



# Analyzing the Changing Role of Professional Secretary in Dealing with The Impact of Digital Technology A Case Study on Professional Secretaries in Indonesia

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## Abstract

The purpose of this research is to analyze the preparedness of secretaries' profession in dealing with the changing role in handling administrative work and the other impacts of digital technology. The research objectives are to determine the understanding of digital technology in business administration that will have an impact on the automation and simplification of secretarial administrative work, to find out what executive secretary jobs can be replaced by the digital technology and to identify competences of the secretary. This study was carried out using descriptive qualitative methodology with online survey technique with total respondents of 150 Professional Secretaries from various companies in Indonesia, and an addition of 25 respondents, who are superiors of secretaries. The research concludes that several secretarial jobs have been supported by some developing digital technology tools. Digital technology helps increase the efficiency of secretarial administrative task, as much as 56% in document filing management, 76% in managing database, 70% in analyzing data and information, 47% in implementing and maintaining administration procedures. It helps track and streamline processes. In fact, this increased efficiency in operation helps reduce costs and time, 52% in organizing meeting, 82% in maintaining diaries, 47% in arranging manager's business travel. This research proposes new competencies of professional secretary that need to be strengthened, specifically in the areas of the digitalization and automation secretarial administrative tasks, management office information system, data analysis, communication, and public relations function. This topic of digital technology in secretarial administrative work in Indonesia has never been discussed before. It has a substantial impact on developing secretarial profession in Indonesia and gives a boarder impact on the preparedness of development the executive secretary role in companies.

*Keywords* – Digital Technology, Professional Secretary; Administrative Work; Competencies.

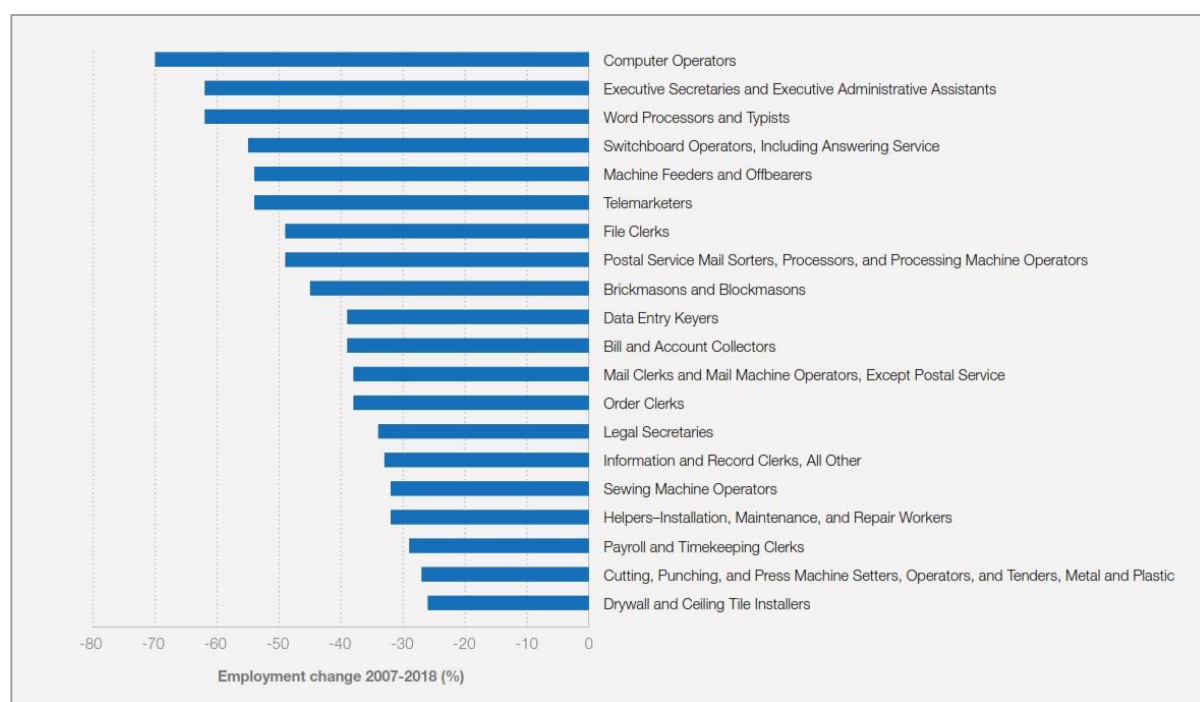
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## 1. Introduction

