DIGITAL INNOVATIONS- EVOLVING ROLE OF CS*

Introduction

Digital innovation refers to the application of digital technology to existing business problems. Concepts such as digital transformation and digitization are closely linked to digital innovation. In today's business scenario, numerous businesses recognize that they need to transform, innovate and embrace new technology in to stay alive in the cut-throat competition.

Digital innovation assists in streamlining the business processes that come as an outcome of automation, SaaS (Software as a Service) and other integrated technology solutions, help in reduction of costs, thereby improving Return on Investment (ROI) and revenue enhancement. It also provide competitive advantage to a business organisation.

Digital innovation can include the following-

a)   Developing a new technology strategy in an existing business context.

b)   Choosing to adopt and implement new software or platforms.

c)   Deciding to evolve from analog to digital processes.

The history of digital innovation goes back to 1940s and it's still evolving with the onset of new technologies like artificial intelligence, augmented reality etc. The brief history of digital innovation that has taken place through several decades is provided in the exhibit 1

Exhibit 1

Brief History of Digital Innovation

Year	Digital Innovation
1940s	Claude Shannon, the father of modern digital communications and information theory, paves the way for digitization in his article, *'A Mathematical Theory of Communication'.*
1950s	The microchip and today's most widely-used semiconductor transistor were invented. During this decade, analog computing went digital.
1960s	The first message was sent over ARPANET (The Advanced Research Projects Agency Network), which was the foundation of internet.
	In view of the stated development, Gordon Moore theorized that computing power doubles once about every year- Moore's law goes on to guide innovations that enhance the scope and reach of digitization.

1970s	(i)	Home computers were introduced.
	(ii)	Space invaders ushered in the golden age of digital arcade of video games.
	(iii)	Data entry jobs cropped up to help businesses convert their analog records into digital data.
1980s	(i)	The World Wide Web was invented and computes achieved semi-ubiquity in developed nations.
	(ii)	Automation began to enter the workforce.
1990s	(i)	The World Wide Web became publically accessible and became integral to international culture by the end of the decade.
	(ii)	The 1990 Football World Cup was the first public, digital HDTV (high-definition television) broadcast.
	(iii)	The 2G network was introduced and digital cell phones were sold commercially.
2000s	(i)	More than half of American households owned a personal computer and the population of internet reached 1 billion.
	(ii)	The digital revolution spread to the rest of the developing world.
2010s	The digitization of existing analog and manual systems got nearly completed and next revolution began, i.e., digital transformation.	
2014	(i)	Pioneering digital transformation projects started to show success.
	(ii)	Marked the understanding of Digital Transformation (DX) morphs from one-off infrastructure projects to a technology first strategic approach.
2015	(i)	MIT (Massachusetts Institute of Technology) and Deloitte articles stated that strategy, not tech, is the driving force behind DX.
	(ii)	Media, telecom, and consumer financial services closely followed by retail and technology were the most disrupted industries.
2016	(i)	Forrester's Digital Transformation Forum suggested that DX should be a never ending quest for improvement.
	(ii)	Enterprises upskilled and formed agile transformation teams.
2017	(i)	Digital budgets increased and software solutions soared.
	(ii)	Businesses transformed operational processes and closed consumer experience gaps between web, mobile apps and offline engagement.
2018	(i)	DX continued to dominate business strategy and became key growth driver for many organisations.
	(ii)	Initiatives were built on the third platform, i.e., a computing platform was formed from mobile technology, social media, cloud computing, big data and IoT devices.

2019	40% of all technology spending were expected to go towards digital transformation.
2020	(i) 50% of the Global 2000[1] were expected to see most of their business depending on their ability to create digitally transformed products, services and experiences. (ii) 30% of the Global 2000 were expected to have allocation of capital budget equal to at least 10% of revenue to DX.
2021	(i) The prevalence of apps, AI, bots and other digital technologies were expected to embed digitization in our everyday lives. (ii) 20% of all activities were expected to involve one of the seven digital giants – Google, Apple, Facebook (new Meta), Amazon, Baidu, Alibaba and Tencent.
2022	(i) 60% of the worldwide DX spending will reach $2 trillion, a 60% increase since 2016. (ii) DX spending will achieve a five-year compound annual growth rate of 16.7%

Role of Digitization in the sphere of Company Secretary Profession

Irrespective of the profession a person is associated with, technology has become pervasive. In other words, digitization has become an indispensable element for a professional in discharging his / her professional obligations to corporate as well as clients. In this regard, the profession of Company Secretary is also not an exception.

As the role of company secretary has witnessed a metamorphosis over a period of time, i.e., in the current era, a Company Secretary is performing multiple roles, like Governance Professional, GST Professional, Insolvency Professional, Registered Valuer, Advisor to the Board, Corporate Planner and Strategic Manager, Corporate Compliance & Risk Manager etc. usage of technology has become crucial.

