

**MAQSUT NARIKBAYEV UNIVERSITY (KAZGUU)**

**International School of Economics**

**MASTER'S DISSERTATION (PROJECT)**

***«The Role of Information and Communication Technologies in Authoritarian States: A  
Comparative Analysis of China and Tunisia»***

**Program 7M04106 – «Business and Management»**

May 2023

**Written by:** Aisaya Kulmurza

**Supervisor:** Dr. Baurzhan Rakhmetov

**Astana, 2023**

*Abstract of the Role of Information and Communication Technologies in Authoritarian States:  
A Comparative Analysis of China and Tunisia, by Aisaya Kulmurza, ISE KAZGUU University,  
May 2023*

This thesis examines the role of ICTs in authoritarian states, using the cases of Tunisia and China as examples. The paper emphasizes that authoritarian states use ICTs as a tool for political control and Internet surveillance. The aim of this paper is to analyze the impact of ICTs on authoritarian governments and to comprehend their role in mass protests and democratization.

The study considers sources such as statistical indicators, articles, news publications, and websites. This thesis uses a qualitative research method, along with a comparative case analysis between Tunisia and China. The most similar systems method was also used to investigate the similarities and differences among the two selected countries, which led to different outcomes.

The executed paper can be considered a detailed source for understanding the experiences of Tunisia and China in terms of identifying the factors that, despite certain similarities in the use of ICTs, led to different political changes.

## Table of Contents

I. Introduction.....	3
II. Literature review .....	6
III. Research Question.....	14
IV. Research Methodology .....	15
V. Case study .....	19
VI. Conclusion .....	30
VII. Bibliography .....	33

## I. Introduction

The advancement of information and communication technology (hereinafter ICTs) plays an important and influential part in modern society worldwide. ICTs are defined as the various technical means, such as personal computers, mobile phones and televisions that used to transmit, create, and share information. For example, they allow the exchange of opinions, information, and ideas, and ease access to information through the Internet. Despite the significant positive impact of ICTs on participation in political, economic, and social spheres, authoritarian regimes around the world view ICTs as a strong threat to their power. Regardless of this perception, these regimes tend to use ICTs to monitor, control, and censor information on the Internet. Although these regimes view ICTs, especially the Internet, as an enemy, they acknowledge that they are able to maintain control over society. Therefore, this thesis examines the role and importance of ICTs control in authoritarian states.

Control over ICTs is a common practice of authoritarian regimes, which have become increasingly adept at using ICTs to maintain power. Such governments take strict measures to control media and access to the Internet, using technology to block, filter and monitor information deemed a threat to their authoritarian rule. This affects citizens' ability to access information and disseminate information about situations in their countries. It also limits their freedom of speech and encourages the spreading of false information. Fuchs (2021) argues that national media should not broadcast false news. Public and civil service platforms must respect the rights of everyone, regardless of their gender, spread people's opinions, and try to promote democratization among citizens of authoritarian states (pp. 23-24). Most researchers have conducted numerous studies detailing the role of ICTs in authoritarian countries, which will be described in more depth in the literature review.

This thesis aims to explore and examine the various strategies employed by authoritarian governments around the world to control ICTs and their implications. The paper will examine the role of ICTs in authoritarian countries, particularly their impact on mass protests against

authoritarian regimes and their role in democratizing such regimes. In addition, the paper will compare the experiences of two countries, Tunisia and China, where the Internet has played a crucial role in shaping their political regime, leading to different results. The use of the Internet in Tunisia provided an opportunity to mobilize people for collective action, organized through social media, which led to the Arab Spring uprising in 2011. In China, the Internet has become the most potent tool for strengthening existing authoritarianism. Ultimately, this paper seeks to reveal the relationship between authoritarian states and ICTs in controlling and influencing numerous spheres of life.

The study will use a literature review to examine successful and unsuccessful examples of government use of ICTs. Through an examination of successful and unsuccessful cases in the literature review, it was decided to select countries such as Tunisia, where ICTs played a role in democratizing the country, and China, where ICTs helped significantly strengthen its authoritarian rule. The paper will also use a case study methodology of small-N comparative analysis. This methodology will give a more detailed study of the two authoritarian countries. By conducting comparative research of Tunisia and China, this study seeks to reveal the difference between the political context, technological infrastructure, and government policies. This will demonstrate a detailed understanding of how governments in these two countries use and control ICTs. Thus, the study's research question is – «why in Tunisia ICTs helped to democratize the government, while in China ICTs are a tool to strengthen authoritarian power?».

The use of ICTs in controlling politics is also a different problem for people of authoritarian countries that seek to promote a democratic vision of the world and freedom of opinion. This is mentioned in an article by Shahbaz et al. (2020) in *Freedom in the World*, that laws are coming to restrict online content and punish Internet users who break them. It can also be assumed that authoritarian governments keep companies that promote disinformation through social media and many other online platforms to spread false information, control news, formulate a «new» public opinion, and keep the stability of their power. If Internet users, activists, bloggers, or

journalists want to stand up against government policies, it could lead to prosecution and even arrest. According to Shahbaz et al. persecution and imprisonment of such people in authoritarian states are pretty common.

Also, a report from Human Rights Watch (2016) shows that some authoritarian governments release their residents from imprisonment. But regardless, almost everyone who was released has faced a series of further problems, such as stalking of relatives, travel bans, and dismissal from their jobs. Thus, political control of ICTs in authoritarian countries includes violation of legal, human, and social norms. In response to these listed problems, as mentioned earlier, an increasing number of international organizations are focusing on protecting human rights and freedom of speech. These organizations keep a clear record of human rights violations associated with ICTs and are fighting for policy change. Therefore, this work seeks to be a significant study that can contribute to many existing studies. This paper could also apply to the practical impact of uncovering such a severe issue as using of ICTs to control its state and residents.

This thesis consists of five main parts. The first part is a literature review that provides an analysis of previous articles revealing the early expectations of the Internet, including successful and unsuccessful cases of ICTs control in authoritarian states. The second part identifies the research question, which will reveal how ICTs helped Tunisia come to democratization, while in China, ICTs have become a significant tool to strengthen authoritarian power. The third part focuses on the research methodology that answers the research question. Then, the fourth part of the thesis consists of a case study with a comparative analysis of Tunisia and China in such aspects as political context, technology infrastructure and government policy. Finally, the last part summarizes all of the above, as well as identifying the limitations of this thesis.

## **II. Literature review**

Examining how authoritarian states try to eliminate threats within the state by interfering with ICTs is an essential topic for discussion today since, authoritarian states view the ability of citizens to access ICTs as a danger to their authoritarian rule. Because authoritarian states consider their citizen's freedom of speech a source of menace, state interference in the digital platform and communication channels has always been commonplace. Therefore, to eliminate these kinds of risks, states take measures such as filtering Internet content, and communication surveillance, that have access to the personal gadgets of the population.

The main goal of this literature review is to illustrate how authoritarian states are coping with the introduction of ICTs to the public. This literature review consists of two groups of studies, namely, unsuccessful (when authoritarian states could not use ICTs as a means to control their citizens) and successful (when authoritarian states could use ICTs as a means to control their citizens) cases and aspects of authoritarian states' control of ICTs to maintain power.