The fourth industrial revolution (Industry 4.0) is currently taking place and is changing the way we communicate, live and work. It represents a fundamental change in the way we live, work, and relate to one another. The impact of Industry 4.0 is making it easier for companies to collaborate and share data among customers, manufacturers, suppliers, and other parties in supply chain. It improves productivity and competitiveness, enables the transition to a digital economy, and provides opportunities to achieve economic growth and sustainability.

Companies also adopt digital technology to increase their profitability. Since one advantage of technology is limitless communication, companies can extend their reach beyond domestic boundaries and access millions of customers worldwide. Finally, digital transformation is not just important but a requirement for all modern businesses, as the majority firms automate their processes, firms who refuse to make the change will left behind and lose their competitive advantage. On the other hand, there are various incentives for companies to implement digitalization. For example, production will run faster since machines are replacing humans in repetitive tasks. So, the coordination of corporate data in one system allows everyone to work together more seamlessly (Quelch & Klein, 2007).

Research submitted in World Economic Forum, 2020, employment trends for jobs in the United States 2007-2018, Executive Secretaries and Executive Administrative Assistants jobs have a high risk of being automated, as shown in Figure 1. The technology and globalization have brought profound transformations to labor markets in near term. Presents the types of roles that are being displaced: computer operator 70%, executive secretaries, and administrative assistants 63%, filing clerks 48%, data entry operator 36%, and other such roles which depend on technologies and work processes which are fast becoming obsolete (Sima, et al., 2020).



**Figure 1.** Employments trends for jobs in the United States at high risk of automation, 2007-2018.

A secretary is a member of a business management team, who must be able to keep abreast of business changes and development and utilize digital technology to be more productive and efficient in carrying out their secretarial duties. This study will find out what kind of professional secretaries' duties in Indonesia can be automated or replaced by developing digital technology tools, and what kind of professional secretary's competencies need to be strengthened, specifically in the areas of the digitalization and automation of secretarial administrative tasks.

### 1.1. Digital Technology

Now, we are in the era of the Industrial Revolution 4.0, where internet technology has become the basis of human life. Digital technology has not only changed our personal lives but has completely change the world of business and no industry is an exception (Li, 2020) Utilizing digital technology and the internet in business activities with the aim of significantly increasing productivity and efficiency.

In general, the digital revolution is driven by four types of technology, that they have a big impact on people's lives: 1) Mobile Internet: smart phones/mobile gadgets have taken over the role of home phones or gadgets that use fixed line for people who access the internet. 2) Cloud Computing: (Pihir, et al., 2019). There are three common benefits of using cloud services: performance, speed and cost reduction, faster and relatively inexpensive internet network, and accessibility 3) Internet of Things (IoT): there were millions of internet-connected devices. Cheaper sensors, faster actuators, and faster and wider internet networks make more areas, connected to one another. As a result, business types, production methods, and the application of new technologies have grown, such as driverless cars, drones, and smart homes. 4) Big Data and Advanced Analytics: Every second there is an exchange of information and high-power computers that can help humans in the decision-making process. In addition, the exchange of information can help businesses because supply chain information processes become more efficient. By digitizing processes and making organizational changes, governments can enhance services, save money, and improve citizens' quality of life (Li, 2020).

Nowadays companies are dealing with large amounts of data, not only for an important decision but also into their day-to-day activities. To handle properly these large volumes of data, from different sources without missing the opportunities, companies need to figure out how to manage big data to their advantage (Şerban, 2017; Corydon, et al., 2016).

### 1.2. The Role of Professional Secretary

A secretary is a person who is employed to do office work, such as typing letters, answering phone calls, and arranging meetings, also handles correspondence, keeps records, and does general clerical work for an individual in business office, and related affairs of an organization, company, or association (Herbranson, et al., 2022)

Based on the different roles and duties of a secretary in a company, we can find different terminologies for a secretarial position, such as: Company Secretary, Executive Secretary, Professional Secretary, Administrative

Professional, Administrative Assistant, Executive Administrative Executive Assistant, Personal Assistant, etc (Aprilya & Suryanto, 2021; McNulty & Stewart, 2015; Money & Schepers, 2007).

