CSSA Best Practice Guide

Artificial intelligence and the impact on the Company Secretary

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Introduction

Artificial intelligence (AI) is defined as the theory and development of computer systems able to perform tasks usually requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation of languages.¹

Developments in AI are increasing rapidly and a new technological way of living may just be around the corner. Many people tend to think that robots and mechanics will only impact their personal lives by way of driverless cars and computer-generated home devices. However, this is not the case and AI will be making its debut in all working sectors sooner rather than later. The question that arises is how we are going to navigate this transition in a way that will secure jobs and complement interaction with robotics as opposed to threatening our very existence. The fear of the loss of jobs was a significant feature of the industrial revolution and technological revolution. However, these periods of history were marked by significant opportunities for economic growth and job creation in new areas. Because there are hardly any practising examples of how a robot may impact the Company Secretary’s job, we need to look at the various debates taking place as well as the differing opinions on this topic and make recommendations based on what we can derive from these sources.

In this paper, we first review the role of the Company Secretary and how it has evolved. The debates about AI are then identified. AI is then looked at in a South African context. The disadvantages and advantages are analysed. Recommendations are then made on the way forward for the Company Secretary and what needs to be done in order to maximise human participation with robots so that a harmonious environment is created wherein humans and robots will complement rather than replace each other.

¹ Online Oxford Dictionaries (https://en.oxforddictionaries.com/definition/artificial_intelligence)
The role of the Company Secretary

The Company Secretary's role comprises both administrative and technical aspects and has evolved exponentially in the last few years. Both the Companies Act of 2008 and the King IV Report outline the functions of the Company Secretary, who is now seen as the master teacher of corporate governance, regulations and the law within the company. The responsibilities of the Company Secretary are diverse and are provided to the governing body, the company and relevant stakeholders. The overall monitoring of compliance within the company, including compliance with the company’s Memorandum of Incorporation (MOI) rests with the Company Secretary. The Company Secretary provides guidance to directors in ensuring the fulfilment of their duties. The overall management and monitoring of meetings is handled by the Company Secretary, who prepares the agenda and the board packs; records the minutes and distributes the minutes for comment, and supervises the voting procedures including proxy voting. The preparation of the company’s annual integrated report and the certification of the company’s annual financial statements are done by the Company Secretary, who must also send copies of the annual financial statements to all persons entitled to receive them.

The Company Secretary is responsible for the timeous lodgement of documents with the relevant regulatory bodies. The induction of new directors is the duty of the Company Secretary who needs to ensure that a thorough induction process is followed and that directors understand all that is required and expected of them.

International debates on AI

The hype around AI has reached its peak with many prominent “techno-savvy” billionaires expressing their views on the possible impact of AI in the future. It is important to keep abreast of these debates and developments so that humans may upskill themselves and minimise any possible negative impact on them in the future. One of the most prominent debates, which has taken place is that between Elon Musk and Mark Zuckerberg, who express conflicting views on the topic of AI. Musk, who is the chief executive of Tesla and SpaceX and Zuckerberg, who is is the CEO of Facebook, adopt different standpoints. Their views can be summarised as follows. Musk approaches AI from a “doom and gloom” standpoint whereas Zuckerberg is of the opinion that AI is something to embrace. Speaking on the topic of AI, Musk advised that AI will cause job disruption and that obots “will be able to do everything better than us.” In addition, Musk stated that “AI is a fundamental risk to the existence of human civilisation.” Zuckerberg responded to Musk’s comments by saying that AI is going to make our lives better in the future, and doomsday scenarios are “pretty irresponsible.” Zuckerberg went on further to say that he is optimistic and that “in the next five to 10 years, AI is going to deliver so many improvements in the quality of our lives.” Zuckerberg does caution the proper use of AI and adds that “technology can generally always be used for good and bad, and you need to be careful about how you build it, and you need to be careful about what you build and how it is going to be used.”

Musk advocates that the implementation of AI regulations is of paramount importance and should be one of the focal points of governments. Bill Gates, co-founder of Microsoft, echoes Musk’s sentiments about AI and states that “first the machines will do a lot of jobs for us and not be super intelligent. That should be positive if we manage it well. A few

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2 Section 88 of the 2008 Companies Act
decades after that though, the intelligence is strong enough to be a concern”.5

A prominent speaker on AI is Vivienne Ming, co-founder of Socos. Ming adopts a positive attitude towards AI. When answering a question on how we can maximise our potential within a company, Ming provides the following guidance and advice. Ming points out that “it wasn’t someone’s specific skills and experiences – whether they knew how to program in a certain language, or whether they went to the right university – that predicted success. Instead, the predictive elements are things like emotional intelligence, social skills, level of creativity, or strategic thinking.” 6 Ming added that “we already know that AI will be able to replace specific skills. If there’s enough data on a process or task, someone like me can build an AI tool to do discrete tasks faster, cheaper, and better than a person.” 7 Ming concludes by stating that “AI is unlikely to replace emotional intelligence or creativity as easily. That’s why the future of work will be defined by people that you can give an open task to, without a lot of direction, and trust that they’ll make progress on it themselves. These creative, strategic thinkers I call the explorers. They have the skills that we’ll become desperately hungry for in an AI-powered future.” 8

An example which illustrates the positive effect of AI on human society is the so-called “Sexy Face” game created by Ming. In partnership with Refugees United, the game evolved and with the technology created through Sexy Face, children in refugee camps were able to be identified in three minutes using an iPad and were subsequently rescued.9 This is one example which shows that with the correct implementation AI can benefit our lives and is not all “doom and gloom”.

Another interesting debate taking place is whether future bosses would be in the form of automated machines. Royal Dutch Shell PLC has implemented an algorithm that is able to scan Shell staff members with the necessary skill and expertise to perform certain tasks and to assign such tasks to those persons.10 Matthew Summers, co-founder and managing director of InSiris stated that “if you’re a human allocating work, a computer’s going to be much more efficient at that.” 11 However, researchers have cautioned that AI systems are designed to make judgments by identifying commonalities to previous data, which can make AI systems weak at deciding when a staff member would achieve a task previously never assigned to him/her.12 Thus, most companies are in agreement that AI systems and machines are “no substitute for human judgment and ability to manage

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6, 7, 8 https://www.salesforce.com/blog/2017/10/how-ai-helps-employees-maximize-their-potential.html
9 https://www.linkedin.com/pulse/artificial-intelligence-force-good-katrina-read
10, 11, 12 http://www.wsj.com/articles/meet-your-new-boss-an-algorithm-1512910800
interpersonal relations” but rather alleviate administrative burdens and assist managers in improving past judgments. James Matcher, a Director and Partner at EY and a specialist in AI, spoke at a CSSA Technical Committee meeting held on 19 February 2018 on this topic. Matcher adopts a positive approach to AI and emphasised that the joint forces of both humans and robots would be a powerful combination. Robots would be the branch, which would undertake all repetitive tasks and high-volume tasks effectively and efficiently, and humans would remain the branch representing the assessors and judgment-makers. Matcher illustrated how AI would save humans much needed time in the workplace to focus on decision-making and judgment. An example provided by Matcher is how banks are currently making use of AI to complete highly administrative and repetitive tasks such as the BA900 report. Matcher showed how the completion of the BA900 report by bank personnel could take up to four hours per report versus the time it takes a robot of six minutes, thus resulting in a 95% time-saving.

The fear, or “automation anxiety” as Matcher described it, of those in administrative positions, which could easily be overtaken by robots, should be alleviated by seeing AI as an opportunity to be redeployed and reallocated in more complex positions after being trained and up-skilled. Matcher indicated that this is already being done by many companies, where staff members are being outsourced to clients who need their services, thus expanding their work experience and knowledge. Though there is a common theme which runs through many mindsets as to the disadvantages of AI, as identified below, Matcher points out positive attributes of robots, examples of which include:

- Robots are interface focused in that a business does not need to rebuild the business rules, which would be applicable to both humans and robots;
- Robots are business user-friendly in that any person within the business can monitor the process;
- Robots embody a full audit history and security in that robots have the ability to digest every historical fact and cannot lie, and passwords and authorised personnel can be monitored; and
- Robots are fully scalable in that a thousand processes can be placed into a single robot.

In an article published by the Gordon Institute of Business Science (GIBS) and Accenture, the question addressed is whether South Africa is prepared for AI. The findings of the article may be summarised as follows. There is raised concern among South Africans that AI will lead to loss of jobs and increase the gap in wage inequality. In a July 2017 roundtable debate on AI in SA hosted by GIBS and Accenture, there was consensus that there are a number of obstacles standing in the way of SA fully implementing AI. Such obstacles include an inadequate education system; inadequate scientific research institutions and inadequate innovation ecosystems.

On a more positive note, the article states that “AI can be seen as a new factor of production that can help address future labour shortages and a chronic productivity deficit in SA”. It has been estimated that AI could increase the economic growth rate in SA by 1% by 2035. The article advises what SA needs to do to embrace AI comprehensively in the future. The suggested actions are the following:

- “Create a vibrant ecosystem – SA needs to fundamentally shift its thinking about AI and strategically plan to create a comprehensive long-term vision of the role of AI in the country’s economic developments”.

- “Turn AI investment into AI-driven growth – AI is already an attractive value differentiator between firms. In fact, analysis shows that companies that can move from “observer” status to the “collaborative inventor” position could see their firm’s value increase by 90% on average.”

- “Practise responsible AI – From economic policy to labour displacement and even data protection, AI is both an opportunity and a responsibility for business, government and technology leaders. These stakeholders must address key elements to ensure success including: governance models anchored on a strong value system; ethical guardrails that encourages trust (e.g. privacy, transparency and security) and a strong code of conduct and guiding principles needs to be developed.”

The legal landscape in South Africa has received much attention in regard to the possible impact of AI on South African lawyers and the legal field in general. Morne van der Merwe, managing partner of global law firm Baker McKenzie, was recently interviewed by Business Law & Tax on the future of lawyers in an AI-driven world. Morne advises that a challenge exists in needing to train lawyers to be able to function effectively in a technological environment. Morne adds that AI will have the benefit of saving client fees by automating various legal services such as due diligence and contract review and will allow lawyers to focus more on judgment and opinion-orientated legal work. Morne welcomes the introduction of AI in the legal sector and is of the opinion that AI will not replace lawyers but will alter the manner in which lawyers provide their services, to the benefit of both the lawyer and the client.

Nerushka Bowan highlighted an interesting legal scenario at the CSSA Premier Corporate Governance Conference held on 22 August 2018. She posed the question as to who would be responsible in the event that a robot “attacked” an employee, in for example the mechanical engineering sector, due to incorrect programming. If such an employee is injured whilst on duty on the workplace premises, would the employer then be liable on the grounds of vicarious liability? Vicarious liability is described as follows: “it is trite in law that an employer is vicariously liable for the wrongful conduct of an employee if such wrong was committed by the employee in the course and scope of his or her employment or while engaged in any activity incidental thereto. The rationale for this is because the employee is an extension of the employer – the instrument with which the latter acts”. Would a robot be classified as an employee? This is not yet certain and would need to be decided by the courts in South Africa, should such a dreadful occurrence take place.
Advantages and disadvantages of AI

Much discussion has revolved around the advantages and disadvantages of AI, especially within the context of the workplace environment. The main advantages and disadvantages of AI were summarised by the Arrk group as follows.21

### Advantages

- **Handling routine tasks**
  AI has the capability of handling routine and administrative tasks. This will enable humans to spend more time focusing on more challenging and complex tasks within their specific roles.

- **Speedy outcomes**
  AI, together with cognitive processes, can assist in resolving outcomes at a faster pace, thus leading to greater productivity.

- **Eliminating mistakes**
  Humans, by their very nature, are prone to making errors occasionally. Where AI is implemented correctly, mistakes will be avoided. This will be of great assistance in the field of data-capturing, where the accuracy of data will be assured.

- **Bearing the brunt on behalf of humans**
  With the level of research increasing drastically, AI can minimise risk faced by humans in fields such as space exploration. This can provide useful assistance in various areas of research including medical diagnosis and oil exploration.

### Disadvantages

- **Loss of jobs**
  Many low-skilled jobs will be at risk of termination through the implementation of AI. Examples of such jobs at risk include data-capturing positions; positions which involve repetitive tasks as well as taxi drivers where driverless cars become the norm.

- **De-humanising actions**
  Power borne by humans may be passed on to robots, thereby de-humanising various actions, which could have catastrophic consequences. An example is where robots may theoretically kill humans without having to “pull a trigger” and remove all human control.

- **Lack of value judgment**
  Humans are able to make certain value judgment calls during the occurrence of various scenarios. This is something that AI may fail to do, and it is uncertain how AI would be in a position to apply values, empathy and subjective judgment.

There are mixed views and opinions on the benefit AI within our everyday lives, particularly our work spaces and which tasks would become the function of AI. According to research done by the International Federation of Robotics (IFR), AI will have an overall positive effect on our lives, both personally and professionally. The views expressed by the IFR can be summed up as follows. AI will increase productivity and competitiveness and this in turn, will lead to job creation.22, 23, 24, 25 The IFR believes that AI and humans will work in unison and complement rather than substitute one for the other, with the quality of work being of a higher standard.23 The IFR argues that less than 10% of jobs can be automated entirely, and that the possible loss of work in one sector does not amount to “aggregate job losses” but rather whether the loss of jobs in one sector may be balanced by an increase in jobs in another.24

The IFR further describes which types of tasks are likely to be taken over by AI as well as tasks, which would not be able to be performed by AI. Highly repetitive tasks with a degree of predictability would easily be automated whereas tasks demanding high degrees of “creativity, empathy, persuasion, an understanding of which knowledge to apply in which situation to reach a productive decision” would be impossible to automate.25
Although Matcher is of the opinion that fully implemented AI is not far off, he illustrated that government is not able to implement AI regulations as quickly as AI itself is implemented, and that regulators are likely to block the full implementation of AI for some time. Though it is common knowledge that AI will inevitably replace repetitive tasks, Matcher advised that the path to having a robot make assessments is underway. Facial recognition is already being implemented in Dubai shopping malls which enable robots to analyse the facial expressions of humans to detect whether they are happy or sad so as to gauge customer satisfaction. Automated machines are already present in meetings which are conducted via Skype so as to track facial expressions, which may be missed by the other participants. Facial expressions go a long way in identifying a participant’s mood, hostility and co-operation – this is useful when conducting board evaluations to assess the performance of directors in relation to the tone that they set in meetings and how this affects the overall functioning of the board.

The appointment of the Company Secretary is regulated by section 86 of the Companies Act of 2008, which provides that the incumbent must “have the requisite knowledge of, or experience in, relevant laws”. This is a pertinent requirement when looking at the possible impact of AI in the sphere of the Company Secretary when questioning whether a robot would have the necessary experience in law to fully discharge the Company Secretary’s role.

We expect the following with regard to the possible impact of AI on the role and tasks of the Company Secretary. It is most likely that AI will abolish the repetitive and administrative tasks, which still form part of the Company Secretary’s role. This does not mean that future company secretaries would not need to continue to acquaint themselves with these tasks, as there will always be nuances specific to a company, and company secretaries would need to be able to review the correctness or otherwise of such documents.

AI will reduce the manual workload and will automate lower level functions of the Company Secretary, thereby improving due diligence processes and providing assistance with compliance procedures. Instead of viewing AI as a threat to the Company Secretary role, AI should be seen as an opportunity to improve the overall knowledge base and fiduciary controls within the company. AI will not eradicate the strategic functions within the company nor will it absolve the advisory functions of the Company Secretary. AI will assist the Company Secretary to expedite research on various topics/issues such as confirming that possible new directors are not conflicted on any other platform prior to appointing them to the board by running extensive research throughout various social platforms.

Some company secretary duties are provided below, the degree of complexity associated therewith may be subject to automation.

**Lodging documents with regulatory bodies such as CIPC**

This is a repetitive task and may be automated. Professor Brian Armstrong, BCX chair in digital business at Wits Business School, says that “knowledge work”, which comprises routine, methodological and fact-based work, will be done by computers. Currently robots won’t be able to access the CIPC webpage as there is the authentication block to confirm that the customer is a human. The majority of the process thereafter could be done by a Robotic Process Automation (RPA) solution developed, due to the recurring manual activity prior to CIPC submission.

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26 Mail & Guardian, May 18 to 24 2018, page 34
→ **Filing and distributing documents such as annual financial statements of the company**

Annual financial statements will now be done via the XBRL programme as implemented by CIPC. This form of submission will too represent one of a repetitive and automated task. The robot would simply learn the date required for submission and the manner in which the financials would be submitted, and would replicate this task efficiently with minimal supervision.

→ **Distributing minutes of meetings**

The distribution of minutes following a meeting is typically done via email to the relevant committee members with a standard cover email requesting members for their comments by a certain date. This is something that an algorithm would do. Mark Barnes describes an algorithm as “a series of instructions that can be applied repetitively to the same problem or set of data and yield the same result.” 27

→ **Drafting the agenda of meetings as well as the notice of meetings and distributing these to the relevant persons**

An agenda and a notice of a meeting will often follow the same format, with the same members; venue and time being displayed. Though the items on the agenda may vary from meeting to meeting, this is something that would be able to be automated with further input by the Company Secretary.

→ **Distributing board packs for meetings**

Board packs of meetings are to a large extent, already distributed electronically via digital platforms. These platforms can monitor and perform various tasks including monitoring attendance responses; scheduling events and conducting surveys. The automation of board pack submission will enable the Company Secretary to spend more time analysing the issues to be raised at the meeting and researching relevant topics prior to the meeting, which will lead to a more effective and informative meeting.

→ **Taking minutes of meetings and noting resolutions taken, and recording them in electronic format**

At present, robots would not be able to take minutes. Though there are tools already in place to transcribe meetings verbatim, such a recording is not a set of minutes. Much dialogue in a meeting is irrelevant for purposes of minute taking, a simple example being one individual stating in the meeting “please pass me the papers” – such statement would not be minuted but a robot would not know that and, according to Matcher, would need to be programmed over hundreds of hours to identify each and every possible insignificant statement. There would, however be an advantage to having robots present in meetings alongside the Company Secretary. Where directors need information on statistics; data etc. a director would be able to simply ask the robot to identify percentages or other statistics in a matter of minutes, thereby leading to more productive and informed meetings. Company secretaries would then have more time at the meeting to focus on assessment and judgment and to provide valuable insight into complex and critical issues. This is an illustration of how a company secretary and a robot can co-exist in the boardroom in a productive and efficient manner, and how AI may be of benefit to the role of the Company Secretary.

→ **Drafting and reviewing mandatory and repetitive clauses in contracts and company policies**

In an article by the UK Daily Mail published in February 2018, it was identified that a robot would be able to review contracts more accurately than humans. The article revealed that a contract-reviewing algorithm was created by legal AI platform LawGeex, and that AI achieved a 94% accuracy rate at picking out risks, while the lawyers – with decades of experience – managed an average accuracy rate of 85%. 28 This development in AI indicates that reviewing contracts would be subject to automation. The drafting of contracts, however, would not be as simple. Standard clauses with the same or similar wording would be capable of being automated. The more complex clauses of a contract, which are requested by parties to an agreement and which require thought and precision to avoid liability, would still need to be drafted by qualified humans who possess the requisite intellect.

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27 Business Day, 19 December 2017
Performing the role of the “trusted adviser” to the board on matters ranging from legal to governance, risk and compliance and applying changes in legislation and governance within the company and advising the board of any risks associated therewith

Human relations are founded on trust and human interaction would be difficult to automate. The advisory role of the Company Secretary is a complex and challenging role, which requires knowledge; opinion and judgment. These human characteristics are unlikely to be automated in the near future, and this duty will firmly rest with the Company Secretary. Having most of the mundane and repetitive tasks automated will allow the Company Secretary to devote more time to the advisory role, which is critical within a company. The board relies heavily on the expertise of the Company Secretary to ensure that the company operates within the realms of the law, and is seen as a good corporate citizen thus ensuring its long-term success. As American financial planning expert, Bill Bachrach stated, “advisers are there to stop people from making poor decisions, and a robo-advisor doesn’t have the capacity to do that.” 29

The Company Secretary is responsible for making the board aware of any risks and non-compliance issues, which could lead to the company’s demise and to director liability. As such, the Company Secretary will possibly remain firmly in charge of this function, and will be the liaison in managing human relations within various committees.

Emotional intelligence is a key trait of any successful company secretary. Robots are currently not able to express emotion or to engage with empathy, subjectivity and value judgment. These traits are vital on the part of the Company Secretary to ensure a harmonious and cooperative environment where many difficult personalities often clash and cause conflict. Managing these often dominant personalities is a skill, which vests in possessing a high degree of emotional intelligence. Conflict between two individuals, for example the chairperson and the CEO, is often not clear-cut and requires a sensitive navigation of the issues and a critical analysis of a possible solution, thus requiring human intervention.

Conducting board evaluations and inducting new directors

The formulation of board evaluation questionnaires could be subject to automation quite easily. It is doubtful that robots would be able to conduct interviews with directors as this involves human elements of judgment. Inducting new directors involves a process of one-on-one interaction between the Company Secretary and the new director, with a series of questions posed to the Company Secretary on a variety of aspects such as the mission and values of the company. Induction would still be a human function which a robot would probably not be able to perform.

Distinguishing between information, which is confidential and that information, which is not

The Company Secretary, as the trusted adviser, would need to advise the board on the important aspect of confidentiality of information. A robot would not be able to apply judgment and reason to what constitutes confidential information. During meeting discussions, the Company Secretary would need to decipher information, which is confidential and would need to treat it accordingly.

Junior company secretaries who are tasked with mainly administrative roles will need to be proactive in training and up-skilling themselves in areas which add value other than processing. The onus vests on company secretaries to take the lead in facilitating training for their junior colleagues. An understanding of blockchain and robotics, and becoming technology literate will be imperative for company secretaries. This does not mean the company secretaries will need to become technology specialists but would need to be competent in the field to make use of AI to their advantage and to work efficiently alongside AI as a whole.

29 https://www.moonstone.co.za/robotic-advice-versus-personal-financial-service/
Given the above and from a strategic perspective, the focus should be on entrenching and growing the tasks of the Company Secretary, which are not susceptible to automation and to have less focus on the tasks, which can be automated. In our view, this will create a more challenging and rewarding working environment for the Company Secretary and will maximise the knowledge and skill of the Company Secretary thus enabling better job performance and processes. The automation of repetitive and administrative tasks would enable the Company Secretary to focus more time on more complex tasks.

Corporate governance is about being a good corporate citizen which speaks to the issue of job creation. It is vital for company secretaries to upskill junior company secretaries by for example, having those charged with doing company secretarial administrative tasks be trained and up-skilled to perform more of the complex duties of a company secretary. Company secretaries will always have a fundamental role to play within a company as the face of corporate governance – this cannot be automated. The attitude towards the development of AI ought to be positive with company secretaries seeing AI as an opportunity to allow them a greater voice within an organisation by having more time to focus on ensuring that the company is a good corporate citizen and legally compliant, and spending less time on administrative and repetitive tasks.

Though the future remains unknown, rapid developments in AI are evident and we all need to be proactive in progressing with the changing landscape.