly one-in-five (**18%**) consumers say they have experienced issues getting a loan or mortgage due to information collected about them from a social media account. This increases among demographics that most rely on these services, with around a third (**32%**) of people aged 25 to 34 experiencing an issue securing these sorts of finance deals. Consumers' experiences have revealed that insurance programs also take social scoring into consideration: almost two-fifth (**39%**) of respondents of this age group have participated in car or health policies based on risk-taking behavior.

It's important to note that while financial credit scoring is somewhat regulated, there is no framework we are publicly aware of when it comes to other systems used by organizations and governments to collect our data. Consumers can find it is impossible to find out what their scores are, how these scores are being calculated and how they can be corrected if there are inaccuracies. It is difficult to know whether or not it's possible to rely on automated AI algorithms and the choices they make. This is a grey area and it also remains unknown if scoring systems are used for other purposes we are not aware of.

Conclusion and recommendations

As the survey results have shown, consumers may find it a challenge to take a step back and remove their personal information from online and some real-world services. Organizations are digitizing quickly and benefit from technology and consumer data in new ways.

Governments across the world are considering a wider implementation of state monitoring systems to ensure public security. Nevertheless, it's not clear how much access to personal information and people's lives governments would request in these cases. The need for a compromise to show where the line is between public safety and control is becoming more crucial than ever.

While the current digital landscape may make it seem like sharing personal information online is inevitable, there are steps people can take to keep their data secure. Protecting privacy, both online and offline, is still possible, and Kaspersky advises consumers to take the following steps to safeguard themselves:

- Don't forget to delete your account and history wherever possible when you stop using an app or online service. Additionally, check which connected services have access to your personal accounts.
- Our world is changing and that means every part of our lives could be measured and scored. Use caution when sharing your personal information so that you are not denied a service for previous behavior.
- Sharing behavior has its benefits but only with the right services. An online survey may give you a discount off your favorite brand, but this may lead to a company learning more than you wanted them to know. Remain vigilant about your online activities.
- Social media is an integral part of our daily lives, so think twice before sharing your personal information online in case it could be misinterpreted or even used against you.
- Use a reliable security solution for comprehensive protection from a wide range of threats, such as **Kaspersky Security Cloud**. The solution also incorporates many features that protect online privacy. For instance, the Do Not Track feature prevents the loading of tracking elements that monitor your actions on websites and collect information about you.