### **Early hype about the Internet**

As Owen (2019) notes, in the 1990s, the Internet increasingly became a platform for promoting political content. This development initially raised high expectations among ordinary citizens, who saw the Internet as a tool for participation, influence, and political decision-making. Citizens in many authoritarian countries initially relied on the Internet to express their opinions and share videos, photos, and political news from around the world. The ability to participate in elections, blog, and create online petitions led citizens to believe they could greatly help shape the political world. However, Hindman (2018) argues that governments continue to limit citizen participation in key aspects of political decision-making, policymaking, and oversight. Authoritarian governments use the power of the Internet for their purposes, obtaining personal data by monitoring private social media accounts to control and influence political opinion.

Despite people's initial hopes to use the Internet for political participation, authoritarian

governments have found ways to control, restrict and manipulate citizens online, especially on political issues.

### **Unsuccessful Cases of ICTs Control**

Blocking the Internet, controlling online content, and surveillance of social media did not help the leaders of some authoritarian countries hide the truth and minimize the involvement of their citizens in their countries' political situations. Kyriakopoulou K. (2011) points out that civilians have not accepted the fact that they do not have the opportunity to know the truth and express their opinions and have decided to fight back against authoritarian rule. In this way, the consequences resulting from the harsh intervention of authoritarian states in ICTs could lead to uprisings on the part of the civilian population (p. 23). Thus, this phenomenon illustrates the unsuccessful examples of authoritarian governments in the field of control over ICTs.

The examined articles illustrate how ICTs have become a «lever» for popular responses to injustice on the heads of authoritarian countries.

One of the most significant movements against authoritarian states is considered the Arab Spring in 2010-2011. During the protests of that movement, the Internet, specifically Facebook, played an essential role in spreading the call to rally for freedom from the government regime.

Christensen (2019) raises the question of how authoritarian governments use ICTs to maintain sustainability, its development, and the way to preserve existing power. The author analyzed how Egypt and Saudi Arabia weakened and reinforced ICTs during the «Arab Spring» in 2011, noting that the government heavily censored Saudi online content compared to Egypt. Based on the author's analysis, Saudi Arabia was much more advanced and diligent in developing the Internet, which made it subject to active filtering and blocking of online content than Egypt (although Egypt is a country with a larger population).

To explain why one authoritarian regime fell and the other did not, the author compared the two Middle Eastern and North African countries, mentioning that the reasons that motivated

people to participate in the revolution were different, as were their living conditions. The researcher also noted that the Saudi authorities had much stricter control channels of communication and technology, while Egypt, though arresting and imprisoning dissidents, was calmer about online content.

Ronzhyn (2014) examines the protest in Ukraine in 2013-2014, which began after the President refused to sign the European Union (EU) Association Agreement. The original idea of this movement was a peaceful demonstration, which evolved into a large-scale movement after the police used violent measures to disperse Ukrainian protesters. After that, the government established a law that prohibits residents from going out to protest. The author also mentions regrettable consequences, such as missing persons and even deaths due to fighting between the police and protesters. On the role of social media in this challenging period, the researcher notes that it became a meaningful way to receive and disseminate information to the masses. Thus, thanks to social networks such as Facebook and Twitter and the hashtag «Euromaidan», many foreign countries have become aware of the situation in Ukraine. But despite this, the Ukrainian government has not blocked or filtered Internet channels.

Heeks et al. (2013) analyzed the role of ICTs in public protests against the authoritarian ruling regime using the 2009 presidential election as a case study, which led to the Green Movement in Iran. At the beginning of the election, social channels were used to support candidates and spread information. However, after it was announced that President Ahmadinejad was re-elected, the Iranian people believed that the election was rigged and began to come out in protests with slogans of «Where is my vote». This event was highlighted in the international and national media. Still, the international channels were faced with the fact that the elected president's regime began to intimidate and arrest journalists. Researchers also mention how Iranian citizens made videos and photos posted on social media (if they had access to the Internet) and used the color green to spread continued attention to their protest on social media.

Tapsell (2018) analyzes that smartphones were considered as «Weapons of the Weak», describing regime change in Malaysia's elections in 2018. In his article, the author describes the Malaysian population as «weak», who unfortunately do not have the «strength» to stand up to society's elites and the government. In this regard, with a smartphone, where everyone has social media (Facebook, WhatsApp, Twitter), Malaysians can get information about the political news in their country and express their opinions on the political situation. Phones have encouraged the population to consume news from the mainstream media and participate in political discourse. Tapsell examines the role of Facebook and WhatsApp in shaping political discourse among Malaysians (especially semi-rural populations). These communication and information channels have significantly undermined people's trust in government media. The researcher also notes that digital sources of information are developing methods of obtaining and disseminating political information and describes the implications of these methods for election campaigns and the political regime. The author also adds that digital communication technologies offer new opportunities for automated intervention. For example, software censorship can detect and block inappropriate content automatically, and digital communications can scan content to find users posting suspicious information. On the one hand, this approach to eliminating the risks of authoritarian rule could lead the government to its desired result. But looking at the situation from another perspective, this approach can lead to unintended consequences such as loss of trust, slander, gossip, and controversy.

According to Faraon et al. (2011), authoritarian governments block the Internet in the Middle East and North Africa, suggesting that media can significantly create a mass movement against the authorities. The authors argue that using ICTs has become a call for uprisings in North Africa and the Middle East because ICTs can become a crucial weapon for the population of authoritarian countries. However, authoritarian states exert fairly intense efforts to control communication technologies to maintain and consolidate power.

The information mentioned above is an example of how authoritarian states have failed to

«restrain» ICTs control over citizens through various means of interference. Thus, it leads to further reflections on how other countries with authoritarian rule have been able to influence ICTs in their favor.

### **Successful Cases of ICTs Control**

The study of successful ICTs interventions in authoritarian states helps to understand how ICTs empower government and enhance authoritarian rule to maintain power and stability. In addition, the methods used by authoritarian governments to «calm down» their populations are also an important detail in this topic, as leaders in authoritarian states understand that public access to ICTs can undermine authoritarian rule, so they resort to actions such as completely shutting down the Internet, monitoring social media, technical attacks, blocking social channels, monitoring content, surveillance, censorship, arrests, and even physical violence.

Bellow, I will focus on how authoritarian states are convinced that ICTs interventions can help control and prevent online unrest because news censored from the state, disseminated through the media, can persuade the population to support authoritarian rulers. Keremoğlu and Weidmann (2020) in their article point out how governments intervene and control the Internet. For instance, the authors cite the complete Internet shutdown in Egypt in 2011 and the censorship of online content in China. Furthermore, Keremoğlu and Weidmann describe that blocking ICTs harms the country's economic development and thus reduces the regime's legitimacy. Although even if this study shows the problem in a negative light, the authors noted that control and deterrence measures like news censorship, blocking Internet sites, monitoring chat rooms and online content, and arrests for distributing «incorrect» information are very effective in deterring Chinese residents from collective action and unrest.

Moss (2016) reveals how Internet communications and technology help religious and ethnic groups act internationally. But authoritarian governments weaken the «voices» and tactics of members of religious and ethnic groups during violent unrest, as the use of ICTs has

a significant influence in contentious politics and helps to create collective action in different ways. Access to ICTs, according to the author, provides a link to the homeland and compatriots and helps cover what is happening in Syria in the international arena.

ICTs, as maintained by Glasius and Michaelsen (2018), have caused the decline of democracy and the rise of autocracy. Glasius and Michaelsen discuss threats such as population surveillance, disinformation, censorship, and human rights violations that citizens expose in the digital world. The authors believe that Internet censorship is a crucial feature of authoritarian power. Glasius and Michaelsen also explored this issue in another article (2018). In that article, the researchers raise the topic of online censorship, cyberattacks, and surveillance to reinforce authoritarian power. According to the authors, politics that create authoritarian states can go beyond domestic politics.

Göll and Zwiers (2018) conducted a study that, so far, most Middle East and North Africa (MENA) countries are not sufficiently developed to take advantage of the new digital world. The authors note that development in the field of ICTs has dramatically impacted the political culture of MENA countries. This policy change was since the governments of these states used the Internet and social channels of information as a symbol of power. State leaders used the power of the Internet to censor and misinform their people. But the citizens of the MENA regions used the Internet for their «truth». They created online forums and blogs, participated in revolutions, accessed government websites. But such citizen responses were not unnoticed by the state. In response to such actions, authorities slowed down and disabled the network, chased, detained, and arrested those who created those forums and spread the «truth». The authors also point out that online networks such as Facebook and Twitter, which were used to spread the message of protest, can also be used as an instrument of the government to identify activists and their locations. Thus, Göll and Zwiers emphasize that leadership and how ICTs were monitored is considered an essential feature of the rise of the authoritarian state.

Sinpeng (2019) examined the use of ICTs in South-East Asia. For example, the author

elaborates on the situation in Thailand in 2014, when the Thai government issued a law of 15 years in prison for distributing information on the Internet, showing that the Thai Internet is considered one of the most limited in Asia. Hence, the case of Thailand demonstrates clearly that early hopes for the positive impact of ICTs in authoritarian states can be deceptive.

The literature review results showed two sides to the authoritarian use of ICTs. For several years now, many authoritarian states have been practicing «invasion» of the digital world to consolidate their power and control their citizens. Summarizing all of the above, the reviewed studies can be categorized into two groups: successful and unsuccessful examples of using ICTs by authoritarian states to maintain power.

Successful control over the ICTs is considered a successful «deception» of the population, which was «trapped» by the elites of authoritarian governments. In contrast, an unsuccessful containment of ICTs is viewed how the authoritarian regime failed to break the spirit of the population; examples of such cases are considered revolutions in Syria, North Africa, and the Middle East.

There is a need for more studies to explore this subject in more depth. In general, studies on ICTs control in authoritarian governments should be uncovered by the civilian population. In addition, it is worth emphasizing that for a better comprehension of this research, the best way is to conduct qualitative research that will help uncover the essence of the influence of ICTs in authoritarian states on the part of the civilian population.

In the literature review, the work of ICTs for or against the authoritarian government is discussed, but all these points to the fact that few studies reveal this topic from the citizens' perspective of authoritarian governments. Civilians are the most crucial resource of every state, which, unfortunately, has gone unnoticed and deceived in authoritarian governments. The success or failure of authoritarian states in ICTs does not cancel the fact that there is the manipulation of ordinary citizens who want to be able to express their opinions, to have the right to vote in elections, to know the truth about their country, not to be subject to human rights

violations.

Thus, the above leads to the conclusion that most authoritarian states decide to censor online content because authoritarian leaders see ICTs as a risk they will try to manage.

### **III. Research Question**

The research question of this thesis is: «Why did ICTs in Tunisia help to democratize the government, while in China ICTs are a tool to strengthen authoritarian power?».

This research question aims to explore the role of ICTs in the democratization of Tunisia and the development of authoritarian rule in China. It aims to understand the initial reasons that drove the use of ICTs in the two countries and the different methods of authoritarian control of ICTs, such as shutting down the Internet, blocking apps, monitoring personal messages, filtering content, and censoring information online. In addition, the question examines a comparative analysis to identify the differences between Tunisia and China regarding the use and control of ICTs.

#### **IV. Research Methodology**

The use of ICTs in recent years gives the feeling that it is aimed at political change in connection with democratization efforts. However, the relationship between democratization and ICTs is poorly understood, and existing studies demonstrate uncertain results. In addition, the factors that reveal the role of ICTs in different political contexts still need to be fully comprehended (Stein, 2017, p. 1). Thus, the research problem focuses on examining the inconsistent impact of ICTs on political systems in authoritarian states, using Tunisia and China as examples. In this regard, the study seeks to identify why ICTs have contributed to democratizing Tunisian rule and strengthened authoritarian power in China.

The research question is: «Why did ICTs in Tunisia help to democratize the government, while in China ICTs are a tool to strengthen authoritarian power?». The methodology to answer this question involves a comparative analysis of the two countries that have reached different results despite their similarities in the authoritarian nature of political systems. This requires understanding why governments feared the emergence and development of ICTs, what Internet control methods were used, and what role ICTs played in Tunisia and China. This data can help determine the elites' motivation in using ICTs, as well as identify the methods used by the governments and people of both countries to achieve their goals of either democratization or strengthening of an authoritarian regime.

The hypothesis of the comparative case study will focus on the role of ICTs in the democratization of Tunisia and the strengthening of China's authoritarianism. The opposite roles which ICTs have played in Tunisia and China can be identified by differences in the technological infrastructure, the political context, and the policies of the government itself. Based on the analysis of the parameters described above, I came to these conclusions, comparing the cases of Tunisia and China. In Tunisia, the revolutionary political context of the Arab Spring, a developing ICTs infrastructure, and government policy enabled the population to use ICTs to organize and mobilize protests that overthrew the authoritarian government and led to the

country's democratization. In contrast, China's political context frequently remains calm. The government has invested heavily in a complex ICTs platform, spreading strict filtering and censorship over online content and using ICTs to monitor and control its citizens. The complexity of China's ICTs platform, compared to Tunisia's developing ICTs infrastructure, is determined by the significant arsenal of technologies, such as artificial intelligence, facial recognition, big data analytics, and Internet censorship systems. Moreover, it requires coordinating and integrating the full range of these technologies, making the ICTs platform more sophisticated (Qiang, 2022).

To test this hypothesis, this thesis uses the method of small-N comparative analysis to conduct in-depth research on political control of information and communication technologies in authoritarian states and their impact on regime stability and mass protests. This method is often applied when the question or purpose relates to the exploratory nature of researching an event or phenomenon. The case study method is considered a meaningful and useful research method in any field, which is very suitable for analyzing an existing problem in the social world that people can observe.

Small-N comparison, like any other method, has its strengths and weaknesses. According to Halperin et al. (2012), the forces of the case study method are that it is very suitable for comparative analysis, thoroughly examining the event that occurred, and its potential high internal validity. The weaknesses of the chosen method include the risks due to a focus on a few cases, limiting the possibility of drawing generalizations on observed political phenomena. (pp. 234-237). A trade-off between findings' internal and external validity is a common issue in comparative studies.

Nevertheless, small-N comparative is a valuable method to reveal the role of ICTs in the democratization of an authoritarian regime. To identify and collect data, I start with two case studies that show the successful and unsuccessful use of ICTs in authoritarian regimes. The focus is on case studies that clearly illustrate successful and unsuccessful ICTs interventions

by governments – Tunisia and China, respectively. Although the small-N analysis assumes a small number of subjects to generalize and conduct an objective study, this method will help achieve a detailed and holistic analysis that will help identify critical points like the role of ICTs in democratization.

The following sources of information will be collected: online sources and information, articles, books, statistical indicators, online videos and photos, news publications, and websites. Collected data will be analyzed to broadly reveal developments in two authoritarian countries where ICTs have become a tool of democratization and have played a significant role in protests against the authoritarian regime and where ICTs have become a method of total control and maintenance of power stability.

In addition, to carry out qualitative research, it is necessary to explain how Tunisia and China have been selected as two cases. The point is that case selection is a practical and crucial part of the research process, as it enables a valid study and can determine how the selected case study will be conducted. Thus, I use the Most Similar System Design. This case selection method allows the selection of two countries common in some crucial respects but differ in one important aspect. In this case selection, it is important to determine what factors connect the two similar cases in Tunisia and China with different outcomes. Using this case selection, I intend to compare and understand how two authoritarian countries, such as Tunisia and China, have achieved different results using ICTs capabilities. For example, in one country ICTs helped achieve democratization and improved the state's politics, while in the other, it strengthened the authoritarian regime and gained its stability.

By comparing and contrasting the two cases in two states, this thesis seeks to identify the key social and political factors that have influenced the relationship between ICTs and political change and to contribute to a better understanding of ICTs' potential to promote or oppose democratization in different political aspects. To achieve the goals and objectives of the research project, I will put into practice the following actions: to study the circumstances in two

countries before and during the appearance of the Internet. After reviewing and comparing the situations in different countries that succeeded or failed in controlling ICTs, it was decided to take two countries, Tunisia and China, as a basis for more in-depth and detailed coverage of my research topic. According to Freedom House (2022), Tunisia has the highest ICTs freedom in the Middle East and North Africa region. By comparison, Tunisia was not considered as authoritarian country before the Arab Spring. However, after the revolution and until 2013, Tunisia was partly free, and since 2014 Tunisia has been considered an entirely free country (Freedom House, 2017). Regarding the definition of status, it is crucial to explain that free countries have a strict rule of law, independent media, free and fair elections, and the political participation of citizens. Partly free countries have some freedoms, but also significant restrictions on some rights, while not-free countries have severe restrictions on political and civil liberties, and citizens face arbitrary detention, torture, and censorship.

But it is worth noting that in 2022, the country's status changed from «free» to «partly free» because Tunisian President Kaïs Saïed implemented strict restrictions on citizen's freedom. Thus, in 2017, the rate of freedom in Tunisia was 78%, while in 2022, the percentage of freedom became 64%, which indicates that the rate of freedom between 2017 and 2022 decreased by 14% (Freedom House, 2017; Freedom House, 2022).

While China has maintained its status as not a free country year after year, for example, the percentage of freedom in 2017 was 15%, but in 2022 the percentage of freedom has dropped by as much as 9%. Such reports suggest that, after the Arab Spring revolution, Tunisia has come to democratize, while China is a stable authoritarian state (Freedom House, 2017; Freedom House, 2022).

## **V. Case study**

In this case study, I will make a comparative study of Tunisia and China, where ICTs played a significant role in the democratization of Tunisia, as well as in strengthening the authoritarian regime in China. Generally, ICTs have become a tool for democratization in Tunisia, while in China they are considered one of the pillars of regime sustainability. First, there is a detailed examination of how the two governments have used ICTs to control their citizens. Then, the role of ICTs in the Arab Spring revolution, particularly in Tunisia, is explored, as well as how ICTs contributed to the sustainability of authoritarian politics in China. Finally, there is a comparison of how the two states came to different results even though both governments originally used ICTs for political purposes.

### **Tunisia**

The Arab Spring movement of 2010, which began in Tunisia, is considered one of the most powerful movements against the authoritarian regime. According to Erkem (2021), the Arab Spring movement started with the self-immolation of Mohamed Bouazizi, a 26-year-old salesman. This protest was the extortion and collection of goods by the police. The next day, after this situation, acts of protest started not only in Tunisia but also in neighboring states. This movement was called the Jasmine Revolution. Ayeb (2011) argues that, in general, the revolution in Tunisia was caused by two main factors. First, it was driven by a unique and absolute dictatorship that relied on specific parameters such as a cohesive elite, a powerful security apparatus, and clientelistic middle-class politics. Second, the revolution was caused by the severe marginalization of citizens in the southern, central, and western regions, while the main power was concentrated in the north (pp. 468-469). Thus, the revolution was caused by a repressive regime that relied on a strong security apparatus and favored a select few, ignoring the needs and interests of the majority of the population.

According to Lotan et al. (2011), social media, particularly Twitter, began to be used in

Tunisia in 2010 as a tool for blogging, social networking, publishing information, drawing attention to political issues, and creating online diaries with a political context. Nevertheless, before and during the Arab Spring in authoritarian Tunisia, all information on the Internet passed through government censorship. However, since the beginning of the revolution in 2011, the number of posts critical of the government has grown so much that the government can no longer keep up with them and fully control their activities (p. 5).

Based on Allagui et al. (2011), citizens' motivation for the revolution was to fight for their political views and the conditions in which they had lived for years. The shared pain allowed people to unite and take to the streets to fight against the government. For this reason, Internet users began spreading information about revolutionary actions. Soon such messages began to reach an increasingly wide range of Internet users. This allowed the revolutionary online content to appear in the media and on television, which, in turn, allowed the information to spread to Tunisians who did not even have access to the Internet. Before the revolution, the Tunisian government did not allow people the right to choose, freedom of speech, gender equality, and human rights opportunities. Nor did the country address corruption, press censorship, and minority oppression (pp. 1-2). Therefore, the revolution in Tunisia was initiated by motivating citizens to fight against longstanding living conditions and a lack of fundamental rights and opportunities. The extensive use of social media allowed information to spread and mobilize the population to put down authoritarian rule.

According to Bruns et al. (2013), both in other countries and directly in Tunisia, social media as, well as blogs and content communities during the Arab Spring, became one of the main approaches to fighting against ending oppression, corruption, and inequality. For instance, social media, especially Twitter, has been enormously helpful in organizing, informing, and covering protests and rallies (p. 895). According to Dhillon (2014), it is also important to note that the fact that Tunisia was one of the most developed countries in the field of technology among all North African countries, and Ben Ali, the former President, was a passionate advocate

of technological progress and sought to develop the technology sector in his country as much as possible, is considered the main reason for the success of using ICTs (pp. 2-6). By the way, Tunisia was the first Arab country to connect to the Internet in 1991. But the irony is that Ben Ali, who fought so hard for the country's technological development, at the same time exercised stringent censorship in the digital sphere. For example, the Tunisian Internet Agency he created functioned to eliminate any form of dissent on the Internet (Ziccardi, 2013). According to Honwana (2013), by 2011, about a third of the population had access to the Internet at home, work, or Internet cafes, and more than 2.4 million people had Facebook accounts (n.d.). Thus, this made it easier for people to exchange ideas on the Internet, some of which, in turn, contributed to the emergence of resistance to the political regime.

Fangxin (2022) points out that an essential capability of the Internet is the remote dissemination of information and communication, security, and guaranteed anonymity. Therefore, in such movements, social media is a means of communication and a venue for political protests, which are promoted through national and international social channels. Another huge advantage of the Internet, especially in movements such as the Arab Spring, is that it is not limited in time, mainly geographically. Therefore, ICTs allow protesters from different areas and points of the world to connect and communicate with each other. It is also worth noting that it was young people, who could make more practical use of the possibilities of the Internet, who played a key role in the Arab Spring (pp. 282-284). Thus, through the Internet, people exchanged information about the time and place of the rally. In addition, they can receive and process information from social media faster, thus increasing the flow of information in the digital sphere.

Based on the above, it can be assumed that the control over the Internet and its possibilities, to which authoritarian governments resort, makes their citizens actively use online channels to resist these restrictions.

Despite the progress toward democracy, several areas require further enhancement and

development. For instance, despite the constitutional amendments, the laws enacted by former President Ben Ali continue to pose a threat to free speech in ICTs, as highlighted by Freedom on the Net (2016). Notably, Article 86 of the Telecommunications Code criminalizes using ICTs to criticize politics, rendering perpetrators liable to arrest. In 2018, Tunisia's Internet freedom was deemed partially free, while the Minister of the Interior announced the wiretapping of journalist's private phones. Unfortunately, despite citizens enjoying widespread access to ICTs, especially the Internet, it would be premature to speak of Tunisia as a fully democratic country, especially given the 2019 presidential elections, when fake information was spread online. Mlika et al. (2020) observed that Tunisians encountered significant challenges trying to follow news about the elections, which was posted on Facebook. Before the election, Facebook blocked sites such as Netvizz, a Facebook data collection app, and CrowdTangle, a content discovery, and social statistics app, which complicated access to relevant election-related information (pp. 1-4). But regardless of some difficulties, Teti et al. (2017) noted that after the Arab Spring revolution in 2011, Tunisia had undergone a transformation whereby Tunisians acquired the right to participate actively in politics, form and engage in political parties, and cast their votes in fair elections, as stipulated by the 2014 constitution (p. 12). Tunisia's transformation towards democratization is also mentioned in ACCORD (2015), noting that Tunisia is a successful example that dispels the myth that Arab countries cannot achieve democracy. Many observers could not have imagined that Tunisians could overthrow a dictatorship and defeat a rigid authoritarian regime. The change of government and the harsh conditions in the state did not stop residents from solving problems peacefully. Pressure from citizens and new alliances between various political parties prompted the government to take steps for stability. Despite Tunisia's challenges, its policy transformation has already been recorded in history as a success of the Arab world.

According to the Freedom on the Net (2022) report, Tunisia is classified as a partly free country, implying that the Tunisian government continues to control the Internet. Nonetheless,

it is crucial to acknowledge that the Internet plays a pivotal role in the fight against authoritarian regimes in Tunisia. Therefore, Tunisia became democratic because, first, a developed digital infrastructure allowed citizens to use the potential of ICTs to fight against the authoritarian regime, and second, because of the political context in which the revolution in the country took place.

## **China**

Kluver (2005) states that with the emergence of ICTs in China, the country's authorities decided to use these technologies for national purposes such as politics, economic development, and culture. Thus, in the early 1980s, China got serious about telecommunications and made using ICTs an important strategy for the country (p. 301). It is no secret that many people in various states, from the early years of the emergence of ICTs, had high hopes for it, particularly for the Internet. This is mentioned by Liang et al. (2010) that even to this day, Chinese population has hope that the use and progress of the Internet in the state could lead to democracy (p. 104). Unfortunately, the reality was very different from their expectations. As Chi (2012) notes, the Internet allows people to be active political participants, but it also gives the government new ways to control it. If the government wants power over the Internet, ICTs give it that power (pp. 388-397).

For instance, this power could be considered as the creation and implementation of the Digital Silk Road, which is viewed as a new digital technology that helps increase ICTs capabilities. According to Abramowitz et al. (2018), after implementing the Digital Silk Road (DSR), many countries will face the common threat of Chinese digital autocracy. The DSR aims to provide fast and secure Internet access for digitalization progress. But experts believe that there is a threat that the DSR will make it much easier for Chinese intelligence agencies to spy on people. The Chinese Communist Party administration openly speaks about its desire to change the state's order to its vision of an authoritarian state by using the digital sphere. An

example of this digital surveillance by the Chinese government is the following up on Muslims in China. They are being watched through apps on cell phones, vast numbers of street cameras, and radio-controlled flying devices. In case a person was suspected of a «threat» by the Chinese authorities through such surveillance devices, he or she could be sent to one of the secret camps in Xinjiang without being investigated.

Additionally, Marguleas (2016) discusses the oppressive conditions facing Uyghurs in China and prison camps in Xinjiang. The Chinese government passed special legislation in Xinjiang to limit the flow of information to Chinese Uyghurs, leading residents to turn to virtual private networks (VPNs) to access the Chinese WeChat platform. However, WeChat proved difficult to censor because messages were exchanged in closed groups. In response, the Chinese government suspended access to WeChat, prompting Uyghurs to distribute information via flash drives, which they saw as a safer alternative without Internet access. These actions underscore the increasingly complex and contentious relationship between the Chinese government and the Uighur minority in Xinjiang, as well as the ongoing struggle for freedom of information and expression in the region.

Mongilo (2016) mentions that China, as a communist state, has begun to move toward the globalization of technology and information despite strict press controls and censorship of both national and international media through Internet censorship (pp. 155-156). The Chinese government combines legal regulations, manipulation, and social media control to restrict online content. According to Moynihan et al. (2021), there are no legal and practical obstacles to online monitoring in authoritarian China and severe restrictions on Internet freedom. China already had one of the world's most sophisticated Internet monitoring systems, before President Xi Jinping came to power. However, already under him, this system began to evolve predominantly toward China: in 2015, a law was introduced that criminalized the dissemination of false information on the Internet that could seriously affect public order in the country. Also, in 2017, Chinese authorities passed a new information security law requiring social media channels to obtain

government approval before disseminating news (pp. 4-6). These actions highlight China's balancing act between preserving national security and fake free speech in an era of digitalization.

Kalathil et al. (2001) state that in the beginning, most Internet users used the Internet for games, social networking, and online shopping. But as people began to have access to the Internet more and more, they became more aware of cultural and political norms. Chinese people have begun to create chat groups that actively discuss social and political topics to spread information, criticism, and news about the situation in China. No wonder after the Chinese authorities became aware of these chats, they undertook the main strategies to eliminate these challenges, such as filtering information, encouraging censorship, and blocking national and foreign media, which are considered a threat. Of course, it is also worth mentioning that the Chinese authorities have always used the mass media to disseminate their unchallenged policies. Since the period of Mao Zedong, the Communist Party of China (hereinafter CCP) used the mass media to spread its communist beliefs (pp. 4-5). Today's situation is no different; the Chinese government still uses ICTs to promote its ideologies. Maintaining a stable regime will always be the country's top priority in modern China. Accordingly, the news website VoaNews, published that China's Minister of Public Security in 2019 declared that preventing a coming color revolution is a top priority for the authorities. A color revolution is a movement that fights for regime change through peaceful action.

Based on Freedom House (2022), China is a state that controls all aspects of its population's Internet participation, resorting to measures such as: blocking social media platforms and websites, completely shutting down the Internet, creating laws on censorship and surveillance, technical attacks, arrests and physical attacks on Internet users. These «security» measures are the norm for the Chinese government and apply to everyone in the country, without exception. Of course, the Chinese population is trying to use social networks to spread information about the situation in their country, but the Chinese authorities are cleverly keeping

an eye on everything.

### **Comparative analysis**

In this section, I conduct a comparative analysis of Tunisia and China on political context, technological infrastructure, and government policies. In the case of Tunisia, ICTs played a significant role in the country's democratization, while the use of ICTs in China was mainly aimed at strengthening authoritarian power.

#### *The political context*

The context in Tunisia was quite revolutionary. As noted above, people protested publicly with one goal: to fight against the regime. Charafeddine (2012) argues that Tunisia, a former authoritarian state, came to a significant political change in the country after the Arab Spring revolution in 2010, mainly due to the influence of ICTs. During the revolution, social media and the Internet were crucial broad resources for connecting and spreading information to the people. In particular, three social media outlets, YouTube, Facebook, and Twitter, played a major role and influenced the overthrow of the authoritarian government (pp. 1-35). Wilson et al. (2012) also note how the use of ICTs contributed to policy change after the revolution of the Arab Spring. ICTs, according to the researchers, in times of revolutions and uprisings can be a great tool to mobilize and organize them. Thus, the revolutionary context allowed people to take full advantage of ICTs in bringing about political change in Tunisia during the Arab Spring.

The context in China, unlike in Tunisia, was relatively calm and stable. Using certain ICTs tools to maintain its power, China is still considered an authoritarian state. Kyriakopoulou (2011) notes how China exerts strict control over ICTs and thus monitors citizens' online comments to ensure that they coincide with the government's views (p. 21). Also, Rod et al. (2015) mention how Chinese authorities skillfully censor and suppress certain online content in the interest of state sustainability (p. 340-341).

### *Technology Infrastructure*

It was indicated above that Tunisia was quite technologically advanced even before the revolution. However, as Farrell (2012) mentions, the ICTs substructure has become even more progressive and developed after the advent of cell phones and the Internet in Tunisia. As a result, the Internet and cell phones facilitated the consolidation of different opinions, grievances, and criticisms, with which people could spread information and formulate structured and organized movements that supported the fight for democracy (pp. 44-45).

In the case of China, as Jinghan (2020) notes, the Chinese government has dedicated a massive budget to providing better government services and digital technology, developing and strengthening state control to maintain authoritarian rule (pp. 1449-1450). Even though both countries had the relatively well-developed technological infrastructure, they had different paths. In Tunisia, the citizens could take advantage of modern technologies to democratize the country, while in China, on the contrary, the government used them to strengthen the authoritarian regime.

### *Government Policy*

After the Arab Spring Revolution and the fall of the authoritarian regime in Tunisia, Saini (2020) notes that Tunisia enacted a series of reforms that were later incorporated into the new constitution. The government's first measures were to free prisoners expelled from Tunisia and unjustly imprisoned during President Ben Ali's rule. The next step was to preserve the integrity of the system of politics by giving the people freedom of speech and expression online (pp. 35-40). Arbi et al. (2021) also examine that Tunisia took significant steps toward a democratic state. The authors mention how Tunisia held peaceful elections that were soon recognized as fair and accessible (pp. 1-2). Thus, ICTs played a crucial role in enabling citizens to participate in political discourse and have freedom of choice.

However, the Chinese government's policy seeks to strengthen existing authoritarian power. Palmer (2012) refers to China as a country far from the process of democratization in the country, because of the constant online censorship and control of the Internet (p. 459). Wang et al. (2015) also note that the Chinese government develops policies that openly affect the media and the control of information on the Internet. Control mechanisms can also be considered government pressure that forces Internet users not to view certain forbidden information online, blocking social media accounts and censorship of online content (p. 2). Thus, the command of the Internet in the country has little effect on the country's political situation, as the government can shut down access to the Internet at any time.

Overall, while ICTs can play a crucial role in promoting democratization and citizen engagement, the context in which they are used is crucial. For example, in Tunisia, ICTs contributed to democratization through a favorable political context, supportive public policies, and developed technological infrastructure. In contrast, in China, using ICTs was aimed at reinforcing authoritarian power, aided by a history of authoritarian rule, a developed technological infrastructure, and government policies restricting access to information and controlling online content.

The cases during the Arab Spring movement demonstrated the power and role of ICTs in the direction of large numbers of people. The Internet, television, and Internet-enabled mobile phones have effectively influenced the politics of authoritarian Tunisia. Despite this increased control by authoritarian governments, citizens find ways and opportunities to fight the authorities using the same tool – ICTs. The way the Arab Spring received much publicity in various media outlets worldwide demonstrates that ICTs played an essential role during the protest and influenced the course of the revolution.

China is an example of how the more systematic use of ICTs can manage huge numbers of people, influence factors such as the economy, and increase political power in some state regions. Therefore, this country has become very adept at exploiting the power of the Internet,

such as filtering online content, censorship, blocking social channels, and spying on the population via the Internet.

## **VI. Conclusion**

This thesis investigated the political control of ICTs in authoritarian states. Based on an extensive literature review of successful and unsuccessful ICTs controls in authoritarian states, Tunisia and China were selected as the main focus of the study. The study aimed to examine the role of ICTs in these countries and the control methods used by authoritarian governments in Tunisia and China. In particular, the impact of ICTs on political awareness, freedom of speech, and human rights, and the potential of ICTs was assessed. Many people in authoritarian countries initially expected a different impact from the Internet. Two main reasons are unlimited access to new information and the ability to participate in political events regardless of time and place. But the reality was quite different as authoritarian governments decided to use ICTs for state control.

Due to the above research question, it was decided to conduct how Tunisia began to move towards democratization, after the Arab Spring movement, and China significantly strengthened authoritarian rule, and to conduct a comparative analysis that would reveal in detail the situations in the two countries. For this purpose, the paper conducted a comparative analysis, which reveals the factors that show how similar the two countries were to each other.

In my research, I set out to examine the role of ICTs, how the Arab Spring revolution in Tunisia began, the methods of control that the two countries used, and the result that the use of ICTs contributed to in authoritarian countries. The study of the factors mentioned above revealed the cause of the movement against the authoritarian regime in Tunisia, how ICTs helped to strengthen and overthrow authoritarianism, and revealed control methods such as online censorship, surveillance of Internet users, content filtering, Internet disconnection and limiting access to specific social networks. The results of my findings are valuable for further research on the role of ICTs in the world, specifically in authoritarian states. Furthermore, considering how ICTs were used in Tunisia and China, it is possible to conclude how great the power of ICTs.

Based on the results of this work, further research can be directed to the study of Tunisia and China at the current time. Unfortunately, even though after the revolution of the Arab Spring, Tunisia began to develop towards democracy, creating a new constitution and rethinking the former dictatorship in the country, the country today is going through a difficult time. As mentioned, today, Tunisia is considered a partially free state due to the people's dissatisfaction with the country's current situation. Freedom on the Net (2023) notes that corruption, gender inequality, security threats, and economic problems (especially after the COVID-19 pandemic) are relevant obstacles to complete democratization. President Kaïs Saïed has taken a series of emergency measures, such as the transformation of the constitution and the issuance of new laws to change the political system and expand his power. While in China, the authoritarian regime has recently begun to intensify. The CCP continues to use intensified control over all areas of regulation and citizens' lives. My research suggests that despite the disclosed initial success of ICTs in Tunisia, more research is needed on today's version of Tunisia and uncover the new methods of ICTs control in authoritarian China. As noted earlier, the power of ICTs, specifically the Internet, should not be underestimated. The Internet opens up many paths that help democratization processes but can also strengthen the authoritarian rule. ICTs have become a tool for suppressing citizen dissent, monitoring people, and maintaining strict control in authoritarian states. The study of using ICTs in authoritarian states raises serious issues of human rights and democracy.

The results of this paper show the seriousness of the whole situation. Many governments need to understand the implications, opportunities, and limitations of ICTs in promoting policy change by creating policies that will protect the rights and freedoms of the population, finding a balance between the necessary provision of stability and national security when needed. Researchers should continue to shed light on the role of ICTs in authoritarian states and their impact on political, economic, and social aspects of life.

In conclusion, this thesis helped identify factors driving authoritarian states to use ICTs. In

addition, the paper highlights the need for more people-centered policies that promote democracy. Finally, it emphasizes the crucial role of ICTs in authoritarian states, underscoring the need to continually examine the methods authoritarian governments use to control the network. As technology develops, how governments control it will also change. Therefore, the impact of ICTs in authoritarian states should be further examined to highlight the importance of factors such as democracy, freedom of expression, and human rights.

## VII. Bibliography

- Christensen, B. (2019). Cyber state capacity: A model of authoritarian durability, ICTs, and emerging media. *Government Information Quarterly*, 36. <https://doi.org/10.1016/j.giq.2019.04.004>;
- Faraon, M., Atashi, S., Kaipainen, M., & Gustafsson, N. (2011). *Using circumventing media to counteract authoritarian regimes*. 251-254. Artikel presenterad vid IADIS International Conference ICT, Society and Human Beings 2011;
- Glasius, M., & Michaelsen, M. (2018). Authoritarian Practices in the Digital Age| Illiberal and Authoritarian Practices in the Digital Sphere — Prologue. *International Journal Of Communication*, 12, 19. Retrieved from <https://ijoc.org/index.php/ijoc/article/view/8899/2459>;
- Göll, E., & Zwiers, J. (2018). Technological trends in the MENA region: the cases of digitalization and information and communications technology (ICT). *Zenodo*. <https://doi.org/10.5281/zenodo.4626817>;
- Keremoğlu, E., & Weidmann, N. B. (2020). How Dictators Control the Internet: A Review Essay. *Comparative Political Studies*, 53(10–11), 1690–1703. <https://doi.org/10.1177/0010414020912278>;
- Moss, D. (2016). The Ties that Bind: Internet Communication Technologies, Networked Authoritarianism, and 'Voice 'in the Syrian Diaspora. *Globalizations*. 15, 1-18. <https://doi.org/10.1080/14747731.2016.1263079>;
- Sinpeng, A. (2020). Digital media, political authoritarianism, and Internet controls in Southeast Asia. *Media, Culture & Society*, 42(1), 25–39. <https://doi.org/10.1177/0163443719884052>;
- Tapsell, R. (2018). The Smartphone as the “Weapon of the Weak”: Assessing the Role of Communication Technologies in Malaysia’s Regime Change. *Journal of Current Southeast Asian Affairs*, 37(3), 9–29. <https://doi.org/10.1177/186810341803700302>;
- Ronzhyn, A. (2014). The Use of Facebook and Twitter During the 2013–2014 Protests in Ukraine. Conference: Proceedings of the European Conference on Social Media.

<https://www.researchgate.net/publication/268979057> The Use of Facebook and Twitter During the 2013-2014 Protests in Ukraine;

Fuchs, C. (2021) "The Digital Commons and the Digital Public Sphere: How to Advance Digital Democracy Today", *Westminster Papers in Communication and Culture* 16(1), 9-26.  
doi: <https://doi.org/10.16997/wpsc.917>;

Heeks, R. & Seo-Zindy, R. (2013). ICTs and Social Movements under Authoritarian Regimes: An Actor-Network Perspective (October 29, 2013). *Development Informatics Working Paper no. 51, 2013*. <http://dx.doi.org/10.2139/ssrn.3477335>;

China: Freedom in the World 2017 Country Report  
<https://freedomhouse.org/country/china/freedom-world/2017>;

China: Freedom in the World 2022 Country Report  
<https://freedomhouse.org/country/china/freedom-world/2022>;

*Freedom House | Expanding freedom and democracy.* (2017). Retrieved March 28, 2023, from [https://freedomhouse.org/sites/default/files/2020-02/Freedom\\_in\\_the\\_World\\_2017\\_complete\\_book.pdf](https://freedomhouse.org/sites/default/files/2020-02/Freedom_in_the_World_2017_complete_book.pdf);

Tunisia: Freedom in the World 2017 Country Report  
<https://freedomhouse.org/country/tunisia/freedom-world/2017>;

Tunisia: Freedom in the World 2022 Country Report  
<https://freedomhouse.org/country/tunisia/freedom-world/2022>;

China: Freedom in the World 2023 Country Report  
<https://freedomhouse.org/country/china/freedom-world/2023>;

Tunisia: Freedom in the World 2023 Country Report  
<https://freedomhouse.org/country/tunisia/freedom-world/2023>;

Sandra, H. & Oliver, H. (2012). *Political Research: Methods and Practical Skills*, 231-256;

Stein, E. A. (2017). Are ICTs Democratizing Dictatorships? New Media and Mass Mobilization. *Social Science Quarterly*, 98(3), 914–941. <https://www.jstor.org/stable/26612450>;

Qiang, X. (2022, February 15). *Chinese digital authoritarianism and its Global Impact*. Project on Middle East Political Science. Retrieved March 28, 2023, from <https://pomeps.org/chinese-digital-authoritarianism-and-its-global-impact;>

The Pandemic's Digital Shadow

<https://freedomhouse.org/report/freedom-net/2020/pandemics-digital-shadow;>

Abramowitz, M., & Chertoff, M. (2018). *The global threat of China's digital authoritarianism*.

The Washington Post. Retrieved March 23, 2023, from

[https://www.washingtonpost.com/opinions/the-global-threat-of-chinas-digital-authoritarianism/2018/11/01/46d6d99c-dd40-11e8-b3f0-62607289efee\\_story.html;](https://www.washingtonpost.com/opinions/the-global-threat-of-chinas-digital-authoritarianism/2018/11/01/46d6d99c-dd40-11e8-b3f0-62607289efee_story.html;)

Harassed, Imprisoned, Exiled Gogia

<https://www.hrw.org/report/2016/10/20/harassed-imprisoned-exiled/azerbaijans-continuing-crackdown-government-critics;>

The Past Decade and Future of Political Media: The Ascendance of Social Media *Diana Owen Georgetown University et al.*

[https://www.bbvaopenmind.com/en/articles/the-past-decade-and-future-of-political-media-the-ascendance-of-social-media/;](https://www.bbvaopenmind.com/en/articles/the-past-decade-and-future-of-political-media-the-ascendance-of-social-media/)

Allagui, I. & Kuebler, J. (2011). The Arab Spring and the Role of ICTs. *International Journal of Communication* 5. 1435–1442;

Arbi, C. & Geri, M. (2021). After Sparking the Arab Spring, Is Tunisia Still a Success Story? *The Washington Institute;*

Ayeb, H. (2011). Social and political geography of the Tunisian revolution: the alfa grass revolution. *Review of African Political Economy*, 38(129), 467–479.

<http://www.jstor.org/stable/23055367;>

Bi, L. & Lu, H. (2010). Internet Development, Censorship, and Cyber Crimes in China. 26(1), 103-120. doi:10.1177/1043986209350437;

Bruns, A.; Highfield, T.; Burgess, J. (2013). The Arab Spring and Social Media Audiences:

- English and Arabic Twitter Users and Their Networks. *American Behavioral Scientist*, 57(7), 871–898. doi:10.1177/0002764213479374
- Hindman, M. (2018). *The Internet Trap: How the Digital Economy Builds Monopolies and Undermines Democracy*. Princeton, NJ: Princeton University Press;
- Charafeddine, A. I. (2012). *The Arab Uprising and the Role of Information and Communication Technologies*. University of Ljubljana - Faculty of Social Science;
- China: Freedom in the World 2022 Country Report  
<https://freedomhouse.org/country/china/freedom-world/2022>;
- China's Xi Says 'Color Revolutions' Must Be Prevented. News  
<https://www.voanews.com/a/china-xi-says-color-revolutions-must-be-prevented/6750450.html>;
- Dhillon, A. (2014). *Social Media & Revolution: The Importance of the Internet in Tunisia's Uprising*. Independent Study Project (ISP) Collection. 1938.  
[https://digitalcollections.sit.edu/isp\\_collection/1938](https://digitalcollections.sit.edu/isp_collection/1938);
- Ekrem, O. (2021). DEMOCRATIC ATTEMPTS IN TUNISIA AND EGYPT AFTER ARAB SPRING: A COMPARATIVE PERSPECTIVE. *Uluslararası İlişkiler Çalışmaları Dergisi*, 1 (1), 83-93. Retrieved from <https://dergipark.org.tr/en/pub/jirs/issue/68256/1064004>;
- Esarey, A., & Xiao, Q. (2011). Digital Communication and Political Change in China. *International Journal of Communication*, 5, 22;
- Eunju, C. (2012). The Chinese Government's Responses to Use of the Internet. *Asian Perspective*, 36(3):387-40. doi:10.1353/apr.2012.0015;
- Fangxin, H. (2022). The Effects of ICTs on the “Arab Spring”. *School of Journalism and Communication*;
- Farrell, H. (2012). The consequences of the internet for politics. *Annual Review of Political Science*, 15(1), 35–52. <https://doi.org/10.1146/annurev-polisci-030810-110815>;
- Honwana, A. (2013) Youth and Revolution in Tunisia. *African Arguments*;

- Jinghan, Z. (2020). Artificial intelligence and China's authoritarian governance, *International Affairs*, 96 (6), 1441–1459. <https://doi.org/10.1093/ia/iiaa172>;
- Kalathil, S., & Boas, T. C. (2001). The Internet and state control in authoritarian regimes: China, Cuba, and the counterrevolution. *First Monday*, 6(8);
- Kluver, R. (2005). US and Chinese Policy Expectations of the Internet. *China Information*, 19(2), 299–324. <https://doi.org/10.1177/0920203X05054685>;
- Kyriakopoulou, K. (2011). Authoritarian states and internet social media: Instruments of democratization or instruments of control? *Human Affairs*, 21(1), 18-26. <https://doi.org/10.2478/s13374-011-0003-y>;
- Lotan, G., Graeff, E., Ananny, M., Gaffney, D., Pearce, I. & Boyd, D. (2011). The Revolutions Were Tweeted: Information Flows During the 2011 Tunisian and Egyptian Revolutions. *International Journal of Communication*. 5. 1375-1405;
- Marguleas, O. (2016). Censoring collective identity: Chinese cybersecurity policy and the Uyghurs. *The Henry M. Jackson School of International Studies*. Retrieved March 23, 2023, from <https://jsis.washington.edu/news/censoring-collective-identity-chinese-cybersecurity-policy-uyghurs/>;
- Mlika, M., Charfi, R., Cheikhrouhou, S., & Mezni, F. (2020). About the association of a lecture-based learning and team-based learning in a pathology course. *Annales de pathologie*, 40(4), 329–336. <https://doi.org/10.1016/j.annpat.2019.11.004>;
- Mongilo, Z. (2016). Internet freedom in Asia: Case of internet censorship in China. *Journal of Government and Politics*, 7(1), 153. <https://doi.org/10.18196/jgp.2016.0026>;
- Moynihan R, Sanders S, Michaleff ZA, et al Impact of COVID-19 pandemic on utilisation of healthcare services: a systematic review *BMJ Open* 2021;11: e045343. doi:10.1136/bmjopen-2020-045343;
- Palmer, N.A., & Perkins, D.D. (2012). Technological Democratization: The Potential Role of ICT in Social and Political Transformation in China and Beyond. *Perspectives on Global*

*Development and Technology*, 11, 456-479;

Rod, E. G.; Weidmann, N. B. (2015). Empowering activists or autocrats? The Internet in authoritarian regimes. *Journal of Peace Research*, 52(3), 338–351.

doi:10.1177/0022343314555782;

Saini, C. K. (2020). Tunisia After the Arab Spring: Understanding Domestic Factors and Democracy. *The faculty of San Francisco State University*;

Teti, A., Abbott, A. & Cavatorta, F. (2017). The Arab Uprisings in Egypt, Jordan and Tunisia: Social, Political and Economic Transformations. *Reform and Transition in the Mediterranean (RTM)*;

Tunisia: Freedom on the Net 2016 Country Report

<https://freedomhouse.org/country/tunisia/freedom-net/2016>;

Tunisia: Freedom on the Net 2022 Country Report

<https://freedomhouse.org/country/tunisia/freedom-net/2022>;

The Democratic Transition in Tunisia

<https://www.accord.org.za/conflict-trends/democratic-transition-tunisia/>;

Wang, D. & Mark, G. (2015). Internet Censorship in China. *ACM Transactions on Computer-Human Interaction*. 22. 1-22. 10.1145/2818997;

Wilson, M. I., & Corey, K. E. (2012). The role of ICT in Arab Spring Movements. *Netcom*, (26-3/4), 343–356. <https://doi.org/10.4000/netcom.1064>;

Ziccardi, G. (2013). Resistance, Liberation Technology and Human Rights in the Digital Age. *Dordrecht: Springer*.