It is to be noted that the technology possess the power to transform challenges into opportunities through the transformative changes in the productivity. It is a widely known fact that as the regulatory provisions are rising and becoming complex along with more strict rules, challenges for Company Secretaries are also increasing as they hold the responsibility to advise the board on various issues pertaining to the corporate governance. Digitalization and its impact on the Company Secretary profession are as under:

1. **Strengthening Governance**- With the help of digital innovation Company Secretaries can easily deal with the matters relating to governance. For instance, the way a Company Secretary organise and conduct board meetings directly affects the board members of the company. Now usage of technology can assist in reducing time consumption, paperwork and manual invitation, as well as in ensuring that directors receive what they need to make the meeting conducive and beneficial. Today most of the boards across the globe are going digital thereby necessitating the need for Company Secretaries to work closely with the board in order to ensure smooth transition.

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[1] The **Forbes Global 2000** is an annual ranking of the top 2,000 public companies in the world by *Forbes* magazine. The ranking is based on a mix of four metrics: sales, profit, assets and market value

As mentioned above, the responsibilities of Company Secretaries have also changed drastically. Gone are the days wherein Company Secretaries were only expected to deal with minute-taking and book-keeping. Now their responsibilities have reached lengths of overseeing processes to support effective corporate governance while remaining compliant to organization bylaws and national regulations.

2. **Artificial Intelligence and its impact on the role of Company Secretaries**: It is estimated that the possible impact Artificial Intelligence may exert on the role of a Company Secretary is that it will abolish the repetitive and administrative tasks, which still constitute a significant part of Company Secretary's role.

Artificial Intelligence will reduce the manual workload and will automate lower level functions of the Company Secretary, thereby improving due diligence processes and provide assistance with compliance procedures. It is to be noted that due to onset of Artificial Intelligence, the need for the future Company Secretaries to be acquainted with various administrative tasks that are part and parcel of a Company Secretary profession.

It can be understood with the help of an example, i.e., SPSS (Statistical Package for the Social Sciences) have made statistical analysis fast but a researcher or a person using SPSS needs to be conversant with the concepts of various statistical tools in order to use the appropriate statistical tool and draw inferences from the output. Similarly, Artificial Intelligence may make the process fast, thereby saving both time and cost but one needs to be aware about the concepts, approaches, relevant laws / regulations etc. driving those processes.

3. **Manual to Digital form filing:** In India, a Company Secretary has to file numerous forms under the Companies Act, 2013. Previously, a Company Secretary was required to file the forms with Ministry of Corporate Affairs or Registrar of Companies manually, thereby consuming substantial time. But in this era of digitalization, form filing have become convenient and fast.

Forms like INC 1- Application for reservation of name, INC 3- Consent of Nominee as regards One Person Company, INC 4- Change of Nominee as regards One Person Company, INC 5- Intimation by One Person Company for exceeding prescribed threshold more than Rs 50 lakh of share capital or Rs 2 crore of turnover and so on and so forth are today filed electronically, thereby putting the companies or clients at ease.

4. **Technology- A Messiah for Company Secretaries**: How technology has proved to be a blessing for the Company Secretaries is evident from a quite recently conducted research study titled, ' Next Generation Governance' conducted by ICSA: The Governance Institute- the professional body for Company Secretaries, wherein the views of younger governance professionals (those aged 35 and under) were sought on some of the issues that are likely to impact the profession and their organisations in future.

The research study revealed that majority of the respondents were fairly optimistic about the impact of technology. Only five percent of the respondents were concerned about job loss due to technological transformation. However, sixty percent of the respondents who took part in ICSA's research survey believed that technology will reduce the time they spent on administrative tasks, including numerous compliance related activities. For instance, tasks like maintaining of insider lists can be done very fast, and more accurately using technology than they can be manually.

Further, the respondents also opined that by embracing technology the time a Company Secretary could save can be devoted to other equally important responsibilities. So it can be observed that technological advancements or digital innovation are indispensable for ensuring high efficiency in the performance of a Company Secretary.

Challenges of Digitalization for Company Secretaries

While espousing digital innovation, a Company Secretary is required to consider the following challenges-

i) ***Menace of Cyber Crime***: Digital innovation apart from ushering cost effectiveness, enhancing efficiency and accuracy, also open the doors to cybercrimes. Breaches of sensitive data through phishing attacks, scam emails and possibly also insider fraud are becoming quite common due to absence of cyber training awareness and computer hygiene ((e.g. encryption of sensitive data, firewalls, updating of software).

In view of this, the Company Secretary needs to be conversant with the ever-increasing cyber related threats resulting from digitalisation as custodian of a huge volume of sensitive information and records.

ii) ***Innovative and Learning Culture***: An innovative and a learning culture is another challenge which the Company Secretary has to witness. It is essential that the Company Secretary keeps himself / herself well-informed of digital skills by undertaking training through appropriate sources. The company secretary must also assist board members and other stakeholders to engage with the opportunities provided by technological advancements and ensure that relevant training on the use of innovative IT systems is provided to board members.

iii) ***Pressure on Quicker Decision Making***- The increase in the use of instant messaging platforms, emails and group chat amongst others have put increase pressure on the company secretary for a quicker decision-making process.

In addition, easier access of information and immediacy could result in additional pressure and adversely impact the work-life balance of the company secretary's role. "Digital technologies promise flexibility in terms of when and how we work. But instead what they have done is to extend the "working day" and created an unhealthy emphasis on "multi-tasking".

In view of the above challenges, a Company Secretary should take on an advisory role to ensure that the organisation has appropriately evaluated its risk appetite and IT risk management systems when managing the demands of operating in a digital world.

Furthermore, internal controls and procedures should be in place to ensure that not only the company secretary, but all organisation staff are aware of the immediate steps to be taken in the event of a data breach and the responsibility to notify the regulator as may be applicable by law. A robust data and business recovery plan need also to be in place to counteract the eventuality of a loss of data through breaches in information security governance.

Trends of Digital Transformation in 2022

The top seven trends shaping digital transformation in 2022 that may exert tremendous impact on various industries, trade and various professions and in this regard, the profession of Company Secretary is also not an exception so it is of substantial academic and research interests to reconnoitre the trends of the mentioned digital transformation.

1. **The future of work will be built on connected, hybrid experiences:** The workplace has rapidly evolved, and with it, employee expectations -- forcing organizations to deliver digital-first and connected experiences to drive productivity and retain talent. In this process of driving productivity, Company Secretaries are also a significant element and so Company Secretaries can take a lead role in advising the requisite digital innovation to the board.

2. **The composable business matures:** As the pressure to innovate faster continues to rise, organizations will seek even greater swiftness, leading to an increased drive to composable and event-driven architectures.

   Composability is a system design principle that deals with the inter-relationships of components. A highly composable system provides components that can be selected and assembled in various combinations to satisfy specific user requirements. Now a Company Secretary depending upon the nature of roles and responsibilities and their magnitude he / she is dealing with may advise the board regarding technical components which the IT Department may arrange under composable system.

3. **The rise of the business technologist:** With the increasing pressure of the digital imperative on organizations, business technologists will come to the fore as an essential partner in IT departments' efforts to accelerate innovation. In this regard, Company Secretaries may advise the IT Department of their respective organisations to arrange for necessary technologies as a mean to strengthen corporate governance.

4. **Hyperautomation unlocks digital value:** Hyperautomation will unlock productivity, accelerate time-to-market, and transform employee and customer experiences. As it is a widely known fact that in this era of cut-throat competition, productivity plays a significant role, i.e., delivery of high quality products (goods / services) at economical price and of high quality. A Company Secretary whether in employment or in practice has to ensure quality assurance in discharging professional obligations. To meet the deadlines of the corporate stakeholders or clients and to deliver optimal output, a Company needs to embrace hyperautomation.

5. **Security-by-default is a must-have:** Security-by-default will become a need-to-have as organizations increasingly realize their applications and automations are only as secure as the composable blocks on which they are built. Security of data is essential in the interests of stakeholders. In this regard, Company Secretaries can explore various softwares or technological applications for securing significant and confidential information of the company or clients.

   Since Company Secretary is a Key Managerial Personnel and is custodian of many crucial information pertaining to the company, board, critical processes of the company, legal reports etc., and so it is imperative to have robust security system to preserve these information.

6. **The rise of hybrid, distributed ecosystems adds complexity:** As the digital world embraces hybrid and multi-clouds, finding a universal way of integrating and managing these environments will become essential to successful digital transformation. So digital world is evolving and evolving at an astounding pace and creating complexity. In view of this, a Company Secretary with the association and advice of IT Experts can find out

suitable IT solutions suiting to his / her professional requirements in order to surmount the complexities in view of rising hybrid and distributed ecosystems.

7. **A single source of truth becomes key to the data-driven business:** As digitization continues to drive an increasing amount of data, organizations will seek a single source of truth where consumers can get the right data in the right context at the right time.

Taking cue from this point, Company Secretaries may with the association of technical team of the organisation can develop a MIS (Management Information System) containing all the much needed and updated information, i.e., information being constantly updated in view of changes in pertinent corporate laws, securities and capital market laws, mercantile laws, tax laws etc. so that the boards can access the relevant information whenever needed for communicating with the stakeholders.

Conclusion

Due to innovative developments in governance ecosystem and legal technology, the role of a Company Secretary is witnessing a major metamorphosis and it's certain that future scenario will be much different from now. In view of this, digital innovation should be welcomed instead of getting unsettled by it. It's high time to acquire knowledge on technological applications like, Algorithms, Artificial Intelligence (AI), Quantum Computing, Blockchain, Augmented Reality etc. in order to stay ahead in the competition and deliver optimum output.

It can be stated without an iota of doubt that digital innovation will allow a Company Secretary to spend fewer time in data processing and more time on creative thinking and problem solving. A Company Secretary being a crucial link between the company and its Board of Directors, shareholders, government and regulatory authorities ensures that Board procedures are both followed and regularly reviewed. He is key managerial personnel and commands senior position in the value chain and acts as conscience seeker of the company. A Company Secretary advises on good governance practices to the board and compliance of Corporate Governance norms as prescribed under Company Law, Securities Laws and Other Business Laws and regulations and guidelines made thereunder, it is imperative to embrace digital innovation to perform the aforesaid complex roles with precision, thereby safeguarding the interests of both internal and external stakeholders.

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