The company secretary's responsibilities may include administration of personnel matters and file in companies (Syed Mohd Fuzi, et al., 2019; Money & Schepers, 2007). The core responsibilities of a secretary or other administrative assistant is to provide administrative support to the senior managers in an organization. This general description means that they may be given a wide range of tasks and responsibilities, based on the specific needs of their organization. They may also be asked to take on a variety of secondary duties.

Secretaries can work in any office environment or business that has a front desk to carry out administrative tasks, arrange staff schedules and manage correspondence. They welcome visitors and determine their reason for stopping by the office, acting as an intermediary to make sure that their coworkers are expecting guests before letting them get into their office. Secretaries manage general files and records, maintaining a logical organization system so they can easily access and send information when requested. Secretaries can also schedule transportation and lodging for coworkers who travel and prepare documents for business meetings (McNulty & Stewart, 2015; Money & Schepers, 2007).

Secretaries tend to work typical business hours in an office environment, although some Secretaries may accompany their team on business trips or work late hours to provide personalized assistance. They start the day by checking emails, physical mail, and voice messages to catch up on any office communications that occurred when they were out of the office. They make calls to confirm appointments and send reminders to office staff. Secretaries may attend office meetings and take notes and meeting minutes, then distribute the summary through the office. At the end of the day, they set up outgoing messages.

There are many professional secretarial jobs, simplified by classifying them into 3 groups of roles: 1) administrative work, 2) working with people and business communication. 3) supporting superiors.

**Table 1. Job Description of Secretary**

<b>Secretary's Role</b>	<b>Job Description</b>
Administrative Work	Document filing management Managing database Analyzing data and information Preparing letters, presentations, and reports Implementing and maintaining administration procedures Petty cash Using variety of software packages
Working with people and business communication	Answering telephone calls Welcoming guests/clients Maintaining diaries Arranging appointments
Supporting Superiors	Arranging manager's business travel Preparing letters, presentation, and report Organizing meeting Minutes meeting

As the reliance on technology continues to expand in offices, the role of the office professional has greatly evolved. Office automation and organizations restructuring have allowed secretaries and administrative assistants to assume responsibilities (France, 2015).

## 2. Materials And Method

### 2.1. Data Collection

Data collection process was conducted from December 2021 to September 2022 using the primary online survey method. The collection of research data was carried out through two surveys, the first survey of secretaries or personal assistants, the second survey of company leaders as superior official assisted by a secretary or personal assistant.

The secretary sample consisted of 150 respondents. They comprised 61% secretaries working in national private companies, 8% secretaries working in multinational private companies, and 31% secretaries working in state-owned

companies. The sample included in the analysis encompassed 24% secretaries to top managers, 58% secretaries to middle managers, and 18% secretaries to lower managers, who all indicated that they had responsibilities and operational tasks to support the work of managers and company directors, as shown in Figure 2.