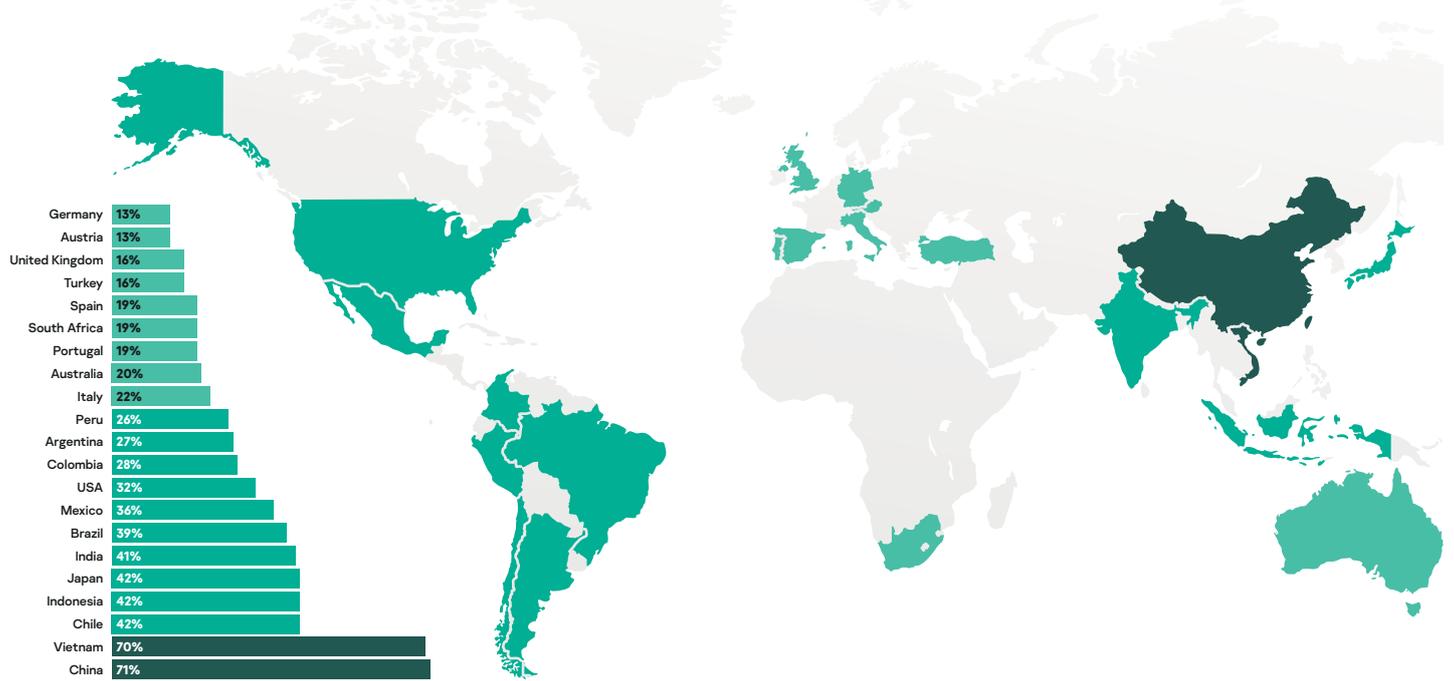
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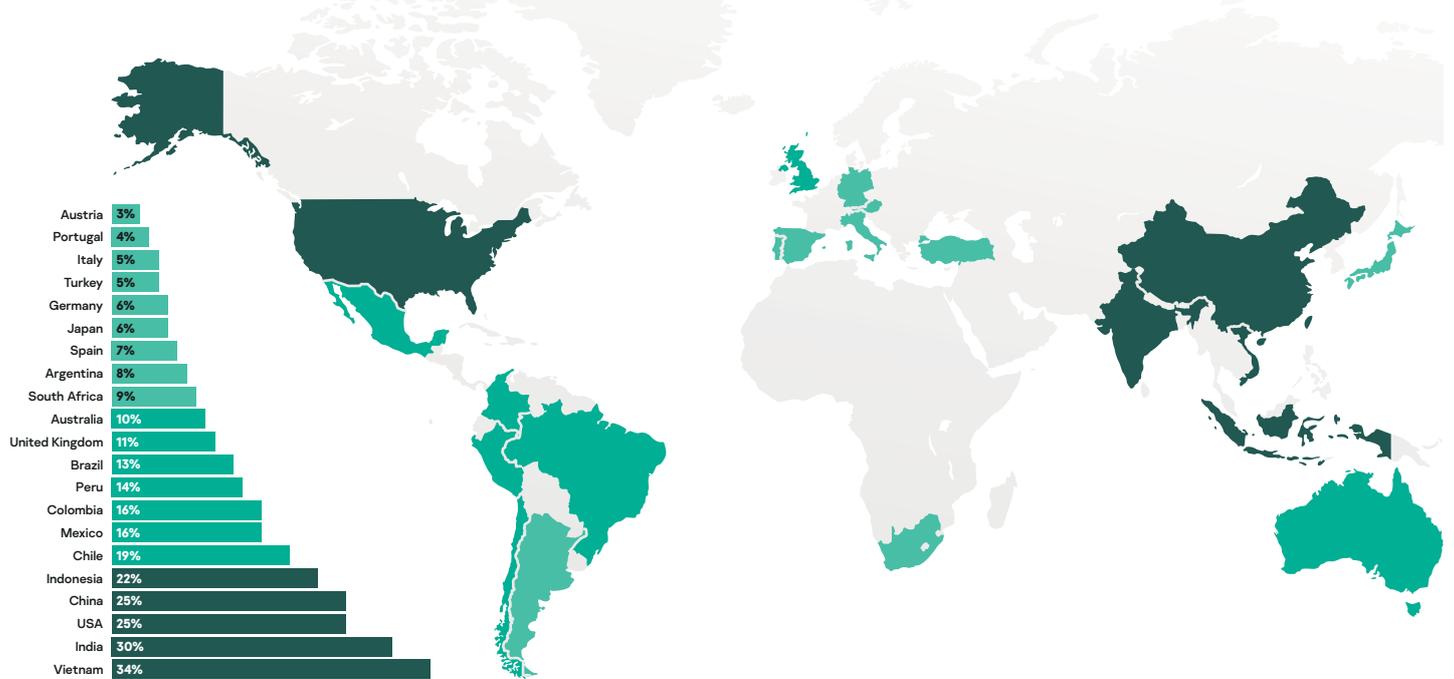
Appendix 1

Percentage of consumers who have heard of a social credit system



Results of the report 'Social credits and security: embracing the world of ratings', 2020

Percentage of consumers who have encountered social credit rankings



Results of the report 'Social credits and security: embracing the world of ratings', 2020