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MASTER'S THESIS

SOCIAL CREDIT SYSTEM – THE GAMIFICATION OF GOVERNANCE

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LIST OF ABBREVIATIONS

- $\mathbf{sl.} \mathbf{Slovene}$
- AI (sl. Umetna inteligenca); Artificial Intelligence
- EU (sl. Evropska unija); European Union
- EIB (sl. Evropska investicijska banka); European Investment Bank
- FOMO (sl. Strah pred zamujenim); Fear of missing out
- NGO (sl. Nevladna organizacija); Non-governmental Organization
- PRC (sl. Ljudska republika Kitajska); People's Republic of China

- PRS (sl. Osebni sistemi ocenjevanja); Personal ratings systems
- RQ (sl. Raziskovalno vprašanje); Research Question
- SC (sl. Družbeni sloves); Social Credit
- SCS (sl. Sistem družbenega slovesa); Social Credit System
- SCR (sl. Ocenjevanje družbenega slovesa); Social Credit Rating

INTRODUCTION

Motivation and rationale for the study

Technologies in Digital era or so-called Smart age are transforming our conception of citizenship, privacy, empowerment, and governance. The famous Sinclair's (1917) shibboleth – if you have nothing to hide, you have nothing to fear – regarding mass collection and process of personal data, is continuously concealing the arising issue how new technologies are progressively being used to erode civil rights rather than to as a tool to strengthen democracy, preserve privacy, enhance trust, and empower citizens. We shall therefore not confuse privacy with secrecy, and we shall acknowledge that we have the right to have a say, and more importantly shall be more empowered, in how information about us is used. As per Buckminster Fuller (1981), if we want to coach people how to think in a new way, we shouldn't trouble trying to instruct them but instead provide them with a tool the use of which will then guide them to mint new ways of thinking. A framework shall be a useful tool, not merely an idiom, and the more the ways it can be used the more useful it can be (Kise, 2017). If we continue to be indifferent to this new ability of emerging technologies and tools in shaping social and political settings, one day we may suddenly find ourselves facing the rapidly changed world, which as such we may pretty much dislike and at the same time be unprepared or even unable to challenge it.

Hence, this thesis provides an analytical review which pursues to identify what Social Credit System (SCS) is and punctuate its most salient features for influencing behaviour, and to ascertain in which ways and to what extent these features could be fully applied for impactful measurement and change of the subject's quantified reputation through gamification, incentives and intervention mechanisms for building and maintaining social capital.

This thesis encompasses many aspects of today's digital world and society and includes extensive references for those interested in delving deeper, however, I write with a strong western bias as the one known to me.

Definition of research field and description of research problem

In recent years gamification has been a considerable trend in many industry and non-industry applications (media, marketing, retail, consumer goods, healthcare and governance) and is used as a means to educate individuals, engage customers to businesses and brand names, and most importantly also nudge people to alter their behaviour, and our lives and interactions are progressively becoming game-like as more and more activities, services and systems are becoming gamified (Wünderlich, Gustafsson, Hamari, Parvinen, & Haff, 2020). Gamification is generally perceived as a transformation process of any activities, services, systems, and even organizational structures into gameful encouraging experiences to facilitate positive changes in cognitive processes and eventually alter behaviour (Hamari, Koivisto, & Sarsa, 2014). Some researches indicate that although gamification provides

significant positive effects, they are considerably dependent on the users using it as well as on the environment in which the gamification is being applied (Koivisto & Hamari, 2019). We have at the same time seen emergence of captivating convergence of utilitarian and hedonic systems and can now witness hedonic systems or entertainment-oriented technologies being adopted for utilitarian use (Koivisto & Hamari, 2019). Van Der Heijden (2004) also suggests that leisure-oriented (or hedonic) information systems are designed to deliver "self-fulfilling rather than instrumental value" to the user and boost "prolonged rather than productive use" as they are more associated with entertaining aspect and activities, however its value can play a pivotal role in increasing the acceptance of utilitarian systems (p. 695).

"To be Chinese today is to live in a society of distrust, where every opportunity is a potential con and every act of generosity a risk of exploitation. When old people fall on the street, it's common that no one offers to help them up, afraid that they might be accused of pushing them in the first place and sued" (Hawkins, 2017, para. 4).

The incidents of so-called peng ci (touching porcelain) unfortunately just help to further deteriorate social trust to an extent which threatens country's economy and reputation and even individual lives (Raphael & Xi, 2019). These kinds of extortions along with counterfeit goods and scams in food and healthcare make more and more people angry which inevitably makes them more acceptable to any government measures designed and taken to end them (Hawkins, 2017).

Already in 1999, some American companies asked some Chinese researchers to develop tools for providing more information on Chinese companies they wanted to develop business relationships with and they soon realised that they had to create some kind of a system for documenting the creditworthiness of Chinese citizens and enterprises, so the term social credit (SC) logically emerged in 2002 (Raphael & Xi, 2019). The Chinese government is now rolling out a data-driven rating system, announced in 2014, that intends to address the issue by tracking behaviour considered as either good or bad i.e. rate people's financial and social behaviour with punishments and rewards distributed accordingly (Hawkins, 2017). Such plans in the West usually raise red flags about the grasp of the surveillance state but in China it is being greeted by a public annoyed with not knowing who to trust (Hawkins, 2017).

Although such ratings are not new non unique to China, as already with eBay's seller and buyer ratings and Uber's passenger and driver ratings companies worldwide have been empowering consumers to rank themselves and others, the aggregated score could then be used to regulate access to certain privileges and luxury nowadays bought with money alone, such as permission to travel with planes and high speed trains or book first-class tickets and could eventually include access to high-ranked schools and even renting cars (Hawkins, 2017). China's SCSs can be seen as a structured observation and evaluation of individual behaviour and whether it's called creditworthiness, integrity or truthfulness, it's designed to

encompass something beyond one's ability to pay back loans, and that could be judgement of the ability to keep promises and fulfil legal commitments i.e. a judgement of moral character (Daum, 2017; Dzankic, 2019). The system seems to be designed to encompass measures meant to make citizens first to "dare not be untrustworthy, cannot be untrustworthy, and finally don't even want to be untrustworthy" (Daum, 2017, para. 29). The merits of such systems are appealing as they may have positive effects on distributive justice and propose suitable alternatives in market economies (van 't Klooster, 2019).

Advocates for the system draw parallels to Western credit ratings run by private companies which take both financial and social data into account although social credit rating (SCR) goes far beyond the Western typical credit ratings as the scope of the information that will adjudicate a person's SCR is enormous (Hawkins, 2017). Beside financial history and criminal records, the Chinese government "has access to troves of online data about its citizens that Western governments do not", mainly via tech giants Alibaba and Tencent, politically and legally beholden to the government to be completely collaborative and transparent, also the boundaries between private companies and government institutions are often unclear, as in theory, there are certain safeguards on citizens' data, though in practice there are no proper controls in place (Hawkins, 2017, para. 10).

SCSs are therefore tools for disciplining society and awareness of surveillance is central to any such system, as it can curtail free will and individual liberty. Just as inmates in Bentham's panopticon, netizens have no certainty of whether they are observed at any given moment or not, which may encourage them to alter their conduct under the assumption that they are constantly being observed and scrutinised. The present digital surveillance of online activities to evaluate and influence market behaviour or even political choices could become extremely problematic. The point is that we may not find 'perfect citizens' inside a panopticon, whether digital or analogue, it may rather be a golden cage hosting utilitarian passive subjects (Dzankic, 2019). To Westerners, this instantly raises worries concerning government surveillance, but many Chinese welcome the system seeing it as a possible rectifier for the shortfall in social trust or even just as a convenient means of steering everyday life and as a longed-for step toward holding the responsible accountable (Hawkins, 2017).

A real-life version of this system designed to encourage desired social and political behaviour of citizens is now being implemented in China with ambitions to become obligatory by 2020 (Creemers, 2014). However, common opinion of the analysts is that there's no D-day and that 2020 is not a magic date at which the system shall be fully implemented and operational (Zhou & Xiao, 2020), and Ahmed (in Tai, 2019, 41:51) adds that being fully operational by 2020 "is not even a goal that the government has set up", rather it's just a milestone in the initial planning period which would further mean that new batch of government policies should be expected and possibly a fresh five-year plan for the next milestone (Zhou & Xiao, 2020). Various stakeholders ranging from government agencies, social organizations to commercial private entities are involved in data collection

and harvesting phase (Liang, Das, Kostyuk, & Hussain, 2018). The system works on the principle of collecting and centralising data, generating quantified data profiles of citizens to be used to assign scores based on digital footprints of their social, commercial, and political beliefs and acts (Denyer, 2016). By design it fundamentally works to quantify, digitise, and shift citizenship from a fundamental right to an incentive that individuals will have to continuously endeavour to preserve and to compete for (Reede, 2017). Literally everything from search engine histories to purchasing patterns could be used to evaluate whether a person can be considered as a trust-keeping or as a trust-breaking kind (Hawkins, 2017).

Many see SCSs as an institution with a "centralised way of rating the virtuousness of citizens based on observable traits, linked to societal rules" that reward higher ranked individuals and punish those lower ranked (van 't Klooster, 2019, para. 11). They may focus on specific behaviour for now but "basically any behaviour that can be reliably measured is a potential input for a SCR" (van 't Klooster, 2019, para. 13). Therefore SCR may well be "future-oriented in that it seeks to predict individual behaviour, rather than merely reward virtuous behaviour that occurred in the past" (van 't Klooster, 2019, para. 13). But the system is, most likely on purpose, dangerously prone to abuse (Hawkins, 2017).

Nowadays, who we are is defined by social media, what we want is defined by online retailers and what we think is defined by search engines. The cofounder of Google Sergey Brin once acknowledged the latter saying that they want Google to be the third half of our brain (Blank, 2014). Although most users of internet services and social platforms are aware that their information and preferences are traded away to advertisers due to privacy for comfort trade-offs for small and insignificant rewards (Acquisti & Grossklags, 2007) and can be easily accessed by the government (Hawkins, 2017), we shall never confuse privacy with secrecy (I have nothing to hide). We shall continuously exercise the right to have a say in how information about ourselves is used which significantly empowers us as stakeholders. But by for example using Facebook, we are willingly giving it up, for us as well as for our friends and family (Virani, 2015). Location and financial data are not just hypersensitive, they allow the third-parties to de-anonymize information about us which immensely empowers them to generate even more information about us, including calculated information that we never revealed (Virani, 2015). It's extremely important to be aware that the right of not disclosing information motivated by a simple desire to preserve our privacy, could instead qualify as an indicator that we are not a good citizen and merely reverse the metrics results from "I have a good credit score, because I am a good citizen" to "I'm a good citizen, because I have a good credit score" (de Filippi, 2019, para. 14).

Acquisti, John, and Loewenstein (2013) suggest that the legal community, policy makers and businesses shall be aware of the prominence of comprehending the value that individuals designate to the protection of their personal data. Furthermore, by assessing how much customers value the protection of their personal data, managers can predict and pursue privacy-enhancing initiatives that may turn into sources of competitive advantage in contrast to intrusive initiatives that may trigger adverse reactions, which is prominent to businesses (Acquisti et al., 2013).

"The economics of privacy studies the trade-offs associated with the protection or revelation of personal information" (Acquisti, 2010, p. 23). The behavioural economics of privacy attempts to address deficiencies and can help us comprehend better "how we value and make decisions about our personal data" (Acquisti, 2010, p. 23). Combining both to comprehend privacy assessments and decision making, can help us assist security-sensitive and privacysensitive behaviours in making sense of our actions and particularly consequences of those actions (Acquisti, 2010). "Understanding how individuals navigate the complexity of information systems in modern economies" can enlighten privacy and security technologists with insights and means to design better interfaces for their systems and to further reexamine "the very strategies and assumptions underlying those systems" (Acquisti, 2010, p. 25). With displaying restrictions "under which technology alone" can no longer be "sufficient to assist decision making", further research in this area may offer prospects and indicate tools to policy makers for analysis and management (Acquisti, 2010, p. 25).

According to Creemers (2014), China believes it will be advantageous for its competition in the global marketplace if they manage to ensure economic stability and civil order. The arch attributes of the policy are to connect big data as the principal unit of measurement for assessment, efficiently integrate tracking and analysis of harvested data, develop an algorithm to quantify behaviour using metrics from the data collected, ensure that the algorithm effectively regulates behaviour to reflect the trustworthiness of the nation through rewards and punishments and establish transparency to prevent and eradicate corruption at all levels (Creemers, 2014).

While this system seems rather dystopian, Solon (2013) thinks Westerners are not far off from similar aspirations in the era of digital hyper-connectivity: our phone numbers and bank accounts are already linked to our credit cards, travel cards, mobile payments, and locations; our internet search histories and purchasing habits are linked to our social media accounts, our passports and IDs include biometric data of our faces, retina and fingerprints which is linked to our nationality, home addresses, criminal records, and travel history (Solon, 2013). Although these simple integrations of information seem quite innocuous as they are used to create a more efficient daily routine, next step could easily be a fully integrated database system with powerful algorithms, machine learning (ML) and artificial intelligence (AI). Nowadays is unimaginable and almost impossible to disconnect from the digital world as almost all aspects of our lives are digitized and therefore producing some kind of data footprint (Solon, 2013) or data exhaust (Zuboff, 2019b; Schneier, 2016). And this is what makes analysis of China's SCS, its development and implementation, even more important as they need to continually question whether Western societies are aspired to such a system (Reede, 2017).

Purpose and goal of the research

The purpose of this master thesis is to analyse possible effects and to assess the prospective impacts that SCS may have on behaviour of individuals and/or entities and their governance in the future, to help understand the current level of implementation of such systems technologically, economically and socially (comparison between China, US, UK and EU countries), and based on findings suggest further possible steps and propose recommendations with intention to achieve proper (right i.e. righteous) application and higher effectivity and usefulness of such system for individuals and entities as well as for the policy makers and the society as a whole.

This research intends to contribute to the elimination of a gap in the literature to offer at least a fresh perspective on the existing issues. Practical implications of this research relate to assisting individuals and businesses as well as policy makers to do more informed decision making and planning. The study is also intended to contribute to the level of my professional development, enhance my knowledge on the topics and enlighten one of my career aspirations with becoming a Digital identity and privacy architect and expert.

Goal of this master thesis is to generate deep insights that go beyond stating the obvious, to explore and evaluate does the SCS primarily aim to punish individuals and/or entities or to bring them to self-coercion and self-control over their habits, behaviours and actions through punishments and rewards on the expenses of privacy, to identify, assess and evaluate which stakeholders is SCS empowering, how and to what extent, and formulate and forecast possible implications and propose recommendations. By doing so I was looking to find answers to the following sub questions:

- 1) Is SCS perceived as a coercive punishment system or as a rewarding system and how is it influencing behaviour?
- 2) Is SCS empowering the right stakeholders and what metrics may it extend to next?
- 3) Is SCS designed as a compulsory privacy for comfort trade-off by default and does it distinguish between privacy and secrecy?

So, the goal of this work is elaboration of the prominence of continuous reassessing of the effects that these implications may have on our everyday life.

Research question and Thesis statement

This work aims at answering the research question (RQ) brought to light by Dzankic (2019): Can China's SCS lead to smooth governance and reduce conflicts horizontally (among individuals and/or entities) and vertically (between individuals and/or entities and governing structures)? The development of China's SCS was mainly driven by government concerns about the trustworthiness of Chinese society and its international reputation, caused by increasing immoral conducts that have eroded trust in both, between and among individuals, corporations, and governing structures, since it seems to rest on at least three factors: lack of honesty and trust, expected boost of domestic economy, and normative expectations on individuals that hardly account for the distinction between a private and a public persona. Thus, the implementation of SCS offers a solution to alter individual's undesired behaviour through the public display of gamified reputation in the form of naming and shaming with the help of underlying mechanics of intervention strategies.

Thesis outline

The first part explores a series of theoretical frameworks in the literature review and outlines the understandings of digital governance through surveillance (dataveillance, surveillance capitalism, corporate surveillance and participatory surveillance), privacy and citizenship in digital age, empowerment of stakeholders, gamification of incentives for building reputation and social capital, and behavioural science (behavioural economics, nudge theory, paternalism, choice architecture,...) for altering behaviour. Then the thesis presents the emerging digital governance called SCS which is already being implemented and provides a background on what led to the development of such system, and what may be its implications for the Chinese society first and eventually to the rest of the world. It further leads to a case study of China's SCS and analogous western rating systems, which outlines main points of the actual policy documents and ongoing implementation. The discussion chapter that follows compares the theoretical issues analysed in the literature review to the case study of China's SCS and similar concepts used in Western societies to identify potential implications of this system to conceptual issues, highlights unanswered questions and generates new ones, and assesses proper and timely individual and governance responses to the emergence of these new digital systems, and discusses the various lessons learned from the cases as well as its practical implications.

Conclusively, it will be reasoned that the digital age is continuously digitising our analogue world, embedding social and political norms into digital systems which have huge potential to reshape what our future society may look like, so we must be simultaneously constantly assessing all versions of it and particularly who shall be empowered enough to create and shape it. Therefore, it should not be redundant to view China's SCS as a heads-up of what the future may look like if we continue to digitize and fully incorporate all aspects of our social and political life in such systems without proper supervision and regulation in place and all stakeholders equally empowered.

1 THEORETICAL AND CONCEPTUAL FRAMEWORKS

This chapter explains the selected most relevant theories and concepts that support my research and are grounded in established ideas already developed by experts, scholars, and researchers in different fields of study, which I have evaluated and compared, in order to establish definitions that best fit my research.

1.1 Gamification of governance and mechanics of intervention strategies

Here I combine and integrate information, perspectives, concepts, and theories from different disciplines and bodies of specialized knowledge to advance the comprehension to find the answer to the RQ, and to develop a new conceptual framework for building a model which will be presented before the Conclusion chapter, to illustrate how the ideas established in this thesis could make use of in practice.

By developing the conceptual framework, I aim to identify all relevant variables, particularly moderating and mediating variables that might influence the relationship between dependent and independent variables.

1.1.1 Surveillance

1.1.1.1 Surveillance

The word surveillance is of French origin as it is derived from the French word surveiller, which when translated means to watch over, and as such implies the visual practice of looking thoroughly at someone or something from above. However, the comprehension of surveillance is not bounded only to a visual practice but rather entails all senses, which means data aggregation and technological mediation (Albrechtslund, 2008).

Surveillance is traditionally comprehended as a tiered system of power frequently portrayed with metaphors like Big Brother and Panopticon, which both exemplify a perpendicular power relation presented by the watcher that controls the watched, as a somewhat passive subject of control (Albrechtslund, 2008).

Nowadays the state, the private sector, and interpersonal relations all form a surveillance society, whether some government agency's gathering of internet traffic metadata, or retailers, employers, and parents watching over customers, employees, and children, respectively. In a contemporary world "surveillance is seen as both, a response to threats and a threat", and as such is "neither good nor bad", but context and demeanour do make it so, which can be applied for the associated concept of privacy as well. Context applies to the kind of organization in question and with it associated policies, objectives, and expectations.

Demeanour applies to the sort of behaviour expected of those in different surveillance roles (Marx, 2015, p. 733).

Although they share some elements, there are differences in surveillance contexts that need to be considered, like coercion context in case of government, care context in case of parents and children, contracts context in case of work and consumption, and easily accessible personal data context in case of personal and private within the public. According to Marx (2015) surveillance is not something bounded to governments, spying, or secrecy, but a common process characteristic of living systems with information boundaries. "Surveillance and privacy are not necessarily in opposition and the latter can be a means of insuring the former as with access controls to information" (Marx, 2015, p. 734).

1.1.1.2 Dataveillance

The digital data embodies the latest key asset that organizations shall utilise as a competitive advantage, as data can be traded, paired with other data, or mined for the purpose of making assumptions about variety of things, from guesstimating the weather to predicting individual's behaviour. Especially modelling and analysis of big data is what nowadays distinguishes capable and successful companies from the rest of the market, as entire business ecosystems have surfaced around the digital data asset (Degli Esposti, 2014). Dataveillance, which refers to "the systematic monitoring of people or groups, by means of digital information management systems in order to regulate or govern their behaviour" prepares the platform and bolsters the advancement of data economy (Degli Esposti, 2014, p. 211).

It is essential to contemplate in more detail the identified four divisions of activities, in order to comprehend dataveillance and appreciate the numerous ways it indicates the ability of altering individual's future behaviour to serve corporate objectives (Degli Esposti, 2014). Recorded observation means paying close attention by watching, listening, or sensing for the purpose of collecting and aggregating information in digital format. Identification refers to the recognition and identity through the analysis of individual's unique features, while tracking presents the possibility to tag and follow the subject once it has been identified. Analytical intervention applies to the analytical capabilities to transform the accumulated information into knowledge. And behavioural manipulation indicates the ability to purposely alter individual's actions toward a preferred course (Degli Esposti, 2014).

Dataveillance and its divisions of action don't serve only to achieve strategic corporate priorities and goals, which profoundly affect the way surveillance is enacted in modern societies, but serve also as an instrument for managing and governing corporations internally as well as to diligently support the automation of standardized tasks (Degli Esposti, 2014).

"Workforce recruitment and retention, long-term customer loyalty, supply chain efficiency, security risk prevention, are just few examples of what can be achieved by means of dataveillance" (Degli Esposti, 2014, p. 213).

Dataveillance, as the observing of online data of citizens, contrasts from surveillance which imposes observing for particular aspirations, while dataveillance includes perpetual metadata tracing for tacit pre-defined purposes. As such, dataveillance is a widespread scheme with abstruse aftermath for social covenant between citizens and consumers on one side and government agencies and corporate platforms and on the other (van Dijck, 2014). Thus mobilized notions of trust and belief are especially important when it comes to dataveillance comprehension especially due to its popularization as a normal and generally acceptable form of social observing (van Dijck, 2014).

The fundamental premise is that people "would accept" to be observed if they can "gain something", but the issue with dataveillance, as with any form of surveillance, is that it embodies an inherently unequal relationship: "one part, usually the company or the government deploys and controls the system, while the other part, either the employee or the customer, must accept terms and conditions imposed by dataveillance in order to participate in the transaction" (Degli Esposti, 2014, p. 215).