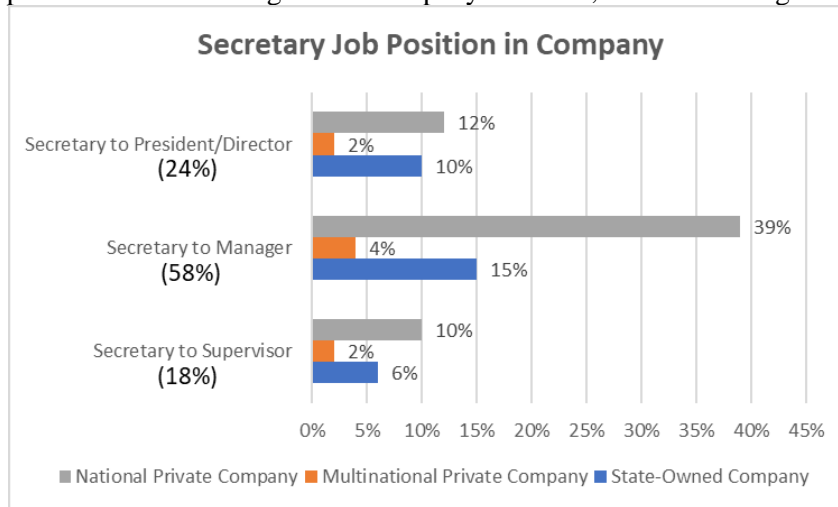


Figure 2. Secretary Job Position in Company

In Figure 3, the superior official of secretary sample comprised of 25 respondents. The respondents were 28% top manager, 48% middle manager, and 24% lower manager. The sample of superior official company included in the analysis encompassed 52% working in national private companies, 16% working in multinational private companies, and 32% working in state-owned companies.

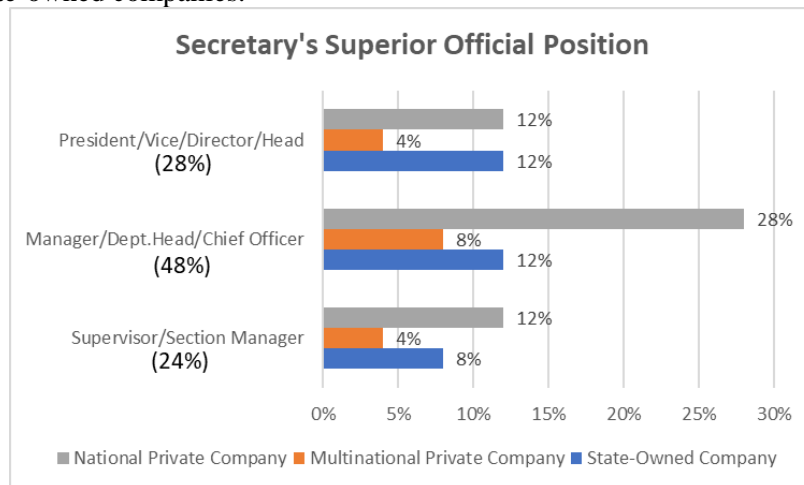


Figure 3. Secretary's Superior Official Job Position in Company

## 2.2. Validity and Reliability of Data

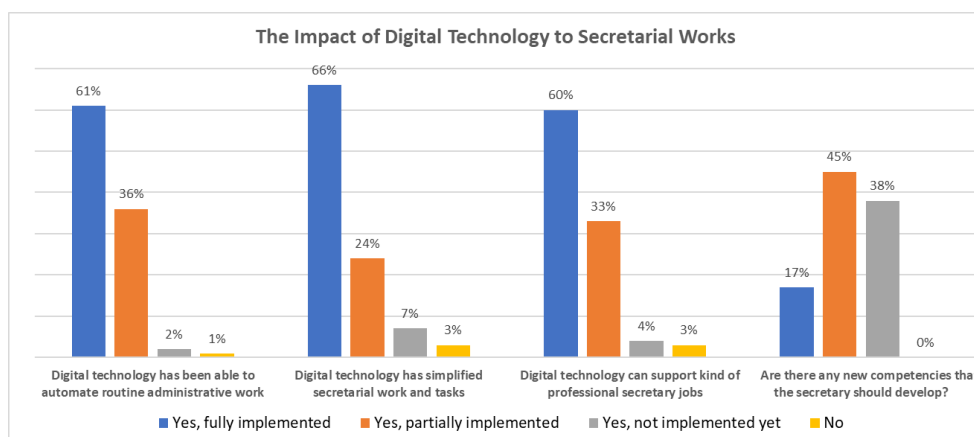
The literature studies are based on references from various national and international journals; the latest research in the last five years, as well as new books related to digital technology, secretarial jobs, and administrative works. After the data was collected, a peer group of fellow researchers and an IT team checked and discussed the accuracy of the data results. Discussions and observations were conducted using methods for data validity and reliability for a descriptive qualitative method with online survey technique.

## 2.3. Research Analysis

The research questions posed to determine the understanding of digital technology in business administration that will have an impact on the automation and simplification of secretarial work. This was to find out what professional secretary jobs can be replaced by the digital technology, and whether the human aspect is still needed in secretary jobs in Indonesia. Then it determines what competency of secretary will need to prepare for.

### 3. Results And Discussion

#### 3.1. Research Results



**Figure 4.** The Research Results: The Impact of Digital Technology to Secretarial Works

The research results have been shown in Figure 4, which concluded that 99% of respondents agree that digital technology has been able to automate routine administrative staff, but only 61% agree that they have fully implemented it, 36% agree that they have partially implemented it, and 2% agree they have not implemented it yet.

90% of respondents agree that digital technology has simplified secretarial work and tasks, and 24% have partially implemented the digitalized tools, 66% have fully implemented them and 7% have not implemented them yet. Only 3% do not agree to implement the tools.

3% of respondents do not agree that digital technology can support secretaries' jobs, but 100% respondents agree that secretaries should develop some new competencies. Only 17% respondents have already developed new competencies, 45% have developed them partially, and 38% respondents have not developed them yet.

A detailed search results of this study of secretaries' job description is presented in Table 2.

**Table 2.** Job Description of Secretary Based on Questionnaire

Secretary's Role	Secretary's Jobs	Description
Administrative work	Document filing management	56% respondents have use computer application to manage document filing
	Managing database	76% respondents manage database by software program application.
	Analyzing data and information	70% respondents process data and information process automatically through information systems / software packages.
	Implementing and maintaining administration procedures	47% respondents have integrated office information system used by the company.
	Managing Petty cash	66% respondents use computer application program or accounting software
	Using variety of software application program	85% respondents use software application program to do the administrative work
	Working with people and business communication	Answering telephone calls
Welcoming guests / clients		13% respondents record guests who come using a computer application
Maintaining diaries		82% respondents use mobile apps for online scheduling calendar. (Google calendar, Microsoft outlook Yahoo calendar, etc.)
Arranging appointment		73% respondents note the appointment on mobile apps for scheduling.

Secretary's Role	Secretary's Jobs	Description
Supporting Superior	Arranging manager's business travel	47% respondents agree these activities would be support by communication channeling, social media, tools, or platform in line with various technologies
	Preparing letters, presentations, and reports	74% respondents preparing letters, presentation and report are easier, these have been supported by tools or platforms as new technology product.
	Organizing meetings	82% respondents organize the meeting use communication media, tools, or platform in line with various technologies.
	Making minutes	73% respondents make meeting minutes on special forms in the computer

The research results that some jobs of professional secretary have been supported by tools and platform, software application as new technology product (Latif, et al., 2017), shown in Figure 5.

