DIGITAL VIGILANCE

Basically.....

the Strategic vigilance is the state of awareness and attention to what is happening in the environment , It is the organized radar to capture signals that are translated into information to help decision makers develop and modify plans . The organization ensures the possibility of creating or exploiting opportunities or avoiding threats or even reducing their risks . Digitization or digital means all technology related to computers, networks and the Internet.....

DIGITAL INTELLIGENCE

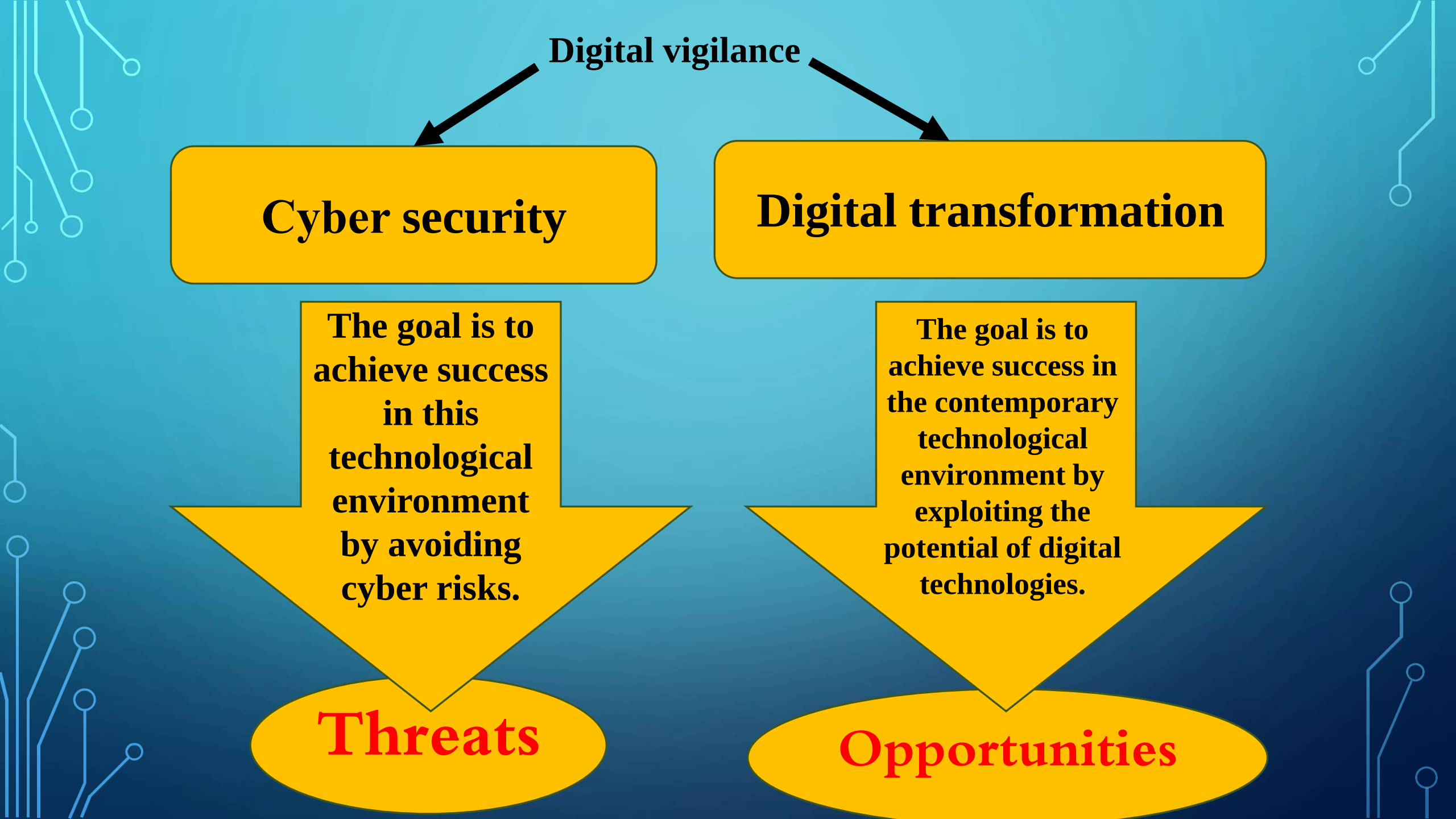
- **capacity to acquire, interpret and apply knowledge related to digital technologies in order to mobilize it in an effective, responsible and sustainable way". It allows us to thrive in a highly evolving technological environment**
- **For individuals, it serves to take advantage of the potential of digital technologies in order to develop the ability to interact effectively with it. It is also a key skill for organizations wishing to transform own selves.**
- **Recruiting digitally intelligent individuals is a guarantee of success today for organizations wishing to develop and achieve a responsible and sustainable digital transformation**
- **Developing digital intelligence is an asset for society - even a condition – to cope with societal changes and disruptive innovations**

Definition of digital vigilance

Digital vigilance points to the need for alertness and attentiveness and a complex collection of human capabilities, procedures for digital change and sociotechnical elements that enable practitioners to act to make urgent digital change take place successfully.

General meaning of digital transformation

Some studies have differentiated between the term digital transformation and the term digital disruption Digital transformation is a phenomenon that includes the basic strategic changes for the entire organization and indicates the strategic opportunities resulting from modern technology , While digital disruption leads to the introduction of strategic threats . It is a reality imposed on organizations due to technology


Digital vigilance
Cyber security
Digital transformation
The goal is to achieve success in this technological environment by avoiding cyber risks.
The goal is to achieve success in the contemporary technological environment by exploiting the potential of digital technologies.
Threats
Opportunities

PART ONE

Cyber security

Difinition:

- "is primarily about people, processes, and technologies working together to encompass the full range of threat reduction, vulnerability reduction, deterrence, international engagement, incident response, resiliency, and recovery policies and activities, including computer network operations, information assurance, law enforcement, etc."
- Cyber security is the body of technologies, processes, and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access. The term cyber security refers to techniques and practices designed to protect digital data. The data that is stored, transmitted or used on an information system. OR Cyber security is the protection of Internet-connected systems, including hardware, software, and data from cyber attacks. It is made up of two words one is cyber and other is security. Cyber is related to the technology which contains systems, network and programs or data. Whereas security related to the protection which includes systems security, network security and application and information security.

Why is cyber security important?

- **Cyber attacks can be extremely expensive for businesses to endure.**
- **In addition to financial damage suffered by the business, a data breach can also inflict untold reputational damage.**
- **Cyber-attacks these days are becoming progressively destructive. Cybercriminals are using more sophisticated ways to initiate cyber attacks.**
- **Regulations such as GDPR are forcing organizations into taking better care of the personal data they hold.**

Because of the above reasons, cyber security has become an important part of the business and the focus now is on developing appropriate response plans that minimize the damage in the event of a cyber attack.

But, an organization or an individual can develop a proper response plan only when he has a good grip on cyber security fundamentals.

Cyber security Fundamentals

Confidentiality:

Confidentiality is about preventing the disclosure of data to unauthorized parties.

It also means trying to keep the identity of authorized parties involved in sharing and holding data private and anonymous.

Often confidentiality is compromised by cracking poorly encrypted data,, disclosing sensitive data.

Standard measures to establish confidentiality include:

- Data encryption
- Two-factor authentication
- Biometric verification
- Security tokens

Integrity

Integrity refers to protecting information from being modified by unauthorized parties.

Standard measures to guarantee integrity include:

- Cryptographic checksums
- Using file permissions
- Uninterrupted power supplies
- Data backups

Availability

Availability is making sure that authorized parties are able to access the information when needed.

Standard measures to guarantee availability include:

- Backing up data to external drives
- Implementing firewalls
- Having backup power supplies
- Data redundancy

Cyber Security Elements

technology

People

Process

PART TWO

Digital transformation

Difinition:

- **Digital transformation refers to "organizational change brought about by the use of digital business tools and models to improve performance" Digital transformation therefore implies profound changes in the way the company operates, but not just any. It is about setting up new practices, related to the digital world, that bring added value and improve the way the company conducts its business.**
- **Digital transformation is the profound transformation of business and organizational activities, processes, competencies and models to fully leverage the changes and opportunities of a mix of digital technologies and their accelerating impact across society in a strategic and prioritized way, with present and future shifts in mind.**
- **Digital transformation is the cultural, organizational and operational change of an organization, industry or ecosystem through a smart integration of digital technologies, processes and competencies across all levels and functions in a staged and strategic way**

Digital transformation areas

- **Business activities/functions: marketing, operations, human resources, administration, customer service,**
- **Business processes: one or more connected operations, activities and sets to achieve a specific business goal, whereby business process management, business process optimization and business process automation come into the picture (with new technologies such as robotic process automation). Business process optimization is essential in digital transformation strategies and in most industries and cases is a mix of customer-facing goals and internal goals today.**
- **Business models: how businesses function, from the go-to-market approach and value proposition to the ways it seeks to make money and effectively transforms its core business, tapping into novel revenue sources and approaches, sometimes even dropping the traditional core business after a while.**
- **Business ecosystems: the networks of partners and stakeholders, as well as contextual factors affecting the business such as regulatory or economic priorities and evolutions. New ecosystems are built between companies with various background upon the fabric of digital transformation, information, whereby data and actionable intelligence become innovation assets.**

- **Business asset management: whereby the focus lies on traditional assets but, increasingly, on less ‘tangible’ assets such as information and customers (enhancing customer experience is a leading goal of many digital transformation “projects” and information is the lifeblood of business, technological evolutions and of any human relationship). Both customers and information need to be treated as real assets in all perspectives.**
- **Organizational culture, whereby there must be a clear customer-centric, agile and hyper-aware goal which is achieved by acquiring core competencies across the board in areas such as digital maturity, leadership, knowledge worker silos and so forth that enables to be more future-proof.**
- **Ecosystem and partnership models, with among others a rise of co-opetive, collaborative, co-creating and, last but not lost, entirely new business ecosystem approaches, leading to new business models and revenue sources. Ecosystems will be key in the as-a-service-economy and in achieving digital transformation success.**
- **Ecosystem and partnership models, with among others a rise of co-opetive, collaborative, co-creating and, last but not lost, entirely new business ecosystem approaches, leading to new business models and revenue sources. Ecosystems will be key in the as-a-service-economy and in achieving digital transformation success.**

- **Customer, worker and partner approaches. Digital transformation puts *people and strategy before technology*. The changing behavior, expectations and needs of any stakeholder are crucial. This is expressed in many change subprojects whereby customer-centricity, user experience, worker empowerment, new workplace models, changing channel partner dynamics etc. (can) all come in the picture. It's important to note that digital technologies never are the sole answer to tackle any of these human aspects, from worker satisfaction to customer experience enhancement. People involve, respect and empower other people in the first place, technology is an additional enabler and part of the equation of choice and fundamental needs.**
- **Technological evolutions and technologies, ranging from cloud computing, big data, advanced analytics, artificial intelligence, machine learning and mobile/mobility (a key game changer) to the Internet of Things and more recent emerging technological realities are 1) enablers of digital transformation and/or, 2) causes of digital transformation needs (among others as they impact behaviour of consumers or reshape entire industries, as in the digital transformation of manufacturing), and/or 3) accelerators of innovation and transformation. Yet, technology is only part of the equation as digital transformation is by definition holistic.**

The need for digital transformation

- First, already since the coming of the World Wide Weband its worldwide adoption, an increasing number of accompanying technologies (e.g., smartphones, SEO, cloud computing, speech recognition, online payment systems,) have risen that have strengthened the development of e-commerce. E-commerce global sales were $2.3 trillion in 2017 The omnipresence of big data and advent of emerging digital technologies, such as artificial intelligence (AI) and robotics, are projected to have far-reaching effects on business . the wide entrance of new digital technologies clearly signals the need for firms to transform their business digitally. Moreover, these new digital technologies may also affect the firm’s cost structure through replacing costlier humans during service delivery with the help of robots or virtual agents or optimizing logistic streams and reducing supply chain costs through the use of AI..

- **Second, due to these new digital technologies, competition is changing dramatically. In retail, technologies have disrupted the competition landscape, shifting sales to relatively young digital firms. Not only has the competition become more global, the intensity has also increased as big, information-rich firms from the U.S. (e.g., Amazon, Alphabet, Apple, and Facebook) and China (e.g. Alibaba, and JD) . to dominate numerous industries. Notably, changes in firm valuations strongly reflect this shift. Just a decade ago, the five most valuable firms of the S&P 500 Index included Exxon, GE, Microsoft, Gazprom and Citigroup, only one of which was truly digital. On May 2018, the S&P's top five most valuable firms were all digital including Apple, Alphabet, Microsoft, Amazon and Facebook.**

- **Third, consumer behavior is changing as a response to the digital revolution. Market figures show that consumers are shifting their purchases to online stores, and digital touchpoints have an important role in the customer journey affecting both online and offline sales . With the help of new search and social media tools, consumers have become more connected, informed, empowered, and active . Digital technologies allow consumers to co-create value by designing and customizing products, perform last-mile distribution activities, and help other customers by sharing product reviews. Mobile devices have become important in today's consumer behavior and facilitate showrooming behavior, the practice of examining merchandise offline, and then buying it online . Consumers also strongly rely on apps, and new AI-based technologies, like Amazon's Echo and Google Home, that are entering consumers' lives. These new digital technologies are likely to structurally change consumer behavior , and, consequently, the use of new digital technologies can easily become the new norm and defy traditional business rules. If firms cannot adapt to these changes, they become less attractive to customers, and are likely to be replaced by firms that do leverage such technologies.**

Digital transformation goals

- the performance improvements.
- generate revenues, profits and improve investor value.
- the customer satisfaction .
- growth in number of users , customers, and sales.
- which want to transform digitally, need to simultaneously attain two main objectives: reducing costs through automation and growing revenues through enhanced customer experience.