Dataveillance therefore incites doubts regarding the integrity of the whole system of online information streams as the revelation of some routine but villainous dataveillance tactics threatens to severely undercut people's trust in individual corporations or government agencies (van Dijck, 2014). However, regardless of the fact that countless companies have the vast amount of data, due to lacking knowledge, data tools and experience, they just don't have any idea what to do with it (Varian, 2014).

1.1.1.3 Corporate surveillance and Surveillance capitalism

At the beginning of new millennium, Google "was well on its way to elaborating a new economic logic" that Shoshana Zuboff have named surveillance capitalism, whose innovative obligations bound it to pursuit seizing as much dimensions as possible of "once private experience as raw material" and input for "newly invented processes of datafication, production, and sales". In the pursuit of their objectives, the top surveillance capitalists chased to create unsurpassed dominion over the entirety of the global population's information flow now ceded in digital format with building most of the "world's largest computer networks of servers" in countless data centres connected through undersea fibre optic cables, cutting-edge microprocessors and machine intelligence, and enkindling an arms race for the limited number of experts with the required brainpower to extract "knowledge from these vast new data continents" (Zuboff, 2020, p. 178).

With Google as the ice breaker, the leading surveillance capitalists pursue the control of workforce marketplace in essential proficiencies "including data science and animal

research", edging out universities, research institutions and government agencies as contestants as well as start-ups and established corporations in other industries (Zuboff, 2020, p. 178).

Astonishing mental invention brings surveillance capitalism to existence by proclaiming personal "experience as free raw material" and input for transformation into behavioural data for computational reproduction for a new business model. All these data streams run through the computational processes powered by artificial intelligence where they are fabricated into behavioural predictions (Zuboff, 2020, p. 178).

Finally, these foretelling products are rapidly introduced into the newly established marketplaces that Zuboff (2020) calls "human futures markets", where they are being traded in for behavioural predictions (p. 181). These markets connect surveillance capitalists to business customers highly interested in the future behaviour of individuals, as current as well as potential consumers. Assurance in people's dealings is the essence of these markets, "where surveillance capitalists compete" on the superiority of their prognostics, "which are about individuals but are not for individuals" (Zuboff, 2020, p. 181).

This means that Google operationally does both, repurposes its expanding accumulation of behavioural data by reintroducing it as behavioural surplus, and develops ways to determinedly pursue new sources of behavioural surplus. They developed new methods with abilities to "find data that users intentionally opted to keep private" and to extrapolate widespread personal information that users would otherwise not provide, which would then be "analysed for predictive patterns that could match a specific ad with a specific user". These newly created procedures thus entrenched a new-found logic of accretion obtained from the social interactions in form of the one-way mirror. These surveillance methods and instruments are thoroughly engineered to create user cluelessness and undetectability through distraction and misperception, where success depends on circumventing their "awareness" and thus "overriding the individual's rights to decide" and determine the privacy of one's past experience and "future course of accion" (Zuboff, 2020, p. 182).

In a contemporary world of extremely "commoditized products and services", this surveillance dividend attracts companies as the current source of higher margins, thus generating new ecosystems of behavioural surplus providers, as companies from nearly all sectors search for ways to partake in the one-sided deprivation of private experience. Surveillance capitalism now spreads all over the conventional economy in usually information heightened sectors like finance and insurance, as well as healthcare, retail, and automobiles (Zuboff, 2020, p. 183).

Invented at Google and expounded at Facebook in the online environment of targeted marketing, surveillance capitalism incorporates a new-found logic of aggregation and can't be identified anymore with individual corporations or even with the giant IT sector, neither should it be confused with technology (Zuboff, 2019a). Consequently, surveillance

capitalism is not algorithms, machine learning or platforms, even so it relies upon all of these as well as on data-collecting devices such as computers, smartphones, sensors, microphones, and cameras to assert its will; it is an economic invention, and as such subject to democratic challenge, discussion, amendment, constraint, supervision, and may even be banned (Zuboff, 2019a; Zuboff, 2020).

Nowadays it is evident that this shift in the utilization of once unwanted or unnoticed behavioural data was an historical defining moment. Rediscovered as what Zuboff (2019a) named behavioural surplus or data reserves, that are more than what is necessary for enhancement of products and services. Google's remarkable achievement in "matching ads to pages" uncovered the "transformational value" of this behavioural surplus as a "revenue generator" (Zuboff, 2019a, p. 13; Zuboff, 2019b).

The recap of these elaborations is that behavioural surplus can be regarded as surveillance asset, a crucial raw material in the chase for surveillance customers for the sake of surveillance revenues and their conversion into surveillance capital (Zuboff, 2019a). This whole logic of aggregation can be most precisely comprehended as surveillance capitalism, the underpinning framework for an economic order based on surveillance: "a surveillance economy" (Zuboff, 2019a, p. 16).

1.1.1.4 Participatory surveillance

In the context of online social networking, Albrechtslund (2008) calls attention to two facets of surveillance, building subjectivity and empowering user, and the online social networking comprehension as a sharing custom rather than an information exchange, which along with affinity conjointly confects what he calls participatory surveillance. Online social networking can thus be delineated as participatory since it is seen as empowering because it enables voluntary engagement with other people and creation of online identities (Albrechtslund, 2008).

"In this case, participatory surveillance is a way of maintaining friendships by checking up on information other people share" (Albrechtslund, 2008, para. 59). "Such a friendship might seem shallow", Albrechtslund (2008, para. 59) adds and explains, "but it is a convenient way of keeping in touch with a large circle of friends, which can be more difficult to handle offline without updated personal information – untold and unasked" (para. 59).

According to Lupton (as cited in Charitsis, 2019, p. 139), self-tracking refers to "practices in which people knowingly and purposively collect information about themselves, which they then review and consider applying to the conduct of their lives." Although "self-tracking" can be acknowledged as a "self-surveillance" practice it has been more effortlessly accepted than "traditional surveillance" because it has been advertised as an "empowering technology" that pledges to make "people healthier" and their lives happier (Charitsis, 2019, p. 139).

The use of "digital tools to track lives" and living styles is quite common nowadays. The marketplace is flooded with wearable devices which along with smartphone apps enable users to observe, trace, record, and quantify various aspects of their lives, in real time, such as physical activities, nutrition habits, emotional and mental health, as well as financial and social interactions, thus generate vast amounts of data. (Charitsis, 2019, p. 139)

1.1.2 Behavioural science

1.1.2.1 Behavioural economics

According to behavioural economics theories derived from studying and explaining economic decision-making, due to "bounded rationality, limited self-control, and social preferences", actual human behaviour is "less rational, stable, and selfish" than conventional normative theory implies (Samson, 2021, p. 168). The concept bounded rationality contests the idea of human rationality as understood through "the concept of homo economicus". Rationality is bounded due to limitations of our thinking capacity, information availability, and time, and it is one of the psychological underpinnings of behavioural economics (Samson, 2021, p. 176). In the social sciences, economics in particular, humans are viewed as "self-interested agents" who seek ideal, "utility-maximizing" results and as such are represented by the term homo economicus, which translates into economic man. However, behavioural economists are critical of that notion because that is not always true as people frequently make decisions under uncertainty with insufficient knowledge, processing ability, and feedback, occasionally lack self-control, and often change preferences (Samson, 2021).

The chief data scientist (as cited in Zuboff, 2019b) for some US drugstore chain delineated the way they design instinctive "digital nudges" that beguiles people toward the particular behaviours preferred by the company: "You can make people do things with this technology. Even if it's just 5% of people, you've made 5% of people do an action they otherwise wouldn't have done, so to some extent there is an element of the user's loss of self-control" (p. 279).

1.1.2.2 Nudge (Sludge) theory

According to Thaler and Sunstein (2008), a nudge is:

"Any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates" (p. 20).

Government is a way of managing people, shaping their opinions and beliefs, so their present and future actions can be influenced and steered, as well as the conduct of oneself (Beaudoin, 2019). If we would replace requirements and bans with incentives and nudges, we would not foster bigger government as government would in fact be smaller and more modest, just better governance. Improved governance needs less of government coercion and constrain and more of freedom to choose, which is the best safeguard against bad choice architecture and fraught choices – basically settings where individuals are least likely to be able to make good choices (Thaler & Sunstein, 2008).

Nudging is therefore a term used to depict a behavioural alteration approach without using force, practiced by both private and public actors. Thaler and Sunstein (2008) argue that beside it being possible, it is also legitimate to assiduously affect behaviour (Sætra, 2019), and is a concept regularly employed in economics, behavioural science, and political theory (Wang, Ma, Dai, Imran, & Wang, 2020).

Whenever people have difficulty interpreting the choices they encounter into the experiences they will have, it is especially challenging for them to make good decisions. And when people have difficulties foreseeing how their life will be impacted, they are less likely to gain by countless options and possibly even by selecting for themselves. Hence, a nudge may well be appreciated (Thaler & Sunstein, 2008).

As an alternative to constraining, motivating, persuading or simply informing people, nudges push people's behaviour with a help of illogical psychological instruments such as salience, loss aversion, and compliance, as well as with the use of defaults and the design of physical architecture (Engelen, 2019).

People turn out to be more likely to accord when they are certain that others will notice what they have to say. Every so often people will forge with the group in spite of being aware that they all have erred (Thaler & Sunstein, 2008). People also tend to think that an outcome was completely predictable and anticipated, and that the accomplishment of an artist, a musician, or an actor was inescapable in light of their talent, skills, and personality. Don't be tempted with that as even tiny interferences so much as coincidences, at a crucial phase, can deliver huge differences in the result (Thaler & Sunstein, 2008).

Advertisers are completely conscious of the power that social influences entail. They regularly highlight that majority prefer their own product, or that increasing number of people are shifting from another brand, which shall be considered outdated, to their own, which characterizes the future. It is their attempt to nudge you by conveying you what the majority of people are currently doing (Thaler & Sunstein, 2008).

If people receive instant and transparent feedback after each try, learning is presumable. Feedback is typically available only on the options we choose, not on those we refuse, so they may never be aware of alternatives unless they go out of their usual way to experiment. When there is no timely or appropriate feedback, we may benefit from a nudge (Thaler & Sunstein, 2008).

However, nudges are certainly not purely neutral instruments that assist people to do what benefits them as even though the emphasis is on individual freedom, nudge is customarily considered necessary only in case the behaviour of individuals encounter the preferred social and political order (Prainsack, 2020). Nudges are also not always required and apparent, and when they are, Sætra (2019) argues that they are more similar to traditional paternalistic principles like ordinary government regulation, and should be considered as such.

While Richard Thaler clearly encourages benevolent nudging by making expedient behaviour simpler, a sludge does just the opposite: To invoke a result that is not in the best interest of a particular individual a manner is made more complicated, for example, to offer items discounts that necessitate complicated procedures or subscription cancellations that can only be done with a written request sent with direct mail (Samson, 2021). Even in case a sludge is associated with an advantageous behaviour, costs can be exorbitant. These costs may be an overcomplicated attaining of information or excessive amounts of time spent, and even psychological detriments, like aggravation (Samson, 2021).

1.1.2.3 Paternalism

The above definition and the expression of embedded individual freedom and choice, tags nudging as libertarian paternalism because it assists people to do what is beneficial for them while at the same time preserves their freedom of choice (Prainsack, 2020). Thus, nudge is said to possess a paternalistic dimension in encouraging options that are considered as welfare bettering for the individual. Authentically paternalistic nudges that are based on trust may deteriorate relationships in case the practice of nudging is exposed (Baldwin, 2014).

Nudge theory, and particularly its fundamental political philosophy of libertarian paternalism, has been commonly criticized of the individual's freedom principles violations because setting defaults and deciding on behalf of individuals is not riskless (Kosters & Van der Heijden, 2015).

At the centre of the "nudge agenda" is a model of "soft governance" that appears opposing in origin: "libertarian paternalism", a form of "soft paternalism" that functions "without coercion" and which aims to alter individuals to select more beneficial "consumer and lifestyle choices" rather than restrict the assortment of proposed options, in the manner of firm layout of state paternalism (Gane, 2021, p. 3).

1.1.2.4 Choice architecture

Choice architecture is the term coined by Thaler and Sunstein (2008) which refers to the manner of influencing choice where a choice architect has the responsibility for arranging and designing the settings in which people make decisions thus making significant enhancements to the lives of others by outlining user-friendly settings, however they also

need to know how to embolden socially beneficial behaviour as well as how to dishearten particular adverse events (Thaler & Sunstein, 2008).

Social influences come in two main forms, as information and as peer pressure. If enough people do or think same thing, their activities and beliefs communicate information that the same thing might be best for you too, and if you are concerned with other people's opinion about you, then you might follow the crowd and comply to prevent their rage (Thaler & Sunstein, 2008). Therefore, if choice architects intend to alter behaviour using a nudge, they merely need to let people know about what their peers are doing. Humans are effortlessly nudged by other humans because we generally like to conform (Thaler & Sunstein, 2008).

Choice architecture incorporates also several other behavioural tools that influence decisions, such as defaults or framing (Samson, 2021). Default options are predetermined activity outcomes that become effective if nothing is declared by the decision maker (Thaler & Sunstein, 2008), and when there is idleness or dubiety in decision making setting, defaults can be an effective nudge (Samson, 2021). Since for defaults no effort is needed by the decision maker they can be a straightforward but powerful instrument, and may also be recognized as an advised activity outcome when choices are challenging (Samson, 2021). Defaults are thus omnipresent and effective, as well as unavoidable in any choice architecture system setting, since there must be an associated rule that defines what happens if the decision maker does nothing (Thaler & Sunstein, 2008).

With altering their relative attractiveness, choices can be exhibited in such fashion that emphasizes either positive or negative angle of the same decision. Hence, several types of framing approaches have been pinpointed, such as risky choice framing, attribute framing, and goal framing (Samson, 2021). The thought is that choices partly hinge on the manner in which problems are expressed and for example for public policy the point is of a great importance. People have a tendency to be fairly mindless and passive decision makers which is the main reason why framing works, and also because they mostly don't bother with reframing the questions to check and see if it would generate a different answer. Another explanation might be because they wouldn't know what to make of the contradiction. All of this indicates that frames are mighty nudges, and shall be chosen with prudence. (Thaler & Sunstein, 2008)

A good choice architect wants his architecture to mirror a proper comprehension of how people behave, particularly in order to ensure that the human automatic system doesn't get all disarrayed (Thaler & Sunstein, 2008).

1.1.2.5 Social norms and preferences

Social norms, which in fact are by the majority of society acceptable unwritten rules, are common acknowledgements that adjudicate the behaviour of people, especially what is or shall be done in particular social situations (All Things Nordic, 2019).

Social norms and preferences thus beckon behaviour considered as appropriate and are digested as behavioural expectations, sometimes even as rules within a group of people. However, social norms of exchange, like for example reciprocity, are disparate from market exchange norms. In behaviour change settings the normative feedback is regularly used and can either be descriptive, portraying demeanour of most people as a benchmark for comparison, or injunctive, conveying accepted or disliked behaviour. For example, injunctive is commonly more efficient when an abhorrent behaviour is more customary than expedient behaviour (Samson, 2021).

The influence wielded by others on our behaviour can be manifested as either normative influence which allude congruence to be liked or accepted, or informational influence which betide in opaque situations where we look to others for information or signals because we are dubious about how to behave. Social proof is an "informational influence", or as abovementioned "descriptive norm", and can lead to "herd behaviour". Research therefore implies that getting information about other people's behaviour leads to higher conformity among people from collectivist societies, while for people from individualist cultures higher conformity is interrelated with information on the individual's past behaviour (Samson, 2021, p. 190).

1.1.2.6 Gamification

Gamification is an emerging approach being gradually utilized for fostering engagement and behaviour change, which intrinsically is not inevitably able to generate the preferred results thus requires customization according to users' preferences. It insinuates the development of game-related techniques to affect behaviour which has been studied and applied in many different sectors (Marcucci, Gatta, & Le Pira, 2018).

Gamification has been widely used to stimulate and boost user activity, especially in interface design and digital marketing, breeding numerous applications in productivity, finance, health, and entertainment media among others. It's commonly offered as an underlying software service for "reward and reputation systems with points, badges, levels and leader boards" (Deterding, Dixon, Khaled, & Nacke, 2011, p. 1) It is implied that gamified applications deliver insight into novel gameful marvels corresponding to playful sensations, but at the same time argued that this gamefulness is distinctive from playfulness (Deterding et al., 2011).

But games are also frightening as they seem both trivial and powerful at the same time, hence Ian Bogost (2011) recommended substituting the term gamification with exploitationware as it would more honestly portray the vile dominion of misuse that gamification more likely subsumes.

In their attempt to sell gamification to customers, merchants and advisors have portrayed it in simple terms and in form of client benefits, such as "the adoption of game technology and game design methods outside of the games industry", "the process of using game thinking and game mechanics to solve problems and engage users", or "integrating game dynamics into your site, service, community, content or campaign, in order to drive participation" (Deterding et al., 2011, p. 2).

The main aim of gamification, primarily defined as "the use of game design elements in nongame contexts" (Deterding et al., 2011, p. 1), is to encourage individuals motivation and execution of particular activity (Sailer, Hense, Mayr, & Mandl, 2017). Gamification (as shown in Figure 1) can also be characterized "as a process of enriching services with motivational affordances in order to invoke gameful experience and further behavioural outcomes" (Hamari, Koivisto, & Sarsa, 2014, p. 2), "as an innovative and promising concept that can be applied within a variety of contexts" (Sailer et al., 2017, p. 1) and "with the focus specifically on the potential gains that a digital game medium has in motivating people's participation in activities beyond entertainment" (Marcucci et al., 2018, p. 121).

Figure 1: Gamification



Source: Hamari, Koivisto, & Sarsa (2014).

The goal of gamification is therefore to inspire and persuade the user to continuously use and return to or repeat a particular application, operation, product, cause or an activity, by making it more captivating (Mahnič, 2014), which can be achieved with employing building blocks of games in real-world situations as its central idea to provoke particular behaviour within a gamified setting (Sailer et al., 2017). In order to design gamification to properly impact behaviour, increase motivation and improve engagement, we would first need to make initial analysis to clearly understand the issue we would like to address, who the potential participants are, and especially what are their anticipations from a gamified experience (Marcucci et al., 2018).

Furthermore, people's behaviour and motives are dynamic and context specific, and can thus change in time, which suggests prudence every time we try to generalize in order to avoid potentially misleading classification and characterization due to its complexity (Marcucci et al., 2018). Whatever the approach used, comprehensive research is needed to properly understand participants' preferences for game types and link them to rules of the game in form of components and mechanics, to nurture the potential of behavioural change that particular gamification structure designed might deliver (Marcucci et al., 2018).

The experiences that successful games induce may involve hedonic pleasure and excitement but to achieve that they need to be engaging with voluntary participation. Envisaged broadly, gamification works as an utilized practice in business, which seeks to tap into that engagement to achieve goals related to some underlying activity with behavioural objectives, such as signing up new customers (Werbach, 2014).

From the aspect of process definition, gamification and persuasive design bond well as game is intrinsically persuasive artifact due to its voluntary and goal directed nature, with which it thrusts toward objectives, but in a non-coercive manner (Werbach, 2014). There are four ways of design defined that can influence behaviour with deployment of gamification techniques: persuasive, seductive, decisive, or coercive. When submitted voluntarily to users or participants it most likely fits into the persuasive or seductive categories, while when mandated, it most likely fits into the decisive or coercive categories. Particularly coercion raises the most concerns related to exploitation or manipulation due to its divergence from voluntariness. However, "the process definition will not itself prevent gamification designers from exploiting participants" (Werbach, 2014, p. 6).

The success or failure of gamification is deeply associated with motivation theory and definitions of motivation often differentiate between extrinsic and intrinsic. In gamification, the motivation is predominantly extrinsic as users are rewarded with points, badges and other elements of game mechanics, which is insufficient encouragement for the user to return. On the other hand, intrinsically motivated users feel pleasure and enjoyment from the activity itself as they do not get engaged for utilitarian but rather for emotional responses. It is thus this association to playfulness which motivates users to return (Mahnič, 2014).

1.1.2.7 Loss aversion and Fear of missing out

People despise losses which also translates to people are loss averse. In other words, losing something makes you twice as sad as getting the same thing makes you happy. This also means that when people must give something up, they are displeased more than they are delighted if they obtain the very same thing, because they do not designate specific values to items (Thaler & Sunstein, 2008).

Loss aversion thus fosters idleness, betokening a strong craving to adhere to your current holdings. This also means that if you are unwilling to give up something you own because you want to avoid losses, then you will decline trades you might have otherwise made, and as such loss aversion functions as a sort of cognitive nudge, pushing us not to make alterations, even when they are pretty much in our favour (Thaler & Sunstein, 2008)

The conclusion here is that people are more eager to take risks and even make dishonest actions to avoid a loss than to make a gain. This may elucidate why in certain settings and situations penalties are more efficient than rewards in motivating people and is thus being utilized in behaviour change strategies (Samson, 2021).

We also hear about Fear of missing out (FOMO) a lot lately. In fact, the abbreviation was added to the Oxford English Dictionary (https://www.oxfordlearnersdictionaries.com) in 2013 and is described as "a feeling of worry that an interesting or exciting event is happening somewhere else". One recent study on the subject portrayed it as the uncomfortable and occasionally overwhelming sensation that you're missing out on what your peers are doing, or that you're missing out in the know about something, or that you're missing out in possession of more of something, or that you're missing out on something better than you (Barker, 2016).

The concept of FOMO, is "defined as a pervasive apprehension that others might be having rewarding experiences from which one is absent", and "is characterized by the desire to stay continually connected with what others are doing" (Przybylski, Murayama, DeHaan, & Gladwell, 2013, p. 1841).

1.1.3 Reputation and ratings

1.1.3.1 Reputation

Humans often face the necessity of deciding what to believe and whom to trust, and the escalation of the extent and pace of interactions and flow of information in our modern society is pushing for a growing need to differentiate what is true, useful, and relevant from those which are not (Masum & Tovey, 2011).

In our everyday life, first-hand experiences and in our immediate circle obtained information from others is what we usually judge and decide upon, however this is not always sufficient to make good decisions and proper judgments (Masum & Tovey, 2011).

Nowadays, the media is able to promulgate and shape opinions over large territories. To accelerate mutually beneficial exchange, trading chambers and certification agencies developed reputational mechanisms, as did banks and countries for borrowing financial means internationally, thus reputation has always functioned within networks of relationships (Masum & Tovey, 2011).

Whether for purchasing a product, choosing a service, or judging a policy, reliable recommendation from other people's experiences is frequently unavailable thus introducing to reputation a similar kind of systematization and standardization as currencies, laws, and accounting brought to rudimentary trade economies, seems a promising solution (Masum & Tovey, 2011). Properly designed reputation systems have the capability to remodel society for the better by amplifying and spreading accountability through the mediated opinions and judgments of billions of people worldwide, to establish what Masum & Tovey (2011) call the Reputation Society.

Evolving a society based on sustainable prosperity for people to come is one of the main challenges of contemporary generations thus sharing goods and services more efficiently could be part of the solution. Shared-use mobility services are rapidly gaining traction and popularity in urban areas and people started sharing everything from power tools to office space where reputation systems are essential for making such concepts feasible (Masum & Tovey, 2011). Furthermore, tools for rating policies and for tracking performance and corruption might enable the public to make those responsible more accountable (Masum & Tovey, 2011).

Domingo-Ferrer (2018) thinks that reputation is a strong inducement for agents to follow the imposed rules of the social interaction, particularly in the absence of a common legal framework, as an incentive not to diverge from the established norms. In computer science, reputation can be defined as an unnatural incentive that can transform into self-imposing practices, however to make a comprehensive reputation system without harming the privacy of agents, it needs to be dispersed and privacy safeguards need to be in place. (Domingo-Ferrer, 2018).

The society has a legitimate interest in having access to information concerning agent's performance in the past, but it is not necessary to know the details of all the dealings he has been involved in, however in a centralized reputation system, learning the behaviour by the central authority in all transactions is inevitable, hence reputation is not a historical notation of the agent's conduct in all past transaction but an aggregate metric of that conduct (Domingo-Ferrer, 2018).

1.1.3.2 Ratings

Personal ratings systems (PRS) are scoring systems that indicate individual's trustworthiness and virtues by displaying his most relevant characteristics and features in form of a grade or a scale. Financial credit ratings such as FICO and SCHUFA are an ascendant form of PRS in the US and Germany, respectively (Devereaux & Peng, 2018). The sharing economy greatly depends on mutual assessments of both ends of a transaction experience presented in some form of five level star rating. Matching apps for romantic and professional relationships with its proprietary algorithms employ relevant information provided by users and deemed as characteristic and representative. Top ratings attract traffic to products and services providing top rated providers with even more opportunities while low ratings, if bad enough, may ban from the given platform both, users and providers (Devereaux & Peng, 2018). Users seem to realize that algorithms beside evaluating their data inaccurately can potentially be misapplied, where the systems which base their ratings on harvested data exhaust, are of particular concern (Devereaux & Peng, 2018).

Modern digital and online reputations have their roots deeply in real-world social system models existent in pre-internet era, like credit scoring industry's flagship reputation score and measure for creditworthiness FICO score, developed and introduced by Fair Isaac Corporation, or SCHUFA record, sourced and generated by SCHUFA Holding AG. It is quite common in industries to rate their members and suppliers as it is for cities and countries to get ratings for their bonds (Farmer & Newmark, 2011). Products have received Underwriters Laboratories certification based on extensive research and testing of compliance, or Good Housekeeping seals of approval based on trusted expert advice on the highlighted best-tested products you can buy. Consumers Digest published five-star ratings long before personal computers (Farmer & Newmark, 2011).

Rating mechanisms utilize an assortment of methods for displaying reputation outputs. The selection of a display method is of high importance for it can ascertain the boundaries to which the reputation mechanism generates a judgment comparing to judgments that users generate on their own, as well as the boundaries to which the existence of the reputation system can induce contest among users. These, according to Dellarocas & Newmark (2011) include:

• Simple statistics of an individual's activity within a group of people such as quantity of posted reviews or quantity of completed transactions, which is probably the most neutral method of recapitulating one's reputation. The judgments that the reputation system makes are minimal and it lets users make their own suppositions, however the user needs to be well accustomed with the contexture to make the proper resolutions.

• Star ratings like Amazon reviews, numerical scores like eBay's reputation score, and achievement badges like eBay Power Seller or Yelp Elite Reviewer, which with highlighting individual accomplishments instantly convey to users whether quality of someone's performance along particular dimension is good or bad by making an explicit judgment, hence help users more effortlessly digest information.

• Numbered tiers like World of Warcraft's player levels and leaderboards, which are lists where users are ranked relative to each other and top users are highlighted, like list of top Amazon reviewers, which bestow a judgment as well as indicate a user's holdings in relation to others, a nibbling order among users. Encouraging direct comparison of users against one another improves the filtering role of a reputation system and often boosts motivations to contribute. Conversely, such straight comparison implants a culture of contest, which may well wind up being disruptive in several ways, as fascination over rankings may well lead some users to deceptive and inexpedient demeanour, and users which fail to reach top ranks might feel aggrieved and be engendered to exit.

As Jeremy Daum (in The Diplomat, 2021, 52:40) argues "We had the fantasies about rating people in fiction long before China had this SCS, we just didn't have a good word for what that fantasy was, and SC does really ring nice with it in English".

1.1.4 Incentives

1.1.4.1 Motivation and stimulation

In case the benefits for individuals are less than the opportunity costs, they just might not consider it worthy to employ prosocial endeavours, thus a component that is prone to improve the performance of prosocial endeavours pertains to people's incentives (Lacetera & Macis, 2010).

An incentive, as described in the simplest terms, is anything that motivates a person to do something, while the definition of Economic incentives is narrower, meaning that these are financial motivations to make people take particular actions (MasterClass, 2021).

There are two types of incentives that have an impact on individual's decision making. Intrinsic incentives are those that come from within, meaning that an intrinsically motivated individual does things for its own sake, free from external duress or reward; that sensation of personal fulfilment and satisfaction that comes from doing particular things, such as learning a new skill (MasterClass, 2021). Extrinsic incentives entail expecting a tangible reward for achieving something, or threatening some penalty for failing at it, hence by definition, any economic incentive is an extrinsic motivation (MasterClass, 2021). Negative economic incentives, also called disincentives, penalize people monetarily for specific conducts which is a way of fostering certain behaviours while at the same time not making them mandatory (MasterClass, 2021).

According to Levesque, Copeland, Pattie, & Deci (2010) behaviours carried out purely for interest and enjoyment are underlined by intrinsic motivation while behaviours carried out to achieve discrete rewards or avert negative outcomes are underlined by extrinsic motivation, whereas Schrader & Helmke (2015) define intrinsic motivation as motivation to participate in a chore or endeavour for its own sake while with extrinsic motivation employment happens for instrumental reasons, such as reward.

Similarly Thomson & Jaque (2017) think that intrinsic motivation is identified as for its own sake motivated engagement in an endeavour that holds interest, is appealing and challenging, and evokes sensations of satisfaction and pleasure. Extrinsic motivation is rather characterized as a motivation to partake in an endeavour centred on achieving an external goal, earning admiration and appreciation, winning a contest, or receiving a prize. In contrast, extrinsic motivation therefore is not for its own sake driven desire to engage in an endeavour (Thomson & Jaque, 2017).

Lactera & Macis (2010) have established that the performance of prosocial endeavours is reactive also to the social prestige that these endeavours bear and therefore show that extrinsic incentives with no straight financial worth are also able to increase these endeavours, particularly when social acknowledgement is attached to these rewards.

People like to compare favourably with their peers, neighbours, and colleagues, especially when social values are involved. The Sacramento Municipal Water district, for example, has taken this point archly with a straightforward reader friendly home electricity report. The report specifies how people's energy consumption compares with that of both, efficient neighbours and all neighbours. Efficient neighbours are those who fall under a specified norm. People hate loses or loosing and their automated systems may get very emotional about them. Hence we can say that loosing something or to someone makes us twice as miserable as gaining the same thing or winning it makes us happy (Thaler & Sunstein, 2008).

1.1.4.2 Rewards and punishments

The reputational value of good deeds gets spoiled in the presence of extrinsic incentives, creating distrust in the extent to which they were performed for the incentives rather than for themselves, which corresponds with what psychologists call over justification effect (Bénabou & Tirole, 2006). Rewards act as an accelerator of the noise-to-signal ratio and can even flip the sign of the signal and thus weaken reputational or self-image motivation to contribute, which resonates with one informal explanation that when someone else proposes a reward to an intrinsically motivated individual he deprives him or her of the chance of displaying his or her own interest and involvement in an activity (Bénabou & Tirole, 2006).

The motivating signal which commonly inspires prosocial behaviour can be reinforced with a greater prominence of not easily forgotten contributions. Good deeds become presumed of being motivated by appearances when individuals are dissimilar in their image concerns which, due to accelerated noise-to-signal ratio, reduces the efficiency of image-rewards based policies such as public glorifying and embarrassment, and the same concern can steer people to refrain from declining any offered rewards (Bénabou & Tirole, 2006).

The conclusions that can be drawn from an individuals' actions rely on what others choose to do, generating strong overflows that let different behaviour standards to surface as equilibrium. Therefore, individuals' choices can be strategic substitutes or complements, as can be social and legal consents, depending on whether reputational worries are internally controlled by the prevention of shame or the chase for honour (Bénabou & Tirole, 2006).

In the settings for prosocial contributions, "a form of holier-than-thou" contest can also prompt governments to give individuals chances for reputationally encouraged sacrifices that will simply just decrease social welfare, with no positive effect to the furnish of public goods. (Bénabou & Tirole, 2006, p. 1654).

Image motivation is affected by other people's opinion of the individual. A positive image generating actions are those that indicate personal characteristics, like being prosocial or caring, while actions that diminish a positive image or even result in a bad image, indicate personal characteristics such as being unfair or materialistic (Ariely, Bracha, & Meier, 2009). The more an individual is thought of as being prosocial, the bigger is the image worth

of individual's prosocial action. Though, the more an individual is thought of as being materialistic, like acting pro-socially to obtain the extrinsic rewards, the smaller is the image worth of individual's prosocial action (Ariely et al., 2009). Therefore, when the image value achieved with prosocial action is positive, boosting the number of observers enhances the image value of prosocial behaviour which results in individual's greater endeavour (Ariely et al., 2009).

Prosocial behaviour can be altered by applying or improving extrinsic incentives in two ways, by "increasing the extrinsic rewards and through image motivation". The perception is that if an individual "receives greater extrinsic rewards for the actions", it may be seen as behaving prosaically "for the extrinsic rewards rather than out of intrinsic motivation". Thus, proposing a bigger material rewards may backlash, "depending on which effect is stronger" (Ariely et al., 2009, p. 546).

Rewards or punishments, being material or reputational, induce scepticism about the real intentions behind the performed good deeds, and with "over justification effect" can cause a partial or even full "crowding-out of prosocial behaviour by extrinsic incentives" (Bénabou & Tirole, 2006, p. 1652).

The impact of extrinsic rewards on image motivation suggests that visibility may affect the efficacy of material rewards. Therefore received extrinsic reward reduces image motivation, and if accompanied with bigger publicity, intensifies this reduction and diminishes the efficiency of material rewards (Ariely et al., 2009).

Only in case if material rewards decrease "image motivation" will extrinsic rewards be less efficient with "more visibility", which means that an unfavourable impact of extrinsic incentives is "more likely" to happen for "a visible prosocial" endeavour than for "a private one" (Ariely et al., 2009, p. 547).

The majority of incentive schemes in these field of studies are already constructed to diminish potential unfavourable outcomes. Hence, most incentives are fairly large, with the objective to make sure that the value effect is bigger than a potential unfavourable crowdingout effect (Gneezy, Meier, & Rey-Biel, 2011). The framing of the decision setting significantly influences prosocial behaviour, thus shifting "from no incentive to a positive incentive" can considerably alter the "framing of the interaction and shift an individual's decision frame from social to monetary" (Gneezy et al., 2011).

1.1.5 Privacy

1.1.5.1 Privacy paradox

Americans live in a "paradoxical world of privacy" where teenagers "reveal their intimate thoughts and behaviours" online and government agencies and corporations are gathering

private data about them. "Locked away" on hundreds of servers nests "every minute detail of our daily lives" from our individual purchasing inclinations to intimate thoughts. Much of the information that people would like to keep secret is already lawfully in the possession of some company or government entity (Barnes, 2006, para. 9). According to a 2021 survey of adults worldwide, two thirds of all interviewees feel that tech companies control too much of their private data, while merely 6% disagree with such statement. Reported customers' concerns over data control were higher in UK and US, where more than 70% of people feel that tech companies gained excessive control over their private data. While in China surveyed interviewees seem to concur the least with such statement, even so more than half of them stated that they feel that tech companies gained excessive control over their private data (YouGov, 2021).

Facebook founder Mark Zuckerberg considers that people no longer have an anticipation of privacy, as since the ascend of social networks, it's no longer contemplated a social norm, that it is merely a thing from the past that has evolved over time, and is convinced that people became quite comfortable sharing personal information more bluntly and with more people (Johnson, 2010). Many may be unaware of the fact that their privacy has already been endangered and they are still not taking any actions to safeguard their private data from being utilized by third parties. Teenagers may well consider their Facebook diary entries as private, but they are in fact pretty much public journals (Barnes, 2006). His statement was not a thunderclap as it was targeted to justify the company's prior announcement of the decision to change the privacy settings of all Facebook users. Zuckerberg advocated that it is essential for corporations like his to mirror the shifting social norms to stay relevant in extremely competitive environment (Johnson, 2010).

Data shows that privacy mindsets and behaviour, although multifaceted, are congruent with the justification that time inconsistencies in disregarding privacy could lead to protection deficiency and excessive disclosure of private data (Acquisti & Grossklags, 2005). Observations as well imply that numerous difficulties might impede even those individuals which are concerned and determined in their efforts to safeguard their privacy (Acquisti & Grossklags, 2005).

Meanwhile, many have rebuffed the belief that younger people are particularly less worried regarding privacy. Microsoft social networking expert and researcher Danah Boyd (as cited in Johnson, 2010) among them advocates that such assumptions regularly misunderstood the motives behind rendering personal information online:

"Kids have always cared about privacy, it's just that their notions of privacy look very different than adult notions. As adults, by and large, we think of the home as a very private space...for young people it's not a private space. They have no control over who comes in and out of their room, or who comes in and out of their house. As a result, the online world feels more private because it feels like it has more control" (para. 18).

Social networking platforms are built to boost the stream of data generated by users to build a centralized repository of personal information, making it persistent and cumulative data archive. Thus instead of overwriting old information with new submissions, online journals are archive–oriented collections of searchable records (Barnes, 2006). Even though social network applications offer embedded risk management tools and privacy settings, teenagers lack the awareness of the privacy risks of exposing personal information in online social interactions. They don't contemplate the size of the audience with access to the exposed information or the risk if it remains spreading and extends to undesired audience (Alemany, del Val, Alberola, & García-Fornes, 2019). So, while adults in US are worried about how data about citizens and consumers is being centrally accumulated by corporations and the government, teenagers are easily surrendering personal information in online diaries. Corporations, government agencies, school officials, and even online predators can gather private data about teenagers through those diaries. Herein lies the privacy paradox where grownups are distressed about invasion of privacy, while teenagers easily render personal information (Barnes, 2006).

Personal mindsets, awareness of risks and safeguards, trust in others, confidence in the ability to safeguard information, and financial deliberations are also some of several aspects that affect privacy decision making (Acquisti & Grossklags, 2005). Many people who affirm to care about privacy frequently display petite worry about it in their everyday conduct. One likelihood why might be that the paradox is deceptive; that broadly delineated privacy demeanour and narrowly delineated intentions and conducts are anticipated to be strongly correlated. Thus, depending on in a specific setting prevailing costs and benefits, one might truly care about privacy overall but not necessarily seek privacy protection (Acquisti, Brandimarte, & Loewenstein, 2015).

1.1.5.2 Typology of privacy

Contemporary attention concentrates on informational privacy associated to concepts "as diverse as surveillance, exposure, intrusion, insecurity, appropriation, as well as secrecy, protection, anonymity, dignity, or even freedom" (Acquisti et al., 2015, p. 512).

Koops et al. (2017, p. 484) have designed "a two-dimensional model" of types of privacy, involving "eight basic types of privacy" (bodily, intellectual, spatial, decisional, communicational, associational, proprietary, and Behavioural privacy), with overarching connections to "the ninth type (informational privacy)" that does not coexist but just overlaps with the eight basic types, where "each ideal type of privacy contains an element of informational privacy" (p. 569).

This typology (as shown in Figure 2) can serve as an analytic means and illustrative model that assist to comprehend what privacy is and how it relates to the right to privacy, why privacy cannot be diminished to informational privacy, and how the right to privacy contrasts and corresponds across different jurisdictions (Koops et al., 2017).



Figure 2: A typology of privacy

Source: Koops et al. (2017).

1.1.5.3 Privacy protection

There are three different ways to approach privacy safeguarding solutions in online social networking platforms — social, technical, and legal. Parents, schools, and social networking platforms are required to work on numerous social solutions for the privacy issues. Social networking sites are in addition to social awareness required to explore technological solutions to enhance their users' protection. While legal solutions for privacy issues encompass human monitoring of social networking platforms as well as technological solutions (Barnes, 2006).

"Currently social responses to privacy in social networks do not tend to deal with the potential misuse of personal information" (Barnes, 2006, para. 45). During a global 2019 survey, it was discovered that 82% and 72% of interviewees trusted online shopping platforms and governments a lot or at least a little to handle and safeguard their personal information, respectively. The least likely to be trusted by users were social media platforms with only 9% of the interviewees trusting corporations in this sector a lot to handle and safeguard their sensitive personal information (NortonLifeLock, 2020a). Resolving this paradox will be complex as it will require involvement of every level of society to challenge the teenagers related social issues. Privacy and awareness are essential to resolving this issue

and individual and more proactive approach to educating each other about safeguarding our online privacy is required (Barnes, 2006).

The same NortonLifeLock (2020b) survey revealed that 40% of interviewees globally expressed discomfort regarding sensitive personal information being sold to and used by third parties in decision-making processes without their consent. An additional 31% of respondents were worried about not knowing for what purposes corporations might use their personal information in the future. Barely 8% of interviewees said they did not have any concerns related to data privacy.

Due to the complexity of privacy protection decision-making process users generally do not have necessary knowledge and sufficient time to appraise all possible outcomes (Alemany et al., 2019). Although numerous empirical studies have discovered that privacy concerns across the US population are growing, it has been revealed by the recent surveys, anecdotal evidence, and experiments that people are inclined to "trade privacy for convenience or bargain" the release of personal information "in exchange" for rather insignificant gains, and are rarely keen to "adopt privacy protective technologies" (Acquisti & Grossklags, 2005, p. 26).

In academic as well as public discourse, individuals' privacy protection has oftentimes been seen as against the interests of society; as a barrier to the pursuance of those interests. In the literature, a distinct viewpoint has been introduced where several scholars have argued that the importance of privacy protection extends further than the individual interests it safeguards, which means that the rights of individuals are safeguarded and that at the same time diverse forms of social interaction are protected. Beside its "value for individuals", privacy thus has an irreducible "social value" as well (Roessler & Mokrosinska, 2013, p. 772). Discussions regarding reasons for sharing data are outlined also around two evidently contrary public goods: re-using data to improve administration effectiveness and to improve research is set against the safeguarding privacy. Privacy is as common as it is as an individual benefit, empowering the public to partake in citizen-state interactions with confidence. "Balancing these public goods is challenging" given briskly advancing data science and technology (Sexton, Shepherd, Duke-Williams, & Eveleigh, 2017, p. 305).

This viewpoint implicates important conclusions for "the way in which" disputes concerning "privacy and other values" are construed. If it can be claimed that the individual privacy protection serves the interests of society, then the apparent dispute between the "individual interest and the interests of society" in terms of privacy protection ought to be reassessed (Roessler & Mokrosinska, 2013, p. 772).

With respect to "legal regimes" of private data being "regulated under data protection statutes", there is a "partial overlap between privacy and data protection" as the private data protection considers both, "private facts referring to individuals" as well as publicly accessible personal information. Nonetheless, the "individual dimension" is legally

protected also with respect to the "computer-mediated" depictions of individuals (Taylor, Floridi, & van der Sloot, 2017, p. 175).

1.1.5.4 Privacy vs. secrecy

Furtive data aggregation is usually seen as an invasion or breach of privacy associated rights. In the "privacy threat" narrative, "institutional secrecy has grown, and individual privacy rights have been eroded". However, that "framing" is ambiguous. Secrecy and privacy are not contraries but rather "moments in a sequence" as secrecy is a result of privacy, "which is its cause" (Zuboff, 2015, p. 82). "Secrecy is a necessity" for the proper functioning of specific groups such as lawyers, doctors, and therapists. If, for instance, the "secrecy between doctor and patient" is not assured, people would most likely not visit doctors and when they would, they would reveal far less information than they would if secrecy was safeguarded (Taylor et al., 2017, p. 287).

Applying one's right to privacy generates option, and one can decide about keeping things secret or sharing them. "Privacy rights thus confer decision rights". Privacy therefore facilitates "a decision as to where on the spectrum between secrecy and transparency" one wants to be in each setting (Zuboff, 2015, p. 83). Ensuring an agreement on the underlying moral principles of data sharing with sufficient investment and care, may significantly increase the level of collective trust, if done properly. Plain transparency may not be sufficient, unveiling as many questions as it answers (Sexton et al., 2017). In 2019, roughly ten billion U.S dollars were invested in privacy and security companies such as KnowBe4, a platform for security awareness training and Rubrik, a data protection and management company, which is nearly a six-fold growth from 1.7 billion U.S dollars (CrunchBase, 2020).

It appears that the work of surveillance is rather to reshuffle than erode privacy rights, as these rights are being concentrated within the surveillance system. Surveillance capitalists have widespread privacy rights and hence numerous occasions for secrecy, which are progressively applied to bereave people of choice in deciding which part of their lives to remain secret (Zuboff, 2015).

"Skilfully exploited lag in social evolution" as the brisk advancement of corporations' capabilities to "surveil for profit" outpaced public comprehension and the "eventual development of law and regulation" that it generates. Once aggregated and claimed, privacy rights can then be "invoked as legitimation" for preserving the obscureness of surveillance operations (Zuboff, 2015, p. 83). One survey found that 48% and 39% of internet users in Europe and North America were much or somewhat more worried regarding their online privacy in comparison to previous year, respectively. In general, more than half of internet users worldwide concurred with the statement (CIGI, 2019). In building public trust, transparency is necessary to support "expert and public engagement" with the concerns in order to communally outline the frontiers of authority, "which should lead to the checks and balances" required for trustworthiness (Sexton et al., 2017, p. 327).
1.1.5.5 Privacy trade-offs

Economic studies of privacy have heretofore considered individuals as forward looking "rational economic agents", utility maximisers who base their decisions in what way to protect or disclose their personal information on probabilities deriving from known random distributions. It is therefore believed by many that individuals and organizations should have the right to handle "privacy trade-offs without regulative intervention" and that individuals can exercise that right in their own best interest (Acquisti & Grossklags, 2005, p. 26).

Traditional economic models have been disregarding the emotional and psychological elements of private data decision-making when making premises about the nature of individual privacy predilections. Fresher methods based on study in behavioural economics and psychology suggest better instruments to comprehend privacy decision-making and might be able to resolve the human need for promotion with our apparent desire for privacy (Acquisti, 2009).

Privacy economics, in broad terms, deals with informational trade-offs: it tries to comprehend and assess the individuals' personal information protection or sharing costs and benefits, how to use technology, market mechanisms, or policy to accomplish a targeted balance between information exposure and protection, with mutual gratification between the individuals, organizations, and society as a whole (Acquisti, 2009).

The very same technological innovations that have hugely enlarged information sharing and mining capabilities have also made our privacy trade-offs more challenging to manage, exposing unexpected contradictions amongst our privacy mindsets and our actual behaviour. Thus, we have placed ourselves inside new technological panopticon by requiring more privacy (Acquisti, 2009). According to the findings of a worldwide 2019 survey, 57%, 71% and 74% of respondents in Germany, UK and US respectively, were more alarmed than ever regarding their digital privacy, and merely 61%, 65% and 69% of German, UK and US respondents respectively, would accept online privacy risks in exchange for convenience (NortonLifeLock, 2020c).

The research from Turow, Hennessy, & Draper (2015) in which they presented the respondents with everyday situations phrased as trade-offs where marketers collect private data, showed that the majority perceived those trade-offs us unfair: 91% disagreed, of which 77% strongly that receiving a price discount was a fair trade-off for collection of personal information without their knowing, and 55% disagreed that even providing them with improved services was a fair trade-off. Pew Research Center (2019) reported their survey results where 81% of Americans considered that benefits were outweighed by the potential risks of companies' data collection, while 66% considered the same about government data collection about them. A similar results about Swedes have been found in a recent study performed by Lund University School of Economics and Management (2020) where 55% of the respondents were most worried about the data aggregation made by merchants about

their daily consumer behaviour, while 11% were most worried about the data collection made by the government.

However, empirical and theoretical studies imply that often insufficient information is available to individuals for making proper privacy concerning decisions and that even with adequate information they are prone to "long-term privacy for short-term benefits" trade-offs (Acquisti & Grossklags, 2005, p. 26). Judged solely by individuals' actions a conclusion may be drawn, that the typical individual finds tolerable balance between privacy and convenience, that they give up some privacy and get plenty of convenience in return (Andrejevic, 2014). Though, on closer examination, such premises fall short as research finds that the vast majority of users only glance privacy policies if even that, a fact that might be considered as a proof, that people don't care much about privacy regardless the high concerns and the expansion of data capturing technologies (Andrejevic, 2014).

The individual decision process regarding privacy is constrained by various constituents. Among those, asymmetric information, bounded rationality, and systematic psychological deviations from rationality indicate that nuances of an individual's privacy-sensitive behaviour might not be adequately captured by the assumption of perfect rationality (Acquisti & Grossklags, 2005).

Asymmetric information affects privacy decision making by reason of externalities (when private information about an individual is shared by third parties, that individual might be affected without his being part of that deal), information asymmetries (information how personal information will be used, which is pertinent to the privacy decision process, might be available just to those few making the decisions), risk (not all privacy associated payoffs are deterministic), and uncertainties (payoffs might have random probability distribution or pattern that may not be predicted precisely). "Benefits and costs associated with privacy intrusions and protection are complex, multifaceted, and context specific". They can be financial or incorporeal and thus difficult to quantify. They are commonly "bundled with other products and services" (a search engine query delivers the anticipated result but at the same time provides observers with information about the searcher's interests), which are often recognized only after privacy violations have already taken place (Acquisti & Grossklags, 2005, p. 26).

"Our innate bounded rationality limits our ability to acquire, memorize and process all relevant information", therefore causes us to rely on simplistic mental models, estimations, and "heuristics". For, we would not be able to sort out and react flawlessly on such vast quantities of data even if we had access to comprehensive information, particularly in the presence of intricate, branched aftereffects interrelated with releasing or safeguarding personal information. (Acquisti & Grossklags, 2005, p. 27).

So, even if we had access to comprehensive information and could effectively consider optimization strategies for our privacy-sensitive decisions we might still diverge from our

most rational strategy. Individuals are for example, influenced by motivational constraints and distortions of personal utility in supplement to their mental processing bounds. An eccentricity between losses and gains have been found by experiments showing that "losses are weighted heavier than gains". Research in psychology has found that imprecise conclusions are drawn by individuals from past choices which makes them falsely foresee their own future preferences. Individuals also tend to "trade off costs and benefits" in favour of instant gratification that often damage their future utility, and their behaviour can also be steered by social norms or predilections. Several of these divergences are quite common to privacy-sensitive settings (Acquisti & Grossklags, 2005, p. 27).

Any of these constituents might affect "decision making behaviour within and beyond the privacy domain" and empirical evidence would not necessarily suggest that individuals act irresponsibly or "make choices against their own best interest". Though, bias and constraints in the individual decision process would imply that "should be considered when designing privacy public policy and privacy enhancing technologies" (Acquisti & Grossklags, 2005, p. 27). The present public privacy discussion rests on two leading dispositions: "either consumers should be granted the right to manage their own privacy trade-offs, or the government should step in to protect the consumer" (Acquisti & Grossklags, 2005, p. 32). There are also others who are worried about the individuals' competence to handle privacy amid progressively complex trade-offs (Acquisti et al., 2015).

Before Google Now, Larry Page used to say that "the trouble with Google was that you had to ask it questions". That vision has now been realized as it knows what you want and tells it to you before you ask the question. You phone may suddenly buzz you with a message from Google Now with notification that your appointment starts in 45 minutes and there is some traffic congestion on the route, so you should better depart immediately. You don't even have to tell Google about it, it will just look at your Google Calendar, see where you are going and when do you need to be there, send your present location and destination to Google Maps, and figure out the time needed for you to get to your appointment. For some people that's "the coolest thing in the world", while others get "completely freaked out". The thing is that Google Now must have access to a vast amount of "information about you and your environment" to deliver these services, which some people find distressing. We share highly personal and sensitive information with our doctor, therapist, trainer, lawyer, bank, and many others whereas we get recognizable "benefits", and we "trust them" (Varian, 2014, p. 28). Researchers found that 36%, 17% and 21% of respondents trusts Healthcare institutions, Financial institution and Government, respectively, at least a little to handle and safeguard their personal information (NortonLifeLock, 2020a). Why do we so willingly share all this sensitive information? (Varian, 2014).

People are ready to disclose personal information in case they are offered some service or thing they want or need in return. That could be a medical or legal advice, a mortgage, or "advice from your personal digital assistant". Digitalized transactions "have enabled new business models that were simply not feasible" not long ago, such as Uber: you download

and install an app on your smartphone and use it to order a ride when in need, watching the ride come to you on your phone's map, you already know the fare and the driver already knows the destination before you even get in the car, and once there, you automatically pay "via the identity verification due to the smartphone" enabling all parties involved a "no surprise" experience. Similarly, Air BnB "enables you to rent out" a vacant room or an apartment, computers make authentication on each end of the transaction and each participant of the transaction can evaluate and rate the performance and experience of the counterpart. Formerly "hard-to-find" reputation information became easily accessible, encouraging people to trust more due to automated verification (Varian, 2014, p. 31).

Varian's assurance in Google Now seems to be sustained by the facts of disparity. He advises that one way to foresee the future is "to observe what rich people have", simply because it is what the lower classes will eventually want too. The prophecy is personal assistants, and that's what Google Now essentially is (Zuboff, 2015, p. 84). The consideration that individuals trade their personal information for insignificant awards has infused the policy discussion which has been used as an argument against privacy regulation based on justification that consumers would request more privacy, if they wanted it, and would take advantage of opportunities to protect it (Acquisti et al., 2013). Varian's bet is that common people will accede to the immense invasions of privacy of Google Now as it will become so essential a resource in the tussle for efficacious life, which is its quid pro quo (Zuboff, 2015).

If we consider just the Nest thermostat owned by Google, a smart home device that gathers data regarding its usage and surroundings with its motion sensors and computation to ascertain the demeanour of residents. Nest's apps can also collect data from other connected home appliances like refrigerators and fitness trackers. Such systems are also able to activate lights if an unusual movement is detected, initiate video and audio recording, as well as send alarms and notifications to homeowners. The thermostat and its brethren devices including its personal digital assistant Google Now are powered with Google's artificial intelligence engine and its capabilities that endlessly create vast collections of new knowledge and thus unprecedented power. All those devices come with a Terms of Service Agreement, an End-User Licensing Agreement, and a Privacy Policy all of which disclose overbearing security and privacy aftereffects. For the purposes of predictive analyses and sales to unspecified parties, sensitive private and household data are shared with other smart devices and third parties. However, not much accountability bears Nest for securing the information it accumulates and even less for how the data will be used in its ecosystem. In case the user declines to agree to Nest's provisions, as per the Terms of Service, the operability and security of the device will be severely endangered as the necessary update support required to ensure its safety and reliability will be discontinued. The aftereffects can be severe and can range from "frozen pipes to failed smoke alarms to an easily hacked internal home system" (Zuboff, 2019b, p. 6). People could easily accede to the vast invasions of privacy of Google Nest as it might become so essential a resource in the tussle for convenience, comfort, protection, and security it provides, which can be seen as its condito sine qua non.

1.1.6 Social capital

1.1.6.1 The Concept of Social capital

Robert Putnam (1995), the most renowned scholar in this field, has defined social capital as social networks with associated norms and trust, and portrayed it as attributes of social life that give contributors the ability to more effectively act together to achieve common objectives, while in other literature it is described also as quantity and quality of social interactions in society shaped through established institutions, relationships and norms; cooperation facilitation among groups within a network with common norms, values and acknowledgements; civic engagement, reciprocity norms and trust in others as features of social organization that facilitate collaboration for common benefit; is also defined in terms of networks highlighting the norm-laden nature of relationships within, between and among them; and as well as the connections, relationships and norms that help organizations and communities to enhance their efficiency (Aldridge, Halpern, & Fitzpatrick, 2002). Social capital is characterized by the function of an assortment of diverse entities all of which consist of some portion of social structure within which individuals expedite certain activities. Social capital is thus composed of the particular set of social relationships which create value for individuals in organizations hence as resources can lead to the development and build-up of human capital (Machalek & Martin, 2015). Work related networks, dispersed friendships and mutually acknowledged social values can all be seen as forms of social capital (Aldridge et al., 2002).

As a theory, social capital was first defined by Bourdieu (1985) as the accumulation of the resources associated to proprietorship of a sustainable network of institutionalized relationships of mutual acquaintance or acknowledgment. Its key principle is that a network delivers "value to its members" by enabling them "access to" embedded "social resources" where another theoretical framework implies that positive shifts appear when social relations within communities are benevolent. Essentially can social capital be dissected into two components: "the social relationship itself", which enables individuals to access "the resources possessed by associates", and the "amount and quality of those resources" (de Camargo Fiorini et al., 2018, p. 123).

Social Capital Research (n.d.) describes social capital as the productive benefits derived from sociability which evolve from the human capability to think and act open-handedly and concertedly, and acknowledge others. It involves individuals with positive interactions based on respect, reciprocity, and trust. It relates to social relationships and structures that foster prosocial behaviours and discourage exploitive ones.

1.1.6.2 The Characterization of Social capital

Adler and Kwon (2002) construe social capital as characterization of market affairs shaped through economic transactions in which people exchange goods or services, while characterization of interpersonal relationships is shaped through social commute in which people exchange favours. Hence, every time someone grants a favour to another person, he or she receives a recognition or goodwill in return which creates value for the individuals that can then be used as a resource to enable achieving desired personal outcomes in the future. However, what precisely the social capital concept acquires is still a debate among scholars, therefore more than a few conceptions can be used to outline social capital. One is that in associations social capital corresponds social relationships, another that social capital and social networks are two autonomous yet associated conceptions while according to the third, it encompasses both social networks and the resources supplied by them where they are seen as two bits of social capital (Bizzi, 2015).

The social capital discussion also tends to differentiate three levels of analysis and can therefore be said that social capital networks "can be analysed at the micro, the meso, and the macro level". A distinction has been made within and across these levels specifically between "bonding social capital", referring to relations within homogenous groups; "bridging social capital", referring to relationships between homogenous groups; and "linking social capital", referring to relations among individuals or groups at different hierarchical levels (Grote & Bonomi, 2018, p. 4).

The "micro level of bonding" basically relates to "communities of fate", a rather small clusters of individuals such as "families, villages, and neighbourhoods" where the presence of rather stronger trust may normally be "taken for granted". The "meso level of bridging" corresponds to outward oriented relationships extending to broader "communities of choice" that are based on discretionary membership and which in comparison to participants in "networks of bonding" may function at the same or even higher "level of complexity". Trust or trustful relationships within communities of choice are expected to flourish to the point where "forms of social exchange have sufficiently been learned and practiced downstream" at the lower levels of communities of fate. At these lower levels, the absence of norms of reciprocity requires continual sequences of exchange with outsiders to build trust. Tit for tat or arm length transactions "only last at the very beginning of such processes" and if productively iterated over time by all parties, "may turn into a more lasting relationship" (Grote & Bonomi, 2018, p. 4). Regarding the quality of relations, concepts of thick trust, for bonding in communities of fate, and thin trust, for bridging relations in and across communities of choice have been introduced by Gerbasi and Latusek (2015). There is also a "third level of complexity" with likely even" thinner" though not insignificant trust (Grote & Bonomi, 2018, p. 5).

Since the trust building in such hierarchies develops from the "bottom-up of bonding and bridging", linking social capital has enduring and flourishing tendency merely in case the

experience at the two lower levels has built it adequately. High levels of linking social capital indicate high levels of "legitimacy for public authorities", which consequently means of "systemic trust". Even though such relationships in comparison to the two lower levels of social capital tend to be less strong, they deliver better gateway to "powerful institutions" and they are of a greater importance for the accomplishments of whole society's progress objectives (Grote & Bonomi, 2018, p. 5).

Let's be honest, that we are living in a cultural crisis of credibility which consequentially is eroding governments, religion, and communities. We all, in general, tend to contribute to improving the world we live in, however how successful we are, depends on people trusting us (Moore, 2018). Credibility is therefore a lifestyle; it is established slowly as trust is built in small steps. Every part of our interaction with the world reflects it in one way or the other. Keeping commitments, being genuine and honest, and consistency, are inevitable pillars for trust building and keeping (Moore, 2018).

The OECD has commenced a project to assess the measurement of social capital with ambition to evaluate its conceptualisation notation in the research literature; to delineate how it has been measured in surveys; and to pinpoint lead areas for statistical development. The report, the project's core output, distinguishes four ways of possible conceptualisation and measurement of social capital: Personal relationships, referring to the structure of people's networks and the social behaviours that contribute to creating and keeping those networks; Social network support, which refers to the resources that are accessible to everyone through their social networks; Civic engagement, contribution to civic and community life; and trust with its cooperative, reciprocal, and social norms along with shared values that enable and support functioning of mutually beneficial collaboration within the society. The trust in others and the trust in institutions are types of trust most often deemed as forms of social capital (OECD, n.d.-b). Scholars tend to measure social capital mostly by capturing the within associations established interpersonal relationships, regardless of how they define it, though not all them epitomise social capital (Bizzi, 2015).

1.1.6.3 The Social capital Index

The Social Capital Index (SCI) is measured as a Sub-Index of the Global Sustainability Competitiveness Index (GSCI) modelled by SolAbility Sustainable Intelligence. The social capital of a nation is the aggregate of social stability, consensus, and the well-being of the whole population. Social Capital generates social concord which in turn provides a stable environment for the economy. It's an intangible value and thus quite challenging to measure and assess in numbers. Beside local historical and cultural influences, several other aspects also impact the social consensus in a society: health care systems with its widespread accessibility; income and asset equality in correlation with crime levels; population characteristics and structure; and freedom of expression, freedom from fear and the absence of violent conflicts "that are required for businesses to be able to generate value" (SolAbility Sustainable Intelligence, 2020, p. 33).

While it might be difficult to scientifically determine a direct link between social cohesion and creating wealth and nurturing economic progress, a particular level of equality, sufficient health systems, and equal opportunities are the requirements for accomplishing the same. The deficiency of social cohesion or its declension may as a result lead to reduced productivity, higher crime rates and possible social instability, and weakening economic progress and expansion (SolAbility Sustainable Intelligence, 2020).

1.1.6.4 The Social Capital Indicators

The indicators used to measure social cohesion (as shown in Figure 3) have been selected from the themes already mentioned above (health, equality, crime, freedom, and satisfaction). Some of them (e.g. "happiness") are qualitative, i.e. not based on measurable performance data. Instead, "qualitative indicators from surveys and other sources compiled by recognised organizations were used to measure the qualitative aspects of social cohesion, including single indicators" from the Happy Planet Index (New Economics Foundation), the Press Freedom Index (Reporters Without Borders), and the Global Peace Index (Institute for Economics and Peace) (SolAbility Sustainable Intelligence, 2020, p. 33).





Source: SolAbility Sustainable Intelligence (2020).

Social Capital World Map

A specific degree of social balance or consensus is essential to preserve "a stable environment in which economic activities can take place". Higher social capital of a country means that the economy of the nation can thrive better, and higher social consensus means that "the motivation of individuals to contribute" to the common good is stronger. "The indicators used to calculate the Social Capital score of countries is composed of health and health care factors, the quantitative equality within societies, freedom indicators, crime levels, and demographic indicators" (SolAbility Sustainable Intelligence, 2020, p. 34).

The Social Capital Index 2020

The top 20 in the Social Capital Index 2020 is dominated by northern European countries, Scandinavian in particular, among which ranked as 9. with a score of 59.56 is also Slovenia, and where Germany with 56.30 score is positioned as last (20.) among those. The UK is ranked 43. (51.57 score), which is lower than China (31.) with its score of 53.49, reflecting the UK's deteriorating social fabric. The US, ranked 109., has a score of just 41.39 due to high crime rates, low health services availability, and growing inequality (SolAbility Sustainable Intelligence, 2020).

1.2 Fluency of governance

There are several definitions of corporate governance where for example, the Governance Institute of Australia (n.d.) describes it in following terms: "Governance encompasses the system by which an organization is controlled and operates, and the mechanisms by which it, and its people, are held to account. Ethics, risk management, compliance and administration are all elements of governance" (para. 1).

Another helpful description of governance is supplied by OECD (n.d.): "Good corporate governance helps to build an environment of trust, transparency and accountability necessary for fostering long-term investment, financial stability and business integrity, thereby supporting stronger growth and more inclusive societies" (para. 1).

According to Investopedia (n.d.) corporate governance is portrayed as the "system of rules, practices, and processes by which a firm is directed and controlled. Corporate governance essentially involves balancing the interests of a company's many stakeholders, such as shareholders, senior management executives, customers, suppliers, financiers, the government, and the community" (para 1).

Corporate governance delivers the structure for achieving a company's goals thus it comprises basically all aspects of management, from planning and supervising to gauging performance and corporate disclosure. It comprises the mechanisms to held accountable those in control of the companies (Investopedia, n.d.).

For the purpose of this thesis, the definition of governance provided by the World Bank (as cited in GDRC, n.d.) in Governance: The World Banks Experience, is applied as it has particular significance for the developing world:

"Good governance is epitomized by predictable, open and enlightened policy-making, a bureaucracy imbued with a professional ethos acting in furtherance of the public good, the rule of law, transparent processes, and a strong civil society participating in public affairs. Poor governance (on the other hand) is characterized by arbitrary policy making, unaccountable bureaucracies, unenforced or unjust legal systems, the abuse of executive power, a civil society unengaged in public life, and widespread corruption" (para. 5).

The World Bank's focus on governance approach emphasizes concerns of better state responsiveness and accountability, and the effect that these factors have on political stability and economic growth echoes the worldwide thrust toward political and economic liberalisation. In its 1989 report, From Crisis to Sustainable Growth, the World Bank (as cited in GDRC, n.d.) conveyed this perception as follows:

"Efforts to create an enabling environment and to build capacities will be wasted if the political context is not favourable. Ultimately, better governance requires political renewal. This means a concerted attack on corruption from the highest to lowest level. This can be done by setting a good example, by strengthening accountability, by encouraging public debate, and by nurturing a free press" (para. 6).

Governance comprises of the customs and establishments by which country's authority is employed which involves the processes by which governments are selected, observed and replaced; the ability of the authorities to efficiently articulate and enforce comprehensive policies; and the veneration for the organizations that govern social and economic interactions among them, by the citizens as well as the state (World Bank, n.d.).

The individual and aggregate governance indicators that the Worldwide Governance Indicators (WGI) project reports for more than 200 countries observed over the period 1996–2019, are presented with the percentile rank of a country among all countries in the world for six below listed and described dimensions of governance, with 0 corresponding the lowest and 100 corresponding to highest (World Bank, n.d.).

The WGI are a research dataset epitomizing how the quality of governance is perceived by a numerous of survey interviewees, ranging from citizens and experts to corporations' representatives, assembled from a numerous survey institutes, NGOs, international establishments, private companies, and think tanks (World Bank, n.d.).

The six composite WGI measures are applicable as a first instrument for comprehensive cross-country comparisons and for assessing broad trends over time and is therefore viewed as complementary to numerous attempts to create more intricated measures of governance, often just for a single country. Also, to gain more insights into the specific areas of strengths and weaknesses detected by the data, users are emboldened to confabulate the dismembered individual indicators underlying the compound WGI scores (World Bank, n.d.).

The degree to which a country's citizens are able to partake in choosing their government is presented by Voice and accountability, which includes a free press and a freedom of expression and association. For example, the indicated percentile rank for China, Germany,

UK and US for 2019 is 6.40, 95.07, 90.64 and 78.82 respectively, while for Slovenia it is 80.79 (World Bank, n.d.).

Perceptions of the probability of political instability, politically motivated violence, and even terrorism are measured by Political Stability and Absence of Violence. For example, the indicated percentile rank for China, Germany, UK and US for 2019 is 38.10, 66.67, 63.81 and 57.62 respectively, while for Slovenia it is 73.81 (World Bank, n.d.).

Perceptions of the degree of excellence of public services, the degree of excellence of the civil service and the level of its independence from political pressures, the degree of excellence of policy formulation and implementation, and the credibility of the government's commitment to those policies are apprehended by Government effectiveness. For example, the indicated percentile rank for China, Germany, UK and US for 2019 is 71.63, 93.27, 90.38 and 91.35 respectively, while for Slovenia it is 82.21 (World Bank, n.d.).

Ability of the government to formulate and implement coherent policies and regulations that facilitate private sector development is presented by Regulatory quality. For example, the indicated percentile rank for China, Germany, UK and US for 2019 is 42.79, 96.15, 93.75 and 88.94 respectively, while for Slovenia it is 80.29 (World Bank, n.d.).

Perceptions of the degree to which agents have confidence in and abide by the rules of society, and particularly the degree of excellence of contract enforcement, property rights, the police, and the courts, including the probability of crime and violence, are apprehended by Rule of law. For example, the indicated percentile rank for China, Germany, UK and US for 2019 is 45.19, 92.31, 91.35 and 89.90 respectively, while for Slovenia it is 84.13 (World Bank, n.d.).

Perceptions of the degree to which public power is exercised for private gain which includes all forms of corruption, as well as "hijack" of the state by elites and private interests are apprehended by Control of corruption. For example, the indicated percentile rank for China, Germany, UK and US for 2019 is 43.27, 95.19, 93.75 and 84.63 respectively, while for Slovenia it is 80.29 (World Bank, n.d.).

2 METHODOLOGY

The analytical approach of the research entails interdisciplinary analysis; the interdisciplinary approach as the ability to analyse, synthesize and harmonize links between academic disciplines into a coordinated and coherent whole by thinking across boundaries.

The conceptual starting point and philosophy of this research is Pragmatism – to use a method more favourable from the financial aspect, promptly evaluating corresponding and appropriate method – Minimax principle.

The aim is to answer the research question with qualitative research methods using secondary sources of data, such as government agencies' reports and publications, various organizations' publications, research papers, relevant literature, news articles, dissertations and thesis on the subject, blogs, podcast audio materials as well as video materials of interviews, debates and webinars with most prominent researchers and experts in the field of study of this thesis.

As a research design in qualitative research, I used a case study of China's SCS, cases of analogous western rating systems, and literature review in relation to this subject to get into depth of the specific context. A case study is used for gaining in-depth understanding of the context and the meaning, though it does not allow generalization to a wider population. With the use of a comparative approach, this thesis analyses the social and economic implications of two societies endeavouring to move beyond gamification. Such more flexible process helped me describe, compare, evaluate, and understand different aspects of the research problem and involved my subjective judgements in the analysis. It allowed me to explore key conceptualizations, characteristics, significances, and implications of the case with potential to deliver new or unanticipated insights, challenge prevailing premises and theories, suggest practical courses of action to resolve an issue or problem, and highlight new ones for further research.

A descriptive method to collect and measure data was used, as well as thematic analysis to describe subjective experiences, interpret patterns and meanings, and understand concepts in the data. As a research approach, I used a combination of both, inductive and deductive reasoning methods.

With secondary data, I was able to expand the scope of my research, but the downsize of this method I used was that I did not have the control over the content and reliability of the data.

I got sources mainly online and part form library archive conducting desk research. In this qualitative research (desk-based research) of secondary data further using case studies (descriptive) and observations, data analysis methods, particularly in the absence of primary data collection, have entailed identifying and examining common patterns and disputes within secondary data directly associated to the research area as well as the responses, which have been critically analysed for accomplishment of the research objectives and goals.

The criteria I used to select more than 400 sources was a date range from beginning of 2010 until end of 2020 with up-to-date information update until September 1st 2021, based on content considering China's SCS as a thematic subject (theme), and focusing on related keywords such as Surveillance (Corporate surveillance, Surveillance capitalism), Dataveillance, Panopticon, Behaviour science and Behaviour economics, Nudge theory and Paternalism, Gamification and Governance, Trust, Privacy and Trade-offs to articulate the research question and analysis. I mainly focused on internet-connected population of mobile devices users in China, US, UK, and Europe.



Figure 4: Analytical framework and strategy

Source: own work.

Data analysis strategy consisted of planning the approach to coding and interpreting the data with a help of Atlas.ti 7, software for qualitative data analysis.

With the use of Triangulation as a qualitative research strategy – alternative methods for the same problem – I used multiple methods and data sources for cross-comparison to challenge and integrate theories to develop a comprehensive understanding of the phenomena (problem) and reveal unique findings, and tested validity through confluence of information from diverse sources with objective to increase confidence in the conclusions through the validation of suggestions using different independent measures, as well as to increase reliability and validity of the study.

3 CASE STUDY: CHINA'S SOCIAL CREDIT SYSTEM

The term "social credit system" was first officially mentioned in President Jiang Zemin's 2002 annual addressing to the Party Congress, asserting China must "establish a SCS compatible with a modern market economy" (Ministry of Foreign Affairs, 2002). The initial objective for such a system was to help state banks to assess the creditworthiness of individuals applying for mortgages and companies requesting financing, and as anticipated then, seemed very analogous to FICO scores in the US (as shown in Table 1) or SCHUFA scores in Germany, utilized to assess individuals' financial creditworthiness (Jiang, 2020). However, the disconnection among two major aspects of the SCS was already evident: on the one hand, credit referred to financial creditworthiness, similar to FICO and SCHUFA scores; on the other hand, it referred to a wider concept of trust and sincere conduct in the marketplace (Creemers, 2018).

The idea of the Chinese nationwide SCS was set forth in 2011 and in the decade since, the SCS has attracted noteworthy attention in recent years, has prompted a trend of media coverage, much of it sensationalist with plenty of blunders, with both, critics and advocates of the idea, and the complexness and dubiety of the system have led to misperception on what it entails (The Diplomat, 2021).

So, what exactly is the SCS – what it is and what it is not, how it's envisaged and how it seems today, what are the actual benefits and risks, and how could the system look like in the next decade (The Diplomat, 2021)?

In 2014, China's State Council released a document labelled "Planning Outline for the Construction of a Social Credit System (2014-2020)" (Creemers, 2014) an assertive and comprehensive governance gambit (Chen, Lin, & Liu, 2018), and declared it a national assignment (von Blomberg, 2020).

The government's initiative presents instruments for a vast accumulation and exchange of data concerning credit subjects, thrusts for the employment of such credit information in the decision-making processes, and raises the importance of naming and shaming punishment to a whole new level (von Blomberg, 2020).

Its abstract legacy is social management, a governance approach bred in the political system of the People's Republic of China (PRC) that does not work with the conventional notion of law (von Blomberg, 2020).

The 2014 "Planning Outline for the Construction of a Social Credit System" remains the most authoritative outline for consequent SCS efforts, and represented a key progress in political consideration of the SC at the national level (Creemers, 2018).

It put ahead a timetable until 2020 for the achievement of five main goals: forming a legal and regulatory framework for the SCS, constructing credit scrutiny and supervision, nurturing a booming market developed on credit services, and finalizing incentive and punishment mechanisms (Creemers, 2018).

It identified priorities in four key policy areas: in government affairs, the aim of SCS is to boost transparency, improve lawful administration, set up trustworthiness for government actors, and present the government as a eidolon of honest demeanour; in the market economy, SC aims to improve transparency, trust and efficiency across whole spectre of industrial and commercial sectors; in social services, the SCS is aimed to improve trust in healthcare providers, reinforce management over particular professions and improve inspection over online demeanour; in courts, the introduction of credit mechanisms aims to enable more effective implementation of rulings, improve information sharing concerning parties in legal proceedings and support norms for the legal profession (Creemers, 2018).

Besides, the 2014 Plan concentrated on the development of the fundamental information infrastructure that the system's successful rollout would require (Creemers, 2018). It thoroughly provided for standardized means to record credit-related information across diverse segments of the administration, local and central databases for storing collected information on different levels, the creation of credit reporting mechanisms with enabled public access to the information, as well as information sharing processes to reduce the aggregation of data within the administration (Creemers, 2018). The key agenda that this infrastructure would endorse is a system of incentives in form of punishments and rewards based on blacklists and redlists, and beside through governmental means, these incentive mechanisms would be implemented also in specific sectors through self-regulatory rules and market mechanisms (Creemers, 2018). The concluding sections of the document address the development of credit service markets, data and information security, and specific guidelines for implementation (Creemers, 2018).

The 2014 plan thus portrayed a comprehensive roadmap, encompassing significant requirements and measures to build the fundamental technical, bureaucratic and financial support systems, that is progressively being implemented (Creemers, 2018). It identified the key mechanisms, especially the incentive system of punishments and rewards for sincere and untrustworthy demeanour, that would be implemented and now form the major operational components of the SCS (Creemers, 2018). However, in contrast to how foreign

observers have ascribed it, the quantitative scoring is not identified as an assessment method in the document (Creemers, 2018).

The underlying norm behind punishments was disproportionate sanction, as summarized in the phrase "if trust is broken in one place, restrictions are imposed everywhere", and "the programme is based on a blacklist system" where identified wrongdoers are recorded and published and consequently blocked from specific activities (Creemers, 2018, p.13). The punishment system for "untrustworthy persons subject to enforcement" which addresses non-performance of legally binding rulings was the first area where this mechanism was implemented (Creemers, 2018, p. 14).

Subsequently, for their own policy fields some separate sectors launched their own, more focused blacklist systems. For example, a blacklist for conduct involving train and air travel issued by two sub regulations in early 2018 was created, and targeted violations range from rail ticket scalping and using fake IDs to buy privileged rail fares to entering airplane cockpits by force and unreasonably opening emergency exits, respectively (Creemers, 2018). Individuals committing such acts would be subject to a comprehensive travel restriction for six months on railways, and twelve months for air travel. These measures also aimed at "gravely untrustworthy conduct" in other areas, such as tax avoidance, financial wrongdoing, and social security fraud where wrongdoers in these cases were banned riding high-speed trains, as well as booking first-class seats and sleepers on slower services, and would also be subject to a more comprehensive air travel ban (Creemers, 2018, p. 16). Among others, further specific measures also emerged for the oil and gas sector, logistics and transportation, food security, insurance, housing, and environmental protection (Creemers, 2018).

In July 2019, the General Office of the State Council, which is the chief administrative centre of the People's Republic of China, released a set of "Guiding Opinions on Accelerating the Construction of a Social Credit System to Build a New Credit-based Supervision Mechanism", a document addressed to practically all levels of government – national, provincial, regional, and municipal – including the ministries and commissions of the State Council with their respective agencies, underlying several critical elements. First, it was a reminder of the cardinal role that SC based governance has presumed since the State Council first adopted this new approach of using data to govern demeanour in its 2014 "Notice Concerning Issuance of the Planning Outline for the Construction of a Social Credit System". Second, it highlighted the systemic nature of SC as a regulatory governance mechanism in China. And third, it made as clear as possible the link between SC as a regulatory governance instrument and the objective of oversight (Backer, 2019, p. 209).

3.1 What is China's Social Credit System

"At its simplest and most abstract level", SC is the "New Era" governance (Backer, 2019, p. 213). It is a digital socio-technical system which with its mechanisms of punishments and

rewards endeavours to assess the trustworthiness of individuals, organizations, enterprises, and government agencies in China (Jiang, 2020). It is more than a social-control mechanism, though: it is at the core of a new concept of governance which is built on a dismissal of the application of "traditional legal and administrative mechanisms for governing a society" (Backer, 2019, p. 209). The creativity of computer engineers, academics, policymakers, and the general public alike continuously portrays it as an Orwellian nightmare that hangs over our near dystopian future (Botsman, 2017); as this new government intrusion by the Chinese state that invokes up worries of a global cyber power arising from Asia and extending its digital surveillance through the society (Jiang, 2020). However, Shazeda Ahmed (Tai, 2019), one of the most prominent scholars on this topic emphasizes "here's what's actually happening on the ground, it's not scary as you think, there is potential for it to be scary and harmful but not as an all seeing surveillance apparatus" (41:28).



Figure 5: Organizational and process chart of China's SCS

Source: Liang, Das, Kostyuk & Hussain (2018).

There is a rising confidence amongst China's leaders, that economic strength and social advancement can be best accomplished through systems of ratings based on continuous oversight (Backer, 2019). Conserving human and economic advancement requires social capital depicted as human networks based on a shared sense of affinity community (Grote & Bonomi, 2018). SCS as a mixture of high-tech surveillance and SC exhibiting "the notion

of market socialism combined with neoliberal practices, has created a new system of social control" in contemporary China, an evolving urban governance, with contrary results materialising from the cohabitation of the technologies of omnipresent control, socialist legacies of urban prerogatives, and neoliberal self-government strategies (Kim, 2021, p. 1). China's evolving SCS (see Figure 5) therefore rates and punishes, or rewards, the demeanour of ordinary citizens, businesses and officials (Backer, 2019).

The administrative topography of both, states and other governance institutions, is being transfigured by data driven governance systems, which while stranded in essentials of accountability and implanted in systems based on incentives for managing risk and demeanour through choice mechanism, may well redesign the way governance organs are created and function (Backer, 2018). "Yet such technological advances can serve as a mega infrastructure that empowers not only civil society and individuals, but also autocratic regimes that attempt to perpetuate and exacerbate the existing power asymmetry via omnipresent and omnipotent surveillance, censorship and control mechanisms" (Chen et al., 2018, p. 4). It is in the area of social sincerity where the Western observers see the most alarming effects for the objective to create "harmonious and amicable interpersonal relationships," but it is also hard to avoid the political connotation (Backer, 2019, p. 213). Harmony and benevolence are terms associated to distinct conformities: "social in the West, political and official in China. But in both cases, they can be measured. And metrics provide the basis for regulation when coupled with punishment and reward" (Backer, 2019, p. 213).

It seems ever more apparent that through advancement of compliance practices of individuals and companies, the rule of law is heading toward implementation of data driven systems supervised by administrators empowered to apply controlled dominion over decision making for the public good, where regulatory governance appears as pushing institutions more toward the governance based on accountability than the government based on law, while accountability "refocused government from the state and form law, to regulation, and the metrics required to bring those subjects to standards to account" (Backer, 2018, p. 4).

3.1.1 History of SCS and motivation behind it

According to Hawkins (2017) the proposed SCS is seen as contemporizing of the Communist party's already developed surveillance practices called Dang'an, for every citizen created personal file that records and tracks their progress about their performance from earliest school days to interaction with other individuals and their political standings later in life, the content of which subjects are not allowed to see, even though it may affect their career outlooks and retirement entitlements. Commercial endeavours at SC, such as a social ranking system named Sesame Credit (as shown in Table 1) developed by Chinese tech giant Alibaba

Item	Sesame Credit	People's Bank of China Credit Reference Centre	Social Credit System	Credit bureaus in the United States
Goal	Expand consumer credit, drive users to Alibaba products	Expand access to finance and lower lending risk	Use creditworthiness to strengthen trust and order in government, throughout life in China	Collect and leverage data to price loans effectively and evaluate credit
Туре	Private	Public	Public	Private
Operated by	Alibaba Affiliate Ant Financial, regulated by the People's Bank of China	People's Bank of China	National Development and Reform Commission as lead, other government departments for areas of jurisdiction	Equifax/Experian TransUnion and FICO
Legal status	Temporary permission indefinitely extended, no full license	Institution under the People's Bank of China	Official government plan and policy, expanded by local and sectoral regulations	Regulated by Fair Credit Reporting Act and other laws, which guarantee right to dispute errors and request explanation for credit denial.
Who is rated/scored?	Individual Alipay users must opt-in; companies can be rated but on a different point scale	Automatic inclusion of ~900 million records on individuals but no scores; company information also collected	No individual choice; data automatically collected; and strict user consent, processing, and sharing provisions may be imposed	Anyone the credit bureau can get data on. No opt-out. Bureaus collect data and produce reports. Joint ventures by credit bureaus called VantageScore and FICO's Score are main scores
Data sources	Mostly Alibaba data: shopping, payments, other sources users share	Financial institutions regulated by the People's Bank of China; some online lenders like Ant Financial	Government data from departments at all levels, trains, courts, etc.; some from private firms	Public records and lenders participating in the reporting system
Output	Single score designed to estimate the likelihood of loan default	Credit report	Laws, databases, systems for data exchange, punishments and incentives; scores possible in future	Credit report and single score designed to estimate likelihood of loan default
Consequences of low or bad credit	More expensive credit from Ant Financial, down payment not waived for some rentals, less access to Alibaba services	Financial institution rejects credit application, requires collateral, or charges higher loan interest	Expanding "rewards" and "punishments"; including lost access to government subsidies, inability to purchase plane/train tickets	Inability to borrow or open a credit card, rent an apartment, get hired for many jobs, and more

Table 1: Comparison of credit systems

Source: Chorzempa, Triolo & Sacks (2018).

which rates the personality of its millions of users, may also have inspired this contemporizing of the Dang'an, where users can see their credit score and share it, however they do not have access to how the data is being used by the tech giant nor to with whom the data is being shared with. Not only that this by Alibaba developed platform serves as a model for the new credit system run by government, the tech giant is also one of the main parties that rendered its entire database of user data to the Chinese government to be incorporated into the SCS (Hawkins, 2017).

While the SCS's relation to the Dang'an seems apparent (Creemers, 2018), there are also the morality files as more recent precursor to the SCS, launched in 2011 in Wuhan, Hubei Province, as "an initiative by residents of the community to record and publicize neighbours' good deeds such as donations to sick neighbours to improve community relationships" (Jiang, 2020, p. 95).

As it seems, at least three core reasons drove the implementation of the SCS. "Lack of honesty and trust", a serious issue revealed through the increasing media reports in past decades about financial frauds, academic deceit, chemical spills and food poisonings (Engelmann, Chen, Fischer, Chingyu, & Grossklags, 2019, p. 2). According to a survey conducted in July 2017, the most serious issue in China with almost half (47%) of Chinese respondents considering it as such, was moral decline, ranked as one of the top three most worrying concerns comparing to 15% of total respondents worldwide (Ipsos Public Affairs, 2017). By giving millions of Chinese unbanked citizens with no credit history access to loans as well as the investment opportunities in the domestic market based on "trustworthiness scores without having to prove their financial creditworthiness" China's SCS is anticipated to "boost the domestic economy" (Engelmann et al., 2019, p. 2). Also, Chinese concept of privacy is evolving and individuality "is supposed to extend from the private to the public sphere" thus fairly "losing its private and public boundaries" making the preface of the SCS "hardly perceived as a privacy-violating system in Chinese society", which from a Western perspective might seem as surprising (Engelmann et al., 2019, p. 2).

3.1.2 What SCS is, what it is not, and what it could be

In the Creemers (2014) policy document, Planning Outline for the Construction of a Social Credit System (2014-2020), the Chinese State Council aligns a catalogue of applicable goals as a start points for constructing a SCS by 2020 with the objective to achieve sincerity in social, commercial, and government affairs as well as judicial credibility through establishment of standard systems, regulations, and underlying laws for SC (Chorzempa, Triolo, & Sacks, 2018). The document articulates the necessity of such system due to globalisation where implementation of economic structural reform is of high importance in order to minimize economic risks and "deepen international cooperation and exchange" through establishment of global reputation (Creemers, 2014, para. 8).

According to Shazeda Ahmed (Wessling, 2017), a PhD in Information Systems & Management at the University of California, Berkeley, and former Visiting Academic Fellow at MERICS, one of the prominent SCS scholars and experts, her research shows that SCS is meant to incentivise people through a system of punishments and rewards to act morally; it is meant to make up for trust deficit in Chinese society and adds in one of MERICS podcasts:

"Enterprise and industrial SCS are meant to delegate government responsibilities to technology, sensors that can detect factory that isn't meeting with pollutant, face recognition tools that can identify jaywalkers, and they want to deduct points from their SC scores, and are considered independent objective tools for doing the work that traffic cops and outside auditors are responsible for" (2:44).

The words Ahmed sees as a ways of making individuals, enterprises, and whole industrial sectors as well as government itself more sincere by observing a wide array of demeanour and come up often are integrity, morality, and honesty, and those things that government want to employ IT to fix range from trivial things like jaywalking to industrial pollution (Wessling, 2017). It is therefore anticipated, that the powerful tools of interagency data sharing, data mining, and predictive algorithms would empower this so called institutionalized reputation to enable the government allocation of its resources, including its rewards and punishments, in more precisely aimed and personalized ways, and thus effectively bring it closer "towards the personalization of law, regulation, and the delivery of government services in general" (Dai, 2018, p. 13).

SCS remains fragmented at the current stage being built at national, provincial, municipal, and ministerial levels having unclear consolidated form (Engelmann et al., 2019). Yet implementation is still in its early phase, several pilots contour what SC is on track to grow to be as some provinces have defined their own local SCS rules, and separate economy sectors are also developing pilots, however these programs have shown limited effects (Chorzempa et al., 2018). Notably, some companies have a special role in the SCS as it also "takes companies, government departments and judicial organizations as its targets", thus since 2015 eight companies were given authorization to run individual SC services with the objective to employ pilot SCS programs and experiments (Engelmann et al., 2019, p. 2). Ahmed (Wessling, 2017) articulates why Chinese government is not hesitant to cooperate with this private companies in such a sensitive issue:

"I think it's because private companies like Tencent and Alibaba have already collected troves of personal and behavioural data from Chinese citizens, they are constantly working to improve algorithms they deploy to make decisions about their users, they have the personnel that have the technological expertise to make the apps and the sensors that go into SCS more user friendly, more modifiable, more rapidly scalable and interconnected with array of other services that people use every day" (3:27).

However, none of those companies received renewed licence to proceed with individual SC services and experiments after the initial two-year trial period ended in 2017, instead, coincidently with the China Internet Finance Association run by the People's Bank of China, they became common shareholders of Baihang Credit company, which in February 2018 received the first and so far the only SC scoring licence (Engelmann et al., 2019). Behind this decision, as Ahmed (Wessling, 2017) sees it, is:

"In foreign media the reasons that are given are that the state feels that the companies have a conflict of interests, that their primary goal should be to ensure that the SCS makes people follow rules, but instead as private companies their goal is to make profit...I suspect it's being used to cover up the state's discomfort with the companies that have too much power because they have accumulated so much data on hundreds of millions of people but the widespread use of the private companies issued SC score is to unlock all sorts of perks, might have also moved too quickly for regulators' comfort which is often the case with new technological development. Another reason that I've seen provided in Chinese sources, not so much in foreign ones, is that the state felt that there were insufficient protections for citizens' privacy, because the companies were collecting data that was seen as irrelevant to the purpose of SC scoring, they probably weren't taking enough precautions to ensure that personal information was being securely stored as free from risk such as tempering, illegal sales being used to blackmail people, all of this which is increasingly common in China" (4:20).

The biggest challenges from the government's point of view in setting up a such a comprehensive system, in Ahmed's (Wessling, 2017) opinion are "The privacy and information security protections that are absent, unclear guidelines for correcting inaccurate credit information or requesting credit repair. On the government side there's unwillingness to build platforms because of competing departmental interests and unclear division of labour" (5:49). In a most recent interview Ahmed (Tai, 2019) circumscribes that although technically a lot of the initial goals were already achieved, there is no unified structure regardless it being presented like a national level comprehensive unified system, as it still does not seem that such thing currently exists.

The only really functional part of the SCS, as it is today, are blacklists which are its integral part and there are, for example, court order defaulter blacklists, blacklists for workplace safety infringements or for the people who misbehave on trains or airplanes, which is what they are aimed for in the first place, and according to Creemers (Kuo, 2018) there's now also a system that recognizes people who are on multiple blacklists. Thus, there is no single one SCS but there are hundreds of SCSs with the similar logic that together make up a sort of an SCS ecosystem (Kuo, 2018). All governmental SCSs are based on infringements of the existing laws and regulations, therefore for the time being can be seen only as an amplification devices for the enforcement of the existing laws and regulations (Kuo, 2018).

Media outside China have wrongly explicated that a credit score is being computed, as at least in the contemporary design of the SCS as determined by von Blomberg (2020), there is merely the comparably straightforward concept of "blacklists for trust breakers and redlists for the particularly trustworthy that have been set up in different contexts and on several levels" (p. 121).

On June 23, 2021, Jeremy Daum, a senior research scholar in law and senior fellow at the Paul Tsai China Centre; Dai Xin, an associate professor of legal theory at Peking University Law School; and Vincent Brussee, an associate analyst at the Mercator Institute for China Studies (MERICS), participated as panellists in a most recent webinar on the SCS topic as some of the most prominent scholars and experts in this field of study to grapple with common myths and misapprehensions about the SCS, which was hosted by The Diplomat.

What we hear or read about SCS, as Daum (The Diplomat, 2021) articulates, is often "a dystopian scenario, something about algorithmic reputation scoring mechanism based on real-time monitoring through big data tools generating a score that, as Vice President Pence said, controls virtually every facet of human life" or "as Wire magazine once said dictates one's place in society", and adds that "the reality of SC is both, more complicated and far less exciting" (3:00).

There is a SCS, however it is just much distinct from the mainstream, mostly Western perception "that is really only tangentially related to what SCS actually is" as Daum (The Diplomat, 2021, 2:42) explains. Chinese citizens do not have a SC score as it is not how the system has been designed, neither do now nor will in near future, because China's SCS is not concentrated on rating individuals, although the system entails the component that deals with individuals. Its primary concentration is on businesses, thus corporations and organizations. China's SCS is mainly a record of infringements of legal obligations and law, though with tightly regulated policy what information can be recorded and made public (The Diplomat, 2021).

The actual SCS in China has to be pragmatic, feasible and useful which makes it quite complex especially since it is still a developing system that keeps changing over time, including its original concept which has changed significantly since the initial version (The Diplomat, 2021).

Dai (The Diplomat, 2021) explains that SCS has three key components: educational publicity, financial and regulatory, which are not unified, however the primary is actually just one, the financial followed by the other two. Digitalization of government processes is pretty much all what government has accomplished for ordinary individual citizen, the mere reduction of paperwork. He argues that SC score is actually non-existent. Though Dai (The Diplomat, 2021) emphasizes that "business people do care about SCS and also the evaluation kind related SCS" because they much care about two aspects "their ability to borrow money

to secure financing" and "their status of regulatory compliance or consequences of noncomplying" (16:44).

What has so far been created, Brussee (The Diplomat, 2021) argues is a fragmented ecosystem of emerged data islands. We cannot even think in terms of big data, AI or SC scores until data sharing is effectively working and shared data ecosystems and standards are set up, and even so there is a non-ignorable amount of indications that "SC scores are not the way forward" (The Diplomat, 2021, 27:11). The authorities are well aware that although AI may be 99% accurate, on a size of population like China, those false-positives or false-negatives may result in vast amount of errors which apparently already formed a level of awareness that AI is not yet ripe enough to be used for market regulation and for the majority of well-behaved citizens (The Diplomat, 2021).

The advantage of current low-tech nature of SC is its flexibility as it can be quite fast adopted to new policy areas and priorities, what has just been the case during the COVID-19 pandemic, where numerous regulations were released within a matter of weeks to cope with all these restrictions that were forced during the lockdowns, and then use the incentives and publicity like some kind of SCS tool to arrange smoothly return to workplace (The Diplomat, 2021).

Nevertheless, Brussee (The Diplomat, 2021) believes, that SC is "really going to be and remain a defining feature of governance in China simply because it offers tools to enforce regulations more strictly, to share data across these different before closed infrastructures" (28:32).

3.1.3 Is SCS first, only, and unique rating system?

Western businesses have entirely accepted compliance cultures that require surveillance practices as well as data-driven systems to minimize risks and coerce behaviours which have become quite ubiquitous in the private sector, and when convenient the state secures itself access to that data (Backer, 2019). The West does not linger much behind China in its excitement and endeavour for SCSs, Becker (2019) notes, as he finds "Scandinavian consumers voluntarily having microchips implanted under their skin to facilitate daily transactions" or the widespread regimentation of "behaviours through consequence-bearing rankings" in form of credit scores or products and services ratings and reviews (p. 214). Nor the West lingers to adopt the "transformative potential of social credit–like systems to convert the individual from an autonomous being to a source of values-laden data" (Backer, 2019, p. 214).

With the success of the internet, particularly social media, the significance of reputation has been revitalized to take on a new meaning and importance. Keeping and fostering one's good name, whether as an individual, product, corporation, or brand has flourished into an immense business (Clippinger & Newmark, 2011). There certainly is no greater reputation

generator than Google, whose widespread page ranking algorithm is a trusted global reputation system that employ social or link popularity metrics equipped with relevance metrics not only to funnel search queries, but also to auction off such queries for targeted promotion, which has created a multibillion-dollar industry for trading and optimizing reputations (Clippinger & Newmark, 2011). More apparent types of reputation and recommendation systems, such as those used by Yelp, Amazon, eBay, among others, regularly publish digest appraisals, much like thumbs-up or thumbs-down rulings upon ill-fated individuals, products, hotels, and content which can have real and enormous economic power. A poorly rated product on Amazon rating can be predestined to get wiped out off the market (Clippinger & Newmark, 2011).

For instance, a virtual trading community of strangers like eBay would not be feasible without the trust building reputation system that empowers sellers and buyers to rate each other based on transaction experience; as well as Amazon, where "the presence of a scoring system that allows readers to vote on a review's usefulness, and uses such votes to point customers to the most useful reviews and socially reward the most successful reviewers" (Dellarocas & Newmark, 2011, p. 1).

In the contemporary world, law and the traditional methods of enforcement are quickly being displaced with the compliance systems and policing, as the framework through which states or corporations govern, which "shifts the function of law from methods of command and obedience to systems of compliance and incentive" (Backer, 2018, p. 47). Most of the SC components have already been developed in the West, however the fusion of those components into a single ecosystem and their seamless operation would be a well greeted innovation (Backer, 2018).

It is therefore as necessary to handle data generation as it is to handle the analytics and aftereffects derived from the data as China's SCSs are focused on ratings which are obtained from data generated by what is being rated (Backer, 2019). "Data collection is coordinated between state and private organizations, and its extent now rivals that of the more loosely coordinated systems in the West", and both systems pursue to "safeguard the integrity of their data and the confidentiality of their analytics and algorithms", however privacy is comprehended in a different way – it is "inherent in individual autonomy and rights in the West, but has a more public and communal character in China, where it is grounded in the responsibilities of the state" (Backer, 2019, p. 211). Yet Westerners have established vigorous marketplaces for information while Chinese SCS recommends a higher degree of "central planning and coordination for generating data as well as rewards and punishments" (Backer, 2019, p. 211).

Reliant on the technology at reach, the prospects for data-driven analytics with aftereffects match the visions of those creating the ratings which is the junction of big data, SC and AI (Backer, 2019). Big data is the harvested and aggregated information required for the development of analytics aimed to achieve the objectives of those with the authority or

interests at stake to set behaviour parameters (Backer, 2019). The means by which vast amounts of data can be integrated into models that are able to learn to debug data sources and also modify algorithms by itself are provided by AI (Backer, 2019). Traditional credit scoring however does calculate the score based on some algorithm, but to Dai (The Diplomat, 2021), this algorithm doesn't seem like AI at all and is pretty sure that there is no machine learning involved; that those are mostly rule-based algorithms and not a dynamic machine learning AI embodiments.

In effect, as Backer (2019) states, these are submission systems already well customary to Western corporations – but not yet to the state. Raw versions of such systems in disciplining labour have been already applied by businesses for years now. Its transmission to the public sector is what makes the Chinese system inventive, with its use first through and later in lieu of law to punish and reward behaviour considered as in need of attention (Backer, 2019).

"Sometimes, these integrated credit scorings are not done with the complicity of the parties; where Chinese SC speaks to integrity and social obligation, Western constructions of private SCSs speak to risk" (Backer, 2018, p. 23).

3.1.4 How is it designed to influence society?

Instead of trying to enforce compliance with traditional legal and administrative mechanisms, the government is endeavouring to make compliance feel like gaming, which as Botsman (2017) notes is where this new system reveals a clever paradigm shift; a method of social control decorated in some points collecting reward system; a gamified subordination.

One way to effectively influence society is through intervention mechanisms which are described as target instruments capable of identifying what to aim for and what to avoid with a help of techniques which steer people's options towards guidelines built on scientific evidence (Beaudoin, 2019).

Surveillance, which is cardinal to China's SCS, should here be comprehended as an accumulation of values, methods, relationships, and judgments obtained through management of sophisticated systems for data harvesting and analytics, as well as with punishment and reward behaviour management algorithms. Thus, what had once been comprehended as surveillance and observing, has been transmuted into a sophisticated method of governance when it incorporates into systems of algorithmically structured data driven processes of conformity with significant incentive in form of rewards and disciplinary rudiments, shifting it from being just means of government to being a government itself (Degli Esposti, 2014).

The system is developed around the idea of conformity: "the way one complies with law and social obligation will be as important as the fact that one complies at all", though it was originally meant to be more comprehensive (Backer, 2019, p. 211).

"China seeks to develop a singular and coherent approach to data driven analytics and the algorithms that can be used to manage society in all of its aspects" (Backer, 2018, p. 41). In case of success, this effort to supplant profound systems of analytics supervised by technical administrators and political officials for the conservative profound systems of regulation and law supervised by bureaucrats and judges is matchless, and might revolutionize governance theory and may likely serve as a modelling tool for the organization of developing countries (Backer, 2018).

The objective of SCS is to trace and rate everyone's actions with which it provokes the question what role is left for traditional law in an environment where all actions deliver almost "real-time consequences" as it also implies a distinct "role for law, as a means by which the system's own integrity is monitored", however such advancements are probably years away (Backer, 2019, p. 213). In that way SCS might "revolutionize the role of law in the political order", transferring it from a "set" of primary directives to a "means" for managing and forming the system of behavioural "control" and would "resemble" that of law and government intervention in markets aimed to guard the "integrity of market functions" and maintain main "operating principles" (Backer, 2019, p. 213).

One of the researches revealed that "students are being thought of SCS as an asset and a label that will determine their careers they are eligible for among other and choices for their future" (Wessling, 2017, 8:37). SCS may also be genuinely appealing due to its prospective role in diminishing widespread dishonest activities (Chen et al., 2018). Such a sweeping social control scheme with all its legitimacy can barely "rest upon effectiveness alone", and it is uncertain if and to what degree the SCS has actually enhanced trustworthiness (Chen et al., 2018, p. 28). The question whether "social trust and personal morals can be imposed by a system reliant on punishments and incentives" remains unanswered (Chen et al., 2018, p. 28). Ahmed (Tai, 2019) notes also that a lot of legal scholars are arguing that the difference between illegal and untrustworthy needs to be ironed out because the second one is very big.

3.2 Is SCS perceived as a punishment system or as a rewarding system?

Mulder (2008) states that penalizing non-cooperation and rewarding cooperation have a direct impact on cooperation due to its instrumental reasons, however in social decision making, they may as well elicit moral concerns as they flag cooperation as socially accepted and non-cooperation as socially objected, and she further argues that punishments do it with a bigger magnitude than rewards as they convey a mandatory rule while rewards convey a voluntary rule, and her research shows that in such way moral concerns are nurtured either due to "increasing moral concerns" or "preventing moral concerns to decrease" (p. 1441).

Figure 6: The joint reward and punishment mechanism of China's SCS



Source: Liang, Das, Kostyuk & Hussain (2018).

Mulder's (2008) first experiment demonstrated that "in a social dilemma, the concept of punishment increased cooperation and the concept of a reward did not", while the second experiment demonstrated that participants showed more displeasure towards a wrongdoer in case of a punishment for non-submission than in case of a reward for submission (p. 1436). Hence these results can be found as a clear indication that "punishing non-cooperation more strongly foster moral concerns regarding cooperation than rewarding cooperation" (Mulder, 2008, p. 1436).

For the specific objective of changing only people's behaviour, rewards may serve better than punishments, though in case it is desired, besides changing their behaviour, that people become aware of the moral correctness or incorrectness of their conducts as well, punishments seem to be more capable than rewards to accomplish that goal (Mulder, 2008).

Perfect way would of course be to change behaviour in a moral domain by merging rewarding the preferred behaviour and punishing the unpreferred behaviour, however as usually it is too complex or resource consuming, instalment of a punishment rather than a reward is more recommended as it more firmly conveys the moral message (Mulder, 2008).

3.2.1 Punishment and reward mechanisms and their utilization

In Memorandum of Understanding (MoU) enacted punishments that are now part of the SCS generally do not outreach what has been specified as "administrative penalty" before SC went live (von Blomberg, 2020, p. 128).

Individual Rewards	Individual Punishments		
Lower tax rates	Travel restrictions		
Discounts on utilities	Blocking purchases of train/plane tickets		
Deposit-free rentals	Visa restrictions		
Lower interest rates	Hotel restrictions		
Faster check-in at hotels and airports	Throttled internet speeds		
Faster internet speeds	Restricted access to higher education		
Increased access to public services	Job restrictions		
Discounts on public transportation	Higher taxes and loan interest rates		
Faster processing of travel visas	Restrictions on property ownership		
Shorter wait time at hospitals			
Increased visibility on dating apps			
Firm Rewards	Firm Punishments		
Commendations and positive publicity	Warnings		
Removal of red tape and reduction of state	Blacklisting mechanisms		
regulation	Market withdrawal and shutdown of e-		
Access to markets for public services	commerce accounts		
Preferential bidding on public contracts	Circulation of criticism to business partners		
Granting of accreditations and qualification	Public shaming/censure		
certifications	Red tape and increased administrative		
Policy support	burdens		
Administrative approvals	Unfavourable loan conditions		
Tax incentives	Higher taxes than compliant competitors		
Access to preferential credit services	Restrictions on stock or bond investments		
Access to investment opportunities	Decreased opportunity to participate in		
Open markets and unrestricted foreign	publicly funded projects		
investment opportunities	Mandatory government approval for		
Expedited processing of permits and visas	investments, even in sectors where market		
	access is not usually regulated		
	Managers denied tickets for high-speed rail		
	or international business flights		

Table 2: A system of rewards and punishments for individuals and companies

Source: Aho & Duffield (2020).

Rogier Creemers, an Assistant Professor in Modern Chinese Studies at University of Leiden, and a PhD in Law, a co-founder of DigiChina, a joint initiative with Stanford University and New America and most cited SCS scholar and a prominent expert, explains that the first, the broadest and the most authoritative blacklist, which is in fact the judgement defaulter blacklist, is run by The Supreme People's Court and their principle is quite obvious and simple (Kuo, 2018). In case you have been convicted of a specific offence and you haven't met the terms of your conviction, or you haven't paid your fine or compensation, or you haven't met the judicial order that was meted against you, then you end up on that blacklist, and if you end up on that list, you can't become a senior corporate official, or you might find it more difficult to get a loan (Kuo, 2018). But also, for example, if you don't have the money to pay your fines, then it shall be considered that you don't have the money for any luxury consumption as well, which means that you can't spend money on private schools tuition, or on flying or first class travel on high-speed trains, or stay in luxury hotels, however you can still get education or travel but you'll be allowed to enrol in public schools only, or

purchase tickets for slow trains only that stop at every station and you'll be spending the night in some low cost traveller inn, because that blacklist is very much targeted on debt defaulters (Kuo, 2018).

Aho and Duffield (2020) see the SCS as principally designed to operate based on a dynamic system of customized punishments and rewards linked to credit scores, and have presented a compilation of some of those that have been contemplated by authorities with the objective to address and mediate the most common issues present within a population, and have been delineated within the Planning Outline as well as identified in the present literature on SCS (as shown in Table 2).

Von Blomberg (2020) finds that receiving bank loans with complimentary conditions, better treatment in public services, and receiving scholarships are just a few examples which portray the range of rewards, while punishments entail rejection or limitations on receiving social welfare, lending money, and business qualifications and licenses renewal. Penalties among other include increased taxes, reduced options to apply for public contracts or denied participation in public budgeting projects, and "mandatory government approval for investments in sectors where market access is not usually regulated" (von Blomberg, 2020, p. 121). Being on a blacklist for example consequentially translates to being restricted from buying publicly traded stocks, being inappropriate applicant for civil service jobs, and even being denied access to public places, among others (Orgad & Reijers, 2020).

3.2.2 Levels of implementation and enforcements

"A wide range of joint sanctions" that promote the underlying idea "trust-breaking here, restrictions everywhere" and force compliance has been established by the central government's policy documents for those on the Blacklists and "failing to comply with a court decision" may result in several penalties that might not even have anything in common with the principal form of misconduct at all (Chen et al., 2018, p. 17).

Blacklists are public therefore apart from the fact that there are penalties assigned to being blacklisted, the naming and shaming element is also present and engaged, which is essential because SCS doesn't target just individuals but it also targets businesses (Kuo, 2018). The blacklisted defaulters, having their information widely publicized in such a manner, have faced reputation-based restrictions from banks, consumer credit agencies, and business partners, while in some localities they have also faced public shaming by having their names published in newspapers and online media as well as being displayed on large screens and billboards within the public infrastructure (Dai, 2018; Orgad & Reijers, 2020). In a more recent example, online media companies have been required to create a blacklist for web users who publish improper posts, with a new rule issued in August 2017 by the national internet content regulator (Dai, 2018).

Nine government agencies from Huaibei City conjointly put up a scheme in 2017 that aims at employers that "default in bad faith" on workers' payments which in such case get blacklisted and under this regime "face restrictions imposed by multiple authorities" in case they "apply or bid for future government projects" (Dai, 2018, p. 34).

Meissner (2017) found that companies are steered to regulate themselves as old policies have become self-enforcing and government interfering unperceived due to this punishment mechanism and sees the introduced China's SCS as an innovative big data enabled toolkit for market participators' behaviour observing, rating, and steering, in a more comprehensive way in comparison to current credit rating mechanisms.

What the SCS "aims to bring" to government's "internal control practices" are new categories of information that prompts an even broader assortment of "disciplinary incentives" that augment the existing internal supervision and incentives upon agencies and officials (Dai, 2018, p. 39). Although not the same types of "sanctions imposed on private defaulters" can be applied to the "similarly blacklisted government defaulters", blacklisted "individual officials" now encounter ramifications "not only within the bureaucratic system", such as rebuke, negative evaluation, disqualification for honours and awards, downgrading and even discharge, "but also outside of it, such as restrictions on travel and real property purchases" (Dai, 2018, p. 39).

The redlists are in contrast to blacklists those which keep tracking of individuals and firms behaviours considered as honest and trustworthy, Dai (2020) explains, those that government want to praise and encourage, which pinpoint those individuals and organizations considered to be in outstanding conformity with laws, regulations as well as other social norms, therefore those labelled as trust-keeping (Chen et al., 2018). In Chinese language the red colour generally connotes positive emotions or appraisals, which may much differ from its connotation in English language (Dai, 2020).

According to Chen et al. (2018) there seem to be no particular uniform standard for redlists, and agencies in charge of wide range of different sectors have their own redlists which for example may include businesses that pass customs authorities verification, top rated taxpayers, and even volunteers. Redlist reputation naturally elicit benefits like fast lane government services, simplified bureaucratic procedures and less frequent inspections (Chen et al., 2018).

There are slightly different approaches in local regulations, however many suggest that SCS based punishments and rewards are anticipated to be the principal mechanisms for imposing the legitimate civility norms (Dai, 2020). Building self-enforcing apparatus for business regulation with persistent monitoring and evaluation of companies' economic as well as non-economic behaviour which shall generate firm incentives for corporations to align their business related operations and decisions with the regulations and laws as well as with the

industrial and technological policy objectives enacted by the government, seems its ultimate goal (Meissner, 2017).

It is just not clear, Ahmed (Tai, 2019) notes, what are the objectives the government officials are even going for, whether it is to diminish the number of people on blacklists or diminish the number of people who break the law in these specific ways that are very repetitive, and further emphasizes: when "to make society more trustworthy" is set as a goal but then you don't have the benchmark, it's difficult to know if you have succeeded (33:39).

Massive data aggregation on company endeavours by government agencies and authorized rating entities forms the centre of the introduced SCS therefore "companies should take the accelerating implementation of the system and its impact on doing business in and with China very seriously" (Meissner, 2017, para. 6).

While the discussed mechanisms seem to have a domestic focus, the impact of SC isn't expected to stop at China's border as spill over effects across border and national jurisdictions are seen as another significant feature of the SCS (Chen et al., 2018). All foreign enterprises and entities in China seeking to establish presence in China, whether they are representative offices or subsidiaries, are subject to general business registration and sectoral regulations that underline the operation of the SCS, therefore must first apply to the relevant authorities for business registration and licenses before carrying any activities, during which they will be assigned an SC Unicode and become subjects of the SCS (Chen et al., 2018). Assigning foreign entities to comply with laws and regulations in China and to not harm the social public interest and national security of China, allows the Chinese government to secure a regulatory grasp over these entities and steer their behaviour to fit its interests (Chen et al., 2018).

3.3 Is SCS empowering the right stakeholders?

Stakeholders are any individual, group, organization or institution who influences or is influenced by an individual's, group's, organization's, or institution's action, decision or policy and stakeholder theory suggests that organizations generate externalities that affect some partakers, that can be internal or external to the individual or organization (de Camargo Fiorini, Roman Pais Seles, Chiappetta Jabbour, Barberio Mariano, & de Sousa Jabbour, 2018). Stakeholders can be individuals and societies, they can be customers and suppliers as well as social and government entities, they can be groups or organizations that function nationally or internationally, such as non-governmental organizations (NGO), religious groups and communities with their subcategories such as family units, property owners or users, farmers, and businesses. Organizations need to pinpoint the stakeholders that their decisions will or might affect and recognize their needs as well as concerns (Wilburn & Wilburn, 2016).

Stakeholders may be divided into two groups: vested stakeholders are those who "have a right to something tangible or an interest in the future of something that is a stake in the organization's initiative or decision", and would have a say and a vote in the decision once it is introduced to them, while non-vested stakeholders "would have only a voice and could be overridden by the vested stakeholders and the organization" which for example could be "governments who want economic growth, suppliers who want customers, or NGOs campaigning for global protection of water, forests, or animals" (Wilburn & Wilburn, 2016, p. 217).

As different stakeholder groups may have distinctive perception of decision impacts, therefore to best meet their anticipations and avoid inadvertent harmful effects, the organization shall collect as much as possible information about its stakeholders and their necessities (de Camargo Fiorini et al., 2018). Being that organizations operate in worldwide communities with diverse needs, norms, and cultures, understanding the stakeholders that have concerns regarding their decisions is essential. Nowadays social media is everywhere, and it is available to stakeholders to be easily used as the "platform to form alliances that either support an organization's decisions or attack them" (Wilburn & Wilburn, 2016, p. 220).

3.3.1 Which stakeholders is SCS empowering?

"The idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you". The keystone of democracy and venerated idea, enthusiastically in theory praised by nearly everybody, is "the participation of the governed in their government". The participation is also characterized as reallocation of power where "citizen participation is a categorical term for citizen power" (Arnstein, 1969, p. 216). Therefore, participation is a reallocation of power that facilitates currently from the economic and political processes excluded citizens to be purposefully involved in the future; a strategy by which individuals partake in deciding the ways information is shared, objectives and policies are set, programs are managed and gains like contracts and sponsorships are allotted; to have a "share in the benefits" of the wealthy society (Arnstein, 1969, p. 216).

"There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process" (Arnstein, 1969, p. 216). This disparity is splendidly narrowed in a poster painted by the French students (in Arnstein, 1969) clarifying the student worker revolt (see Figure 7) which emphasizes the underlying argument that participation without reallocation of power is a meaningless and infuriating process for the powerless. It serves the powerholders as excuse to argue "that all sides were considered" while it still "makes it possible for only some of those sides to benefit". "It maintains the status quo" (Arnstein, 1969, p. 216).

Figure 7: French student poster (In English: I participate; you participate; he participates; we participate; you participate...They profit)



Source: Arnstein (1969).

"A typology of eight levels of participation", for graphic presentation "arranged in a ladder pattern" with each rung relating to the scope of "citizens' power" in defining the end results (see Figure 8), may help in analysis of this complicated issue of identifying levels of empowerment (Arnstein, 1969, p. 217).



Figure 8: Eight rungs on a ladder of citizen participation

Source: Arnstein (1969).

The bottom rungs of the ladder are Manipulation (1) and Therapy (2). These two rungs illustrate "levels of non-participation" that have obviously been designed by some to be used as replacement for true participation as "their real objective is not to enable people to

participate" in projects preparation or steering, but to "enable powerholders to educate or cure the participants" or engineer their support, which shall be deemed as both dishonest and arrogant (Arnstein, 1969, p. 217).

The middle three rungs advance to levels of bare minimum that allow the participants to indeed hear and be heard, however under these conditions they still don't have the power to make sure that their views will be noted by the powerholders, and if participation is limited to these levels, there may be no muscle to follow it through, hence no guarantee of altering the status quo. Informing (3) citizens of their rights, responsibilities, and options can be highly important first step toward authentic citizen participation, although mostly as a one-way flow of information with no feedback channel and no negotiation power, especially when information is delivered at a late stage in planning. But if it is not done in combination with consulting (4), this rung of the ladder is still a deception as it offers no guarantee that citizen concerns and ideas will be taken into account. It is at Placation (5) level that citizens begin to have some degree of impact though bare minimum is still evident, in other words, it is simply just a higher level tokenism because the ground rules allow citizens to recommend, but preserve for the powerholders the continual right to decide (Arnstein, 1969).

Further up the ladder are levels of citizen power with improving grades of decision-making authority where they can enter a Partnership (6) that empowers them to negotiate and take part in trade-offs with established powerholders, in other words, the power is in fact reallocated through this process. Sharing planning and decision-making assignments through structures as joint policy boards and planning committees is agreed and after the ground rules have been set they are not subject to unilateral change (Arnstein, 1969).

At the topmost rungs, with Delegated Power (7) and Citizen Control (8), citizens obtain the majority of votes or full managerial power where they have the position to assure responsibility of the program to them. People are basically demanding the degree of power and control which assures that participants can govern a program or an organization and be full in charge of policy aspects and negotiation (Arnstein, 1969). Obviously, the eight-rung ladder is oversimplification, however it is meant to help in demonstrating the point that has been missed by many – that there are significant categories of citizen participation. (Arnstein, 1969).

Sketching on the original work of Arnstein's (1969) "ladder of citizen participation", some other researchers forged similar "scales of stakeholder empowerment", one of them for example imaged "a simpler scale with a split between the process owner and the participants" where relations can be categorized in "four main levels" (see Figure 9): Information, where "stakeholders only receive information" delivered by the owner of the process; Consultation where stakeholders' viewpoints are evoked by the process owner; Cooperation where stakeholders' viewpoints are plainly "taken into account and decisions are co-produced with the process owner" in the form of power sharing; and Delegation where

"stakeholders take over a task" and their decision is acknowledged by the process owner in form of delegated power (Späth & Scolobig, 2017, p. 190).



Figure 9: The four levels of stakeholder empowerment

Related to this is the idea that inner management of private as well as state-owned companies could be superintended through SCS. The West gradually counts on regulations that restrict "prosecutorial discretion to act against corporations in return for their development and operation of compliance systems"; China appears prone to use SC mechanism for resemblant objectives. That requires data generation, models as a backbone for developing analytics, and algorithms as replacement for administrative discretion in assessing behaviour and enforcing aftereffects, for which the adequate support for the creation of precise statistics is essential (Backer, 2019). Statistics should be collected by all stakeholders, by practically all elements of society not just by the state. "Everything and everyone should become both objects of social credit and generators of the data necessary for imposing algorithmically determined consequences" (Backer, 2019, p. 212). While all stakeholders generate data, the state becomes the supreme keeper and caretaker of that data with which SC reallocates the power of data away from markets and reinforces the state's capability to "comprehensively control behaviour" (Backer, 2019, p. 212).

In Lin's (2019) opinion, for the systematic and robust progress of market economy the creation of SCS is more than welcome as well as an important necessity and objective need with its potential to reduce information asymmetry and uncover advantages and disadvantages of social subject credit through the mechanisms of information sharing and combined punishments and rewards. SCS incorporates entire social forces to honour good faith, penalize trust-breaking and generate favourable credit environment, as it is quite common that companies are confronted with financing limitations that are not beneficial to the constant need for expansion and development of companies (Lin, 2019).

While state and corporations have aggressively expanded their capacities to observe the population, the comprehension of citizens and their capability to hold them accountable has

Source: Späth & Scolobig (2017).
faded and "the absence of a civil society stakeholders further enhances the information asymmetry between those holding the data and ordinary people" (Liang, Das, Kostyuk, & Hussain, 2018, p. 434).

Hoffman (2017) finds that certain companies and separated security agencies are reluctant to data sharing or to be incorporated, inducing worries that the enormous complexness and amplitude of this infrastructure's development may be too optimistic and thus cause eventual blowback and destabilize the state's ability to administer society. Moreover, as Liang et al. (2018) note, the SCS is at present merely a display of credit information (e.g., blacklists and redlists) rather than a demonstration of a complex and predictive approach, thus it is quite ambiguous about how data accumulation is to be used for self-operating computational analysis, and how the government is empowered by big data analytics to improve its surveillance capability.

3.3.2 Identifying the metrics and what metrics may it extend to next

The system itself is designed to pivot around the gamification of trust encouraging individuals to display their high credit scores in their social networks and share them with their peers (Ramadan, 2018). Sesame credit builds its score upon private data such as social status and connections, credit history, and behaviour patterns. The score would among other correspond one's educational and professional background and one's social network together with the credit score of those connections, which would therefore mean that befriending people with high scores while unfriending those with low scores would enhance one's rating. Someone buying diapers on a regular basis would be considered as a responsible individual while those playing video games for several hours during the day would be deemed as futile (Ramadan, 2018; Backer, 2019). Consequently, individuals with low credit scores would be penalized as they would be publicly tabbed as untrustworthy. Increased competitiveness between individuals to reach the highest scores possible and maintain it on such high levels would be highly anticipated. It is important to emphasize that "by the mere fact of being connected online, individuals will be screened for their online activities and scored accordingly in an aggregated form" (Ramadan, 2018, p. 98). As consumers' lives are being evermore closely entangled with the internet for nowadays basic needed services, "there might hardly be any option to opt-out of this rating system" (Ramadan, 2018, p. 98).

3.4 Effects and consequences of privacy trade-offs and preserving privacy

Another interesting and privacy related argument concerns the eventual legitimization of the SCS as a supreme surveillance system, either national or global, because in order to function properly, any SCS will require the accumulation of an enormous amount of information about individuals, which might bring to question some significant privacy concerns. Yet, numerous Chinese citizens surrender to the SCS because it enables them to show mainly to

the government but also to everyone else that they are good citizens, additionally to the financial or non-financial benefits and entitlements they can obtain (de Filippi, 2019). Because of these benefits, people are eager to contribute to the SCS, often without even thinking of questioning the purpose or legality of the rules it enthrones, and thus voluntarily render information about their daily conducts, even "at the expense of privacy". Even those who might be hesitant to cede their privacy are left with only few options if any at all. Actually, those who will try to protect their privacy and thus disguise or hide their conducts will eventually be disadvantaged, since they will disqualify themselves from the race for being good citizens rewards. The simple decision to preserve one's privacy and a fact of not revealing information, instead of being considered as a reasonable choice encouraged by a "desire to preserve one's privacy", could thus be considered as an indicator that "a person is not a good citizen, because I have a good credit score" to "I have a good credit score, because I am a good citizen" (de Filippi, 2019, para. 14).

Reijers (2019) argues that the SCS does not permit individuals to "choose to act virtuously", but rather dictates them how to do so, thus does not really contribute much to making citizens more virtuous. People no longer need to practice their own resolutions as to how to act; they merely need to conform to the required rules thereby averting them from differentiating themselves from peers within the society (de Filippi, 2019, para. 15). Consequently, people are ripped off the chance to "think for themselves" about something being "right or wrong". Which means that instead of "taking the risk" of behaving in a way that the SCS might deem as an unwanted conduct, they can merely assign part of their virtue to the system (de Filippi, 2019).

4 ANALYSIS, DISCUSSION AND RESULTS

After I have learned about the theoretical background of the topic, carefully scrutinized the case studies and theoretical frameworks, and identified conceptual frameworks, I further summarize the findings through analysis and discussion, and then provide answers to the RQ sub-questions with highlighting relevant findings from previous chapters in order to better introduce the answer to the RQ question which is given and illustrated at the end.

4.1 Analysis and discussion

By scrutinizing SC initiatives in China, we learn few lessons. There is no one unified SCS, but several national, local, and private systems forming an ecosystem hosting several subsystems that progressively focus on a common goal. Each with its own data sources, rating norms, evaluation methods, and normative results. Scoring is mainly a feature of private systems, while the most significant ones, local as well as the national blacklists and redlists systems, assign a status rather than a score (Orgad & Reijers, 2020). Even though they include both rewards and punishments, rewards are usually strictly speaking extra-legal, while punishments are primarily lawbreaking related. Although Western media writes about a every aspect of life scrutinizing and for every citizen score generating unified system, those reports are mainly inaccurate and embroidering (Orgad & Reijers, 2020).

Studies show a high public approval of SCSs among Chinese citizens, especially amid wealthier and higher educated urban residents (Kostka, 2018). The SCS is positively portrayed also by the Chinese media, and is seen as a beneficial advancement (Ohlberg, Ahmed, & Lang, 2017). However, the objectives of the system are debated as Western media delineates it as a means of surveillance, deep-seated in a history of social control in China (Hoffman, 2017), while China asserts that the objectives of the national system are establishing a culture of integrity and trust. Though, it is not clear how effective the system is in fostering its proclaimed objectives (Orgad & Reijers, 2020).

"Discipline comes when the costs of choices can be imposed on the individual" and "control comes when aggregated data of choices suggests the turn of policy in terms of managing the range of choices and directing choices toward particular ends" (Backer, 2017, p. 9).

A potential incorporation of the SCS into the rule of law is merely possible after a comprehensive reassessment of the very concept of law. Issues arise from the "lack of a clear concept of trust", thus recognizing "trust breaking as law breaking", as some government sources indicate, which are reasons why the term is a necessity. There are indicators for the establishment of a block of "rules beyond law" which would impose punishments based on mere norms (von Blomberg, 2020, p. 131). Also, through the exercise of naming and shaming, a changing nature of punishments is beginning to show especially in the context of the SCS. A rule of law system, in contrast, conventionally resolves issues by "granting rights to subjects" and requiring legal proceedings "on the grounds of which" issues can be resolved case by case through court rulings, so neither the issues brought before a court nor the resolutions are "systematically re-integrated in the SCS", and are mostly "designed to unfold effects outside of the SCS", in the domain of the "individual or entity which filed the case". Therefore it at most merely "signals a warning to the public", and sets an eventual antecedent for future court rulings (von Blomberg, 2020, p. 132).

The principal element that all SC and rating systems have is control, and while the one of law and regulation is rooted in commanded submission, those of SC and rating systems are rooted in evaluation, incentive, and compliance. However, this distinction in form concerns only means to its realization as it does not change the nature of the objective. This transformation of SC and rating mechanisms to substitute for the assurance of legal authority, at the same time streamlines shifting of the costs of submission from the state to the objects of enforcement. The cardinal control value therefore is the incentives it delivers toward self-enforcement through the association of behaviour with algorithmically selected punishments and rewards, thus reducing enforcement costs usually required for the police function. Yet, law is still required for these self-enforcement systems, although less as a normative and more as a structuring tool (Backer, 2018).

Von Blomberg (2020) therefore argues that the SCS "questions the concept of law, while at the same time stating to enforce it" (p. 132). A punishment and reward mechanism, like the SCS aims to be, might be forthcoming only if it can effectively be controlled by an autonomous external organ with a distinct underlying logic (von Blomberg, 2020). Social management is a "holistic approach" (Hoffman, 2017, p. 4) and SCS with its "reductionist approach" aims to resolve issues by "taking into consideration the overall situation only", instead of delving into details of particular issue (von Blomberg, 2020, p. 132). Therefore it seems to be a "reductionist approach" and "does not resonate" with the essence of "complex systems" (Hoffman, 2017, p. 4). Complex systems are automated and self-learning, and thus able to cope with shifting "dynamics and threats", such as identifying displeased credit subjects internally, and being that the system has no direct feedback on neither the problem nor the solution, the self-learning process is not mobilized or is even hindered (von Blomberg, 2020, p. 132).

Backer (2018) states that in order to conserve the sincerity and integrity of social system ratings and function, to circumvent "systemic corruption", and to ensure proper "fidelity" to underlying political "values and policies", it will be "necessary to consider a SCS of the SCSs". With the suitable supervision, new and mostly unexplored areas for the development of governance, of the rule of law, and of the productive forces of society, will be opened alongside the development of SC and ratings. Even though states and enterprises are working rapidly on building "a reality which will, inevitably, produce its own ideology, its own structures and mechanics", much remains to be done (Backer, 2018, p. 48).

Along with it we are also destined to witness the birth of reputation black markets offering to boost trustworthiness, as some individuals might be quite willing to pay to manipulate their score, comparable to the way that Facebook Likes and Twitter followers can be bought (Botsman, 2017). There is also an increasing challenge in preserving the system secure as hackers, some even supported by foreign governments, could alter or snatch the digitally stored information (Botsman, 2017).

The SCS ought not be ascertained as an all-embracing governance instrument, but just as one "technology-empowered" method of governance "among many", which may "learn from or build on each other", however the differences need to be distinguished. Ideas and objectives for social control in China along with approaches, means and strategies, may emerge from a unified political environment, but the intricacies of organization and coordination of all intervening variables "fragment them as much as they do the rest of China's political and legal landscape" (Creemers, 2018, p. 28).

When "explicit incentives" pursue behaviour change in areas like benefactions to public goods and creating habits, a dispute may likely arise due to intrinsic motivations being crowded-out by the direct extrinsic effect of those incentives. Therefore, in emboldening contributions to public goods, careful designing of the incentives is a necessity to avert unfavourable "changes in social norms, image concerns, or trust" (Gneezy et al., 2011, p.

206). The emerging literature indicates that the use of large enough "incentives for lifestyle changes" clearly work in the shorter run, however in the longer run, the desired habits changes are likely to vanish again. Therefore Gneezy, Meier & Rey-Biel (2011) suggest economists to expand their focus when discussing incentives as a significant and mounting body of evidence advocates that the "effects of incentives" much rely on "how they are designed" and in which form they are distributed, "how they interact with intrinsic motivations", and what is the aftermath of their withdrawal. "Incentives do matter, but in various and sometimes unexpected ways" (Gneezy et al., 2011, p. 206). Their findings show the significance of the social network in boosting the effects of incentives for changing habits and behaviour of individuals which is a contemporary topic with an increasing interest (Gneezy et al., 2011).

"The dynamic emerging from the interplay of two trends", one empowering and the other disempowering Schwab (2017) illustrates with the term (dis)empowered citizen (p. 89). Individuals feel empowered by technological advancements that make collecting information, communicating, and organizing effortless, and are "experiencing new ways" to partake in community life. Simultaneously, individuals, civil society groups and local communities strongly sense that they are being left out from eloquent partaking in conventional decision-making processes, and "disempowered in terms of their ability" to have effect on and be heard by the authorities and sources of power in all areas of governance (Schwab, 2017, p. 90).

There certainly is a serious threat that some authority might exploit blends of technologies to silence or water down activities of clustered individuals and civil society establishments that are in pursue of creating the activities of businesses as well as governments more transparent, and thus fostering change. We have already witnessed that in many countries around the globe governments nurture regulation and policies that constrain the autonomy of civil society groups and shrink or even restrict the space for civil society activities. "The tools of the fourth industrial revolution enable new forms of surveillance and other means of control that run counter to healthy, open societies" (Schwab, 2017, p. 90).

The extent of the "unfolding technological revolution" will lead to social and economic changes of extraordinary proportions that are nearly unimaginable, particularly the conceivable "impact of the fourth industrial revolution" on individuals, society and business as well as on the economy, governments and countries (Schwab, 2017, p. 31).

What Schwab (2017) foresees is that "in all these areas, one of the biggest impacts will likely result from a single force: empowerment – how governments relate to their citizens; how enterprises relate to their employees, shareholders and customers; or how superpowers relate to smaller countries" (p. 31). The disruption that the fourth industrial revolution will bring to current social, economic and political models will therefore necessitate the acknowledgement of the empowered actors to apprehend that they are now part of a

dispersed power system that requires more cooperative interaction settings to succeed (Schwab, 2017).

The fourth industrial revolution according to Schwab (2017) tenders the chance to incorporate the unanswered necessities of roughly "two billion people into the global economy", pushing for further "demands" for already present products and services by "empowering" and linking "individuals and communities" from any part of the world to each other (p. 36).

Greater disintegration and polarization of society and increasing citizen empowerment could give birth to "political systems that make governing more difficult and governments less effective", thus the governments shall undertake the role to timely master the fourth industrial revolution, while identifying the perennial forces that are altering "the traditional perceptions of politicians and their role in society". Which is of an even greater importance as it is happening "at a time when governments should be essential partners in shaping the transition to new scientific, technological, economic and societal frameworks" (Schwab, 2017, p. 66).

Masum & Tovey (2011) question whether the Reputation Society, as they name it, could be nothing more than a compliance enforcing Panopticon which could be easily seized by authoritarians as an opportune and more efficient means of social control since there seem to be no single intervention that will forestall such a sinister outcome. However, they think that measures that can direct the advancement of these systems in a positive direction are already evident, and which partly lie in reputation system design and partly in the development of legislative norms. The manner in which we select to apply reputation systems will also play a crucial role (Masum & Tovey, 2011).

The reputation system design selection can deeply impact a community's culture, turning an otherwise cooperative and friendly community into a rivalrous and even agnostic environment as even if there is no economic benefit to receive, users frequently obsess over scores and rankings. Although those features are utilized to boost motivations to contribute, they may also provoke cunning and antisocial demeanours (Dellarocas & Newmark, 2011).

Apart from trust building, a reputation system can be a significant "source of user loyalty" and a compelling "mechanism for user retention" thus can serve a variety of objectives, such as filtering content and matching users. Therefore comprehending and "prioritizing a system's objectives should be a designer's first task" (Dellarocas & Newmark, 2011, p. 8).

We shall all be convinced that reputation tools matter, that they embody real threats, and that they carry huge potential for enhancing life standards and social advancement. Thus the proper time to embark on seriously cooperating on understanding, designing, and incorporating such instruments is now (Masum & Tovey, 2011).

Gradually, the trustworthiness and development of reputation systems will demonstrate to be of institutional significance, as social networks and online engagements are already much relied upon, and following current trends, users are not far from requisitioning from their sellers and governments more transparency as well as better targeted and more reliable reputation metrics. If the science and technology will work together to provide robust reputation systems, then novel models will emerge to utilize the reputation arms race toward complementary and beneficial outcomes and to spur unprecedented innovation (Clippinger & Newmark, 2011).

4.2 Key findings and results

4.2.1 Is SCS perceived as a coercive punishment system or as a rewarding system and how is it influencing behaviour?

By synthesizing the notions from previous chapters this thesis finds that penalizing noncompliance and rewarding compliance have a direct impact on compliance due to its instrumental reasons, however punishments do it with a bigger magnitude than rewards as they convey a mandatory rule while rewards convey a voluntary rule. Even though SCS is designed to include both rewards and punishments, rewards are usually strictly speaking extra-legal, while punishments are primarily lawbreaking related. Mulder's studies show that the concept of punishment increases compliance, and the concept of a reward does not, and have demonstrated that participants showed more displeasure towards a wrongdoer in case of a punishment for non-compliance than in case of a reward for submission. Also, through the exercise of naming and shaming, a changing nature of punishments is beginning to show especially in the context of the SCS which raises the importance of naming and shaming punishment to a whole new level.

For the specific objective of changing only people's behaviour, rewards may serve better than punishments, however in case it is desired, besides changing their behaviour, that people become aware of the moral correctness or incorrectness of their conducts as well, punishments seem to be more capable than rewards to accomplish that goal. Perfect way would of course be to change behaviour in a moral domain by merging rewarding the preferred behaviour and punishing the unpreferred behaviour, however as usually it is too complex or resource consuming, instalment of a punishment rather than a reward is more recommended because it more strongly conveys the moral message. The programme is yet mainly based on a blacklist system where identified wrongdoers are recorded and published and consequently blocked from specific activities

As an alternative to constraining, motivating, persuading, or simply informing people, nudges push people's behaviour with a help of illogical psychological instruments such as salience, loss aversion, and compliance, as well as with the use of defaults. Therefore, if choice architects intend to alter behaviour using a nudge, they merely need to let people

know about what their peers are doing, and humans are effortlessly nudged by other humans because we generally like to conform. Choice architecture incorporates also several other behavioural tools that influence decisions, such as framing. The framing of the decision setting significantly influences prosocial behaviour, thus shifting from no incentive to a positive incentive can considerably alter the interaction configuration and change the decision frame of an individual from monetary to social. Gamification is generally perceived as a transformation process of any activities, services, systems, and even organizational structures into gameful encouraging experiences to facilitate positive changes in cognitive processes and eventually alter behaviour and there are four ways of design defined that can influence behaviour with deployment of gamification techniques: persuasive, seductive, decisive, or coercive.

4.2.2 Is SCS empowering the right stakeholders and what metrics may it extend to next?

This thesis also finds and describes, that individuals feel empowered by technological advancements that make collecting information, communicating, and organizing effortless, and are experiencing new ways to partake in community life. Simultaneously, individuals, civil society groups, and local communities strongly sense that they are being left out from eloquent partaking in conventional decision-making processes. Their capability to have effect on and be hearkened by the authorities and sources of power in all areas of governance has been disempowered.

The SCS ought not be ascertained as a widespread governance instrument, but just as one method of governance among many that is empowered by technology, and which may learn from each other or build on that, however the differences need to be distinguished.

The SCS is currently merely an expo of credit information rather than a demonstration of a multifaceted and prognostic approach, thus it is quite ambiguous about how data accumulation is to be used for self-operating computational analysis, and how the government is empowered by big data analytics to improve its surveillance capability. Yet such technological enhancements can serve as a mammoth infrastructure that beside empowering individuals, civil society, and government bodies, it also enables attempts of the autocratic regimes to spread and aggravate the prevailing power asymmetry via ubiquitous and omnipotent surveillance, suppression, and control mechanisms.

Although self-tracking may well be acknowledged as a self-surveillance practice it has been more effortlessly accepted in comparison to conventional surveillance because it has been advertised as an empowering technology that pledges making people's lives healthier and happier. Virtual trading communities of strangers, such as eBay, would not be feasible without the trust building reputation system that empowers sellers and buyers to rate each other based on transaction experience. It is anticipated that the powerful tools of interagency data sharing, data mining, and predictive algorithms would empower this so-called institutionalized reputation to enable the government allocation of its resources, including its sanctions and rewards, in more precisely aimed and individualized ways, and thus effectively bring it closer towards the personalization of law, regulation, and the distribution of government services in general.

4.2.3 Is SCS designed as a compulsory privacy for comfort trade-off by default and does it distinguish between privacy and secrecy?

As also already mentioned in previous chapters, secrecy and privacy are not contraries but rather moments in a sequence as secrecy is a result of privacy, which is its cause. Privacy therefore facilitates a decision as to where on the spectrum between secrecy and transparency one wants to be in each setting. Surveillance, whether performed by corporations or governments and cardinal to any SCS, has widespread privacy rights and hence numerous occasions for secrecy, which are progressively used to bereave people of choice in the matter of which part of their lives remains secret. Chinese concept of privacy is evolving, and individuality is expected to outstretch from the private to the public sphere thus fairly erasing its private and public borders which makes the SCS implementation hardly recognized as a privacy-violating system by the Chinese society. A simple desire to preserve our privacy could therefore qualify as an indicator that we have something to hide and thus are not a good citizen.

4.3 Answer to the RQ

Can China's SCS lead to smooth governance and reduce conflicts horizontally (among individuals and/or entities) and vertically (between individuals and/or entities and governing structures)?

What I have discovered in my research is that according to the underlying logic behind the concept of SCS and the way it has been designed with Planning outline policy document, China's SCS which is currently still under development is not concentrated on rating individuals, although the system entails the component that deals with individuals, however merely in connection with its primary concentration on businesses, thus corporations and organizations. Massive data aggregation on company endeavours by government agencies and authorized rating entities forms the centre of the introduced SCS therefore corporations ought to take the hastening implementation of the system and especially its potential impact on doing business in and with China very seriously.

4.4 Model of instrument for measurement of SCS effectiveness

Beside answering the research question, in this thesis I am also looking for a feasible theoretical framework to outline the proposition for the conceptual model that could be developed and used as an instrument to measure how effective the SCS is in fostering proclaimed objectives, and how well it leads to smooth governance and can reduce conflicts horizontally (among individuals and/or entities) and vertically (between individuals and/or

entities and governing structures), because in line with the phrase attributed to well-known management consultant Peter Drucker: "what cannot be measured cannot be improved", or in other words, we cannot know how successful for society SCS is if the success of SCS is not clearly defined and tracked.



Figure 10: Model of instrument for measurement of SCS effectiveness

Adapted from World bank (n.d.) and SolAbility Sustainable Intelligence (2020).

Above (as shown in Figure 10) is an idea of the model which could serve as a SCS effectiveness measurement instrument where intervention mechanisms are merged in two groups, in this thesis identified as independent variables: Surveillance (which consists of surveillance, dataveillance, corporate surveillance, surveillance capitalism, and participatory surveillance) and Behavioural science (which consists of behavioural economics, nudge theory, paternalism, choice architecture, social norms and preferences, gamification, scoring and rating, loss aversion, and fear of missing out), that have an direct as well as indirect effect on World Governance Indicators, which are already measurable indicators of governance efficiency, weather performed by corporations or governments, and in this thesis form a group identified as dependent variables (which consists of voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule

of law, and control of corruption). This model includes also in this thesis identified groups of moderating variables: Privacy concerns, Reputation, and Social capital (presented with already measurable Social Capital Index); which are not affected by the independent variables but have the ability to alter their effects on independent variables. The mediator variable, which is affected by the independent variables, links the independent and dependent variables, and helps explaining how and why the independent variables influence the dependent variables, and are in this thesis identified as Incentives (which consists of rewards and punishments) and Motivation (which tend to be intrinsic or extrinsic).

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

There is merely one ecosystem where several subsystems with a common objective reside but each of them with its own data harvesting and aggregation and rating and assessment norms and methods, rather than the one unified and ultimate SCS. Scoring is mainly an attribute of commercial systems while the more meaningful blacklist and redlist systems designate a status rather than a numerical score, however a shifting nature of punishment is becoming apparent with the application of naming and shaming, particularly in the context of SCS, which should not be looked upon as an all-encompassing governance instrument but merely as one by technology empowered method of governance. Just by the selection of the design of the reputation system, an otherwise collaborative and amicable community may consequently turn into a competitive and heretical environment, as people often obsess over scores and rankings even if there isn't any economic benefit to receive, and although utilising those attributes is primarily meant to enhance incentives for societal contributions, they may as well backfire and thus incite beguiling and belligerent demeanours.

Since this research is entirely based on secondary data collected from the scarcely published Chinese documentation on the SCS, subjective interpretations of the feedbacks from the field, and guesstimates rather than educated guesses based on currently run pilot projects, this research needs to be read with care.

I have prepared a couple of recommendations for individuals and entities to follow in their everyday conducts in order to be prepared for this 'new' future, that this all-encompassing digitalization and data harvesting not just might, but most certainly will bring:

- Develop a comprehensive understanding of the concept of privacy and educate yourself, your employees, and your business partners.
- Enroot trustworthiness and privacy protection into your mindset and in the mindsets of your employees and business partners and embed them into your business.

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APPENDICES

Appendix 1: Povzetek (Summary in Slovene language)

Razvoj kitajskega Sistema družbenega slovesa (SDS) večinoma ženejo naraščajoče skrbi vladajočih struktur v zvezi z medsebojnim zaupanjem in zanesljivostjo v kitajski družbi ter s tem obenem tudi njenega mednarodnega slovesa, ki so posledica naraščajočih nemoralnih vedenj, ki najedajo zaupanje tako znotraj skupin posameznikov, korporacij in vladajočih struktur, kot tudi med njimi. Implementacija SDS torej nudi rešitev s spreminjanjem posameznikovega neželenega vedenja s pomočjo javne objave igrificiranega slovesa v obliki 'poimenovanja in sramotenja' preko strategij na osnovi intervencijskih mehanizmov.

Namen tega magistrskega dela je analizirati možne učinke in oceniti potencialne vplive, ki jih SDS lahko ima na vedenje posameznikov in/ali entitet ter njihovo vodenje oz. upravljanje v prihodnosti, pomagati razumeti trenuten nivo implementacije takšnih sistemov v tehnološkem, ekonomskem in socialnem smislu, ter na osnovi spoznanj predložiti bodoče korake in priporočila z namenom doseganja primerne aplikacije ter večje učinkovitosti in uporabnosti takšnih sistemov za posameznike in entitete kot tudi za oblikovalce politik ter družbo kot celoto. Namen raziskave je prispevati k odpravi vrzeli v literaturi ter ponuditi vsaj svežo perspektivo obstoječih vprašanj in problemov. Praktična implikacija raziskave se nanaša na nudenje pomoči posameznikom in podjetjem kot tudi oblikovalcem politik za bolj informirano načrtovanje in odločanje. Cilj tega magistrskega dela je ustvariti globlji vpogled, ki sega onkraj očitnega; raziskati in oceniti ali SDS meri predvsem v kaznovanje posameznikov in/ali entitet ali pa jih želi usmeriti v samoprisilo in samokontrolo glede njihovih navad, obnašanj in dejanj preko kaznovanja in nagrajevanja, in sicer na račun zasebnosti; identificirati, oceniti in ovrednotiti katere deležnike SDS opolnomoča, kako in v kakšnem obsegu; in oblikovati ter napovedati možne implikacije in predlagati priporočila. Cilj tega dela je torej izoblikovanje pomena neprekinjenega ponovnega ocenjevanja učinkov, ki jih te implikacije lahko imajo na naš vsakdan.

Prvi del s pregledom literature raziskuje niz teoretičnih okvirov in oriše razumevanje digitalnega upravljanja preko nadzora, zasebnosti in državljanstva v digitalni dobi; opisuje opolnomočenje deležnikov, igrifikacijo spodbud za izgradnjo slovesa in družbenega kapitala in vedenjsko znanost za spremembe vedenja. Nato delo predstavi nastajajoče digitalno upravljanje imenovano SDS, ki se že izvaja ter opisuje ozadje, ki je vodilo v nastanek in razvoj takšnega sistema kot tudi kaj so možne implikacije najprej za kitajsko družbo nato eventualno tudi za preostali svet. Nadalje delo opisuje študijo primera kitajskega SDS in analognih zahodnjaških ocenjevalnih sistemov s katerim oriše ključne točke aktualnih dokumentov politike pravil in implementacije v teku. Poglavje analize in diskusije primerja teoretična vprašanja analizirana v pregledu literature s študijo primera kitajskega SDS in podobnih sistemov v zahodnjaških družbah z namenom prepoznavanja potencialnih implikacij pri konceptualnih vprašanjih; poudarja neodgovorjena vprašanja in generira nova; ocenjuje primerne in pravočasne individualne in upravljavske odzive na nastanek teh novih digitalnih sistemov; ter razpravlja o različnih lekcijah, ki se jih da izvleči iz primerov, kot tudi o sami praktični implikaciji.

V zaključku delo utemeljuje neprekinjeno digitalizacijo našega analognega sveta v tej novi digitalni dobi, ki se izvaja in v digitalne sisteme vgrajuje družbene in politične norme, kateri imajo gromozanski potencial, da preoblikujejo dejanski izgled naše prihodnje družbe, zaradi česar moramo nenehno ocenjevati vse njihove verzije še posebej pa kdo vse bi moral biti dovolj opolnomočen za njihovo kreiranje in oblikovanje. Zatorej ne bi bilo odveč na kitajski SDS gledati skozi prizmo opozorila kako bi prihodnost lahko izgledala, če bomo nadaljevali s popolno digitalizacijo in vključevanjem vseh aspektov našega družbenega in političnega življenja brez primernega nadzora in regulacije ter vseh deležnikov enako opolnomočenih.

Analitični pristop raziskave vključuje interdisciplinarno analizo; interdisciplinarni pristop kot zmožnost analize, sinteze in usklajevanja povezav med akademskimi disciplinami v koordinirano in skladno celoto s pomočjo razmišljanja preko meja s ciljem odgovoriti na raziskovalno vprašanje s pomočjo kvalitativne raziskave na osnovi sekundarnih podatkovnih virov. Kot raziskovalna zasnova v kvalitativni raziskavi je uporabljena študija primera kitajskega SDS, primeri analognih zahodnjaških ocenjevalnih sistemov in pregled literature v povezavi z zadevo, za globlji vpogled v specifičen kontekst. Za zbiranje in merjenje podatkov je bila uporabljena deskriptivna metoda kot tudi tematska in vsebinska analiza za opis subjektivnih izkušenj, razlago vzorcev in njihovega pomena ter razumevanje konceptov v uporabljenih podatkih. Kot raziskovalni pristop sta uporabljeni obe metodi sklepanja, tako induktivna kot tudi deduktivna.

Kriterij za izbiro več kot 400 virov za artikulacijo raziskovalnega vprašanja in analize, kateri temeljijo na vsebini, ki zadeva kitajski SDS kot predmet tematike, je bil časovni razpon od začetka leta 2010 do konca leta 2020 s posodobitvijo informacij do 1. septembra 2021, ter istočasno osredotočenje na ključne besede kot so nadzor, podatkovni nadzor, vedenjska ekonomija, teorija dregljaja in paternalizem, arhitektura izbire, igrifikacija in upravljanje, zaupanje, zasebnost in kompromis.

To delo ugotavlja, da imata kaznovanje neskladnosti in nagrajevanje skladnosti direkten vpliv na skladnost zaradi njunih instrumentalnih razlogov vendar kaznovanje to doseže z večjo magnitudo kot nagrajevanje saj prenaša obvezna pravila medtem ko nagrajevanje prenaša prostovoljna pravila. Za dosego specifičnega cilja spremembe le vedenja ljudi, lahko nagrajevanje služi bolje kot kaznovanje, ampak v kolikor je zaželeno, da poleg spremembe vedenja ljudje obenem postanejo zavestni moralne korektnosti ali nekorektnosti svojih dejanj, se kaznovanja zdijo bolj sposobna za dosego tega cilja. Kot alternativa omejevanju, motiviranju, prepričevanju ali enostavnemu informiranju ljudi, dregljaji usmerjajo vedenje ljudi s pomočjo nelogičnih psiholoških inštrumentov kot so izpostavljenost, odpor do izgube in skladnost, kot tudi uporaba privzetih nastavitev ali vrednosti. Če zatorej arhitektura izbire namerava spremeniti vedenje ljudi z uporabo dregljajev, je potrebno ljudi zgolj obvestiti kaj počnejo njihovi vrstniki, saj so ljudje večinoma brez prevelikega napora dregnjeni od drugih ljudi ker ljudje na splošno stremimo k skladnosti z drugimi ljudmi.

To delo prav tako ugotavlja in opisuje, da se posamezniki čutijo opolnomočene s tehnološkim napredkom, ki brez prevelikega truda omogoča zbiranje informacij, komuniciranje in organiziranje s čim doživljajo nove načine in možnosti sodelovanja v življenju skupnosti. Posamezniki, civilna družba in lokalne skupnosti hkrati močno čutijo, da so izpuščeni iz zgovornega udeleževanja pri procesih konvencionalnega sprejemanja odločitev. Čeprav je samo-sledenje zlahka prepoznano kot praksa samonadzora, je bilo bolj brez prevelikega napora sprejeto v primerjavi s konvencionalnim nadzorom zaradi načina na kateri je oglaševano, in sicer kot opolnomočujoča tehnologija, ki ljudem obljublja narediti jih bolj zdrave in srečnejše. Transakcije v navideznih trgovalnih skupnostih neznancev, kot je na primer eBay, nebi bile izvedljive brez izgradnje potrebnega zaupanja s pomočjo sistema slovesa, ki opolnomoča prodajalce in kupce, da se medsebojno ocenjujejo na osnovi izkušenj iz uspešno in neuspešno opravljenih transakcij. Pričakovati je, da bodo zmogljiva orodja za med agencijsko izmenjavo podatkov, rudarjenje podatkov in napovedne algoritme opolnomočila tako imenovan institucionaliziran sloves za omogočanje dodeljevanja razpoložljivih resursov, vključujoč sankcije in nagrade, na bolj natančno ciljan in individualiziran način ter ga s tem bolj učinkovito približala personalizaciji zakonov in ureditev ter na splošno distribuciji vseh vladnih storitev.

Tajnost in zasebnost nista v nasprotju saj sta zgolj trenutka v zaporedju ker je tajnost posledica zasebnosti, ki je njen vzrok. Zasebnost torej olajšuje odločitev o tem kje v zaporedju med tajnostjo in transparentnostjo nekdo želi biti v določeni situaciji. Nadzor, izveden bodisi s strani korporacij ali vladajočih struktur, in ki je osreden in ključen del kateregakoli SDS, ima razširjene pravice zasebnosti ter zatorej številne priložnosti za tajnost, ki so progresivno uporabljane za omejevanje izbire ljudi glede delov zasebnega življenja katere želijo obdržati kot zasebne. Koncept zasebnosti na kitajskem se spreminja ter se pričakuje, da se bo individualnost raztezala od zasebne do javne sfere ter se bo s tem postopoma zabrisalo meje zasebnega in javnega, zaradi česar tudi je implementacija SDS v kitajski družbi redko prepoznana kot sistem, ki krši njihovo zasebnost. Preprosta težnja posameznika k ohranitvi zasebnosti bi se zatorej zlahka kvalificirala kot indikator, da posameznik s tem nekaj skriva, torej ni dober državljan.

V opravljeni raziskavi sem odkril, da glede na temeljno logiko, ki je v ozadju koncepta SDS, ter glede na način na kateri je koncept oblikovan v skladu z vladnim dokumentom politike načrtovanja orisa sistema, kitajski SDS, ki je sicer še vedno v fazi razvoja, ni osredotočen na ocenjevanje posameznikov čeprav vsebuje komponento, ki se ukvarja s posamezniki, vendar le v povezavi s prvotno osredotočenostjo na poslovanje subjektov, torej korporacij in organizacij. Masivna akumulacija podatkov s strani vladnih agencij in pooblaščenih ocenjevalnih subjektov glede prizadevanj poslovnih subjektov tvori središče predstavljenega SDS, zaradi česar bi pospešeno implementacijo sistema ter še posebej njegov potencialni učinek na poslovanje znotraj Kitajske kot tudi z njo, korporacije morale vzeti zelo resno.

Poleg odgovora na raziskovalno vprašanje sem v magistrskem delu prav tako poskušal predstaviti izvedljiv teoretični okvir kot predlog konceptualnega modela, ki bi lahko bil

razvit in uporabljen kot inštrument za merjenje kako učinkovit je SDS pri doseganju razglašenih ciljev, ter kako dobro vodi h gladkemu upravljanju in ali lahko zmanjša vodoravna in navpična nesoglasja, saj ne moremo zanesljivo vedeti kako učinkovit za družbo SDS je, dokler uspešnost SDS ni jasno definirana in sledljiva.