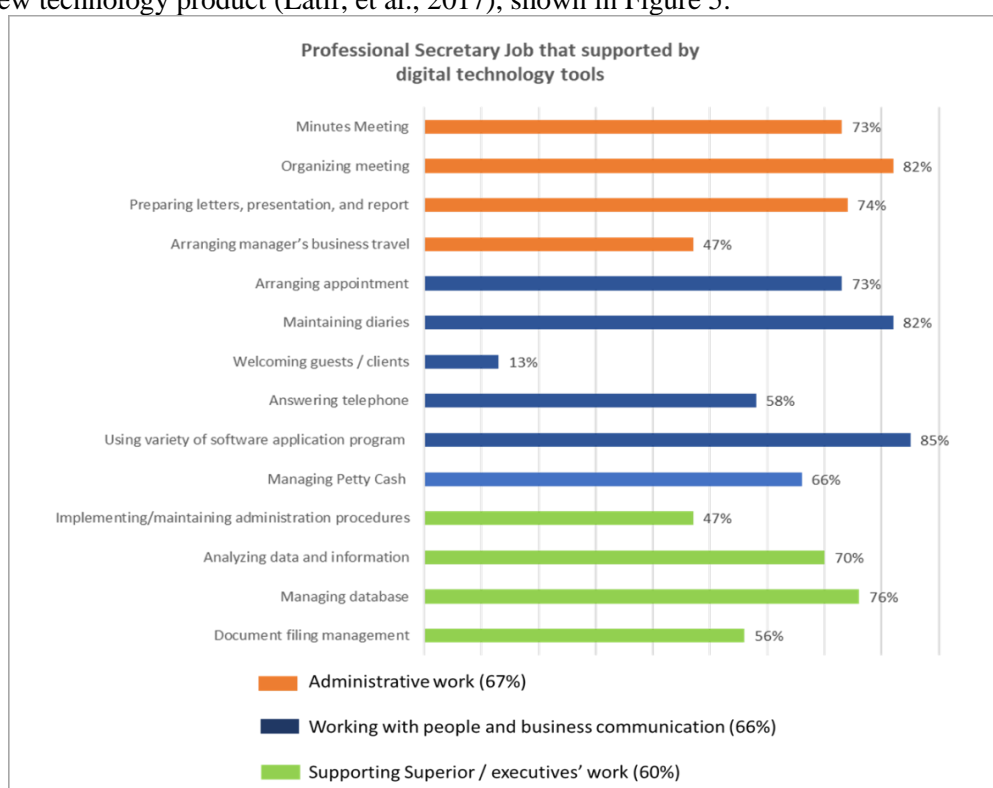


Figure 5. Professional Secretary's Job that Supported by Digital Technology Tools

The research concludes that several secretarial jobs have been supported by tools developed in the digital technology. Digital technology helps increase the efficiency of secretarial administrative tasks: 56% in document filing management, 76% in managing database, 70% in analyzing data and information, 47% in implementing and maintaining administration procedures. It helps track and streamline processes. In fact, this increased efficiency in operation helps reduce costs and time: 82% in organizing meeting, 82% in maintaining diaries, and 47% in arranging manager's business travel.

It can be concluded that secretaries' role is largely supported by tools developed in the digital technology: 67% in administrative work, 66% in working with people and business communication and 60% in supporting superiors/executives.

### 3.2. Professional Secretaries' Competencies

Previous research has been conducted to study about the emerging and redundant jobs. The role identified as increasingly redundant within an organization are accounting, bookkeeping and payroll clerks, data entry clerks, assembly and factory workers, administrative and executive secretaries, business service and administration managers, accountants, and auditors (Frey & Osborne, 2017).



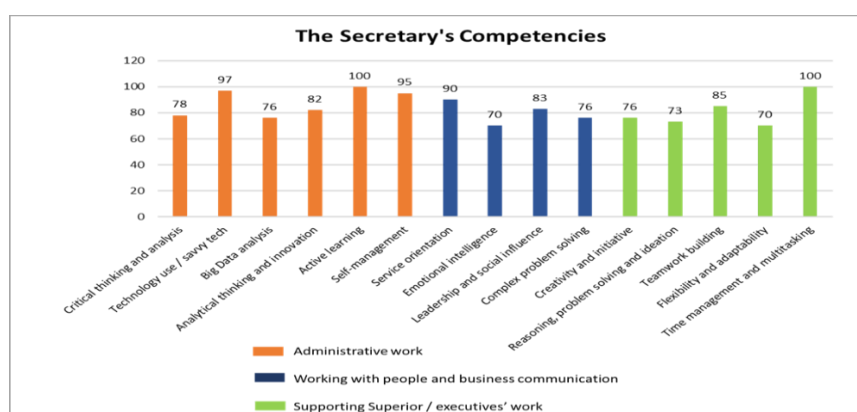
This is caused by the increase in using tools of innovative technology such as internet of things and connected devices, cloud computing, big data analytics, artificial intelligence, robots; the skills identified as being in high demand within an organization are creativity, originality and initiative, reasoning, problem solving and ideation, complex problem solving, active learning, emotional intelligence, analytical thinking and innovation, leadership and social influence, critical thinking and analysis, service orientation, technology use (Frey & Osborne, 2017).

Some secretaries' administrative jobs that have been replaced by tools developed in digital technology (Ramaswamy & Gouillart, 2010): digitalization of working process, automation, and simplification of secretarial work, and these cause the secretaries' role to change, and the necessity of of some new competencies.

The ten skills needed to thrive in the Fourth Industrial Revolution, 2020: complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgement and decision making, service orientation, negotiation, cognitive flexibility (Gray, 2016). Detailed secretaries' competences needed based on their roles and tasks are shown in Table 3, and Figure 6.

**Table 3.** The Competencies Needed According to Secretary Roles and Tasks based on Questionnaire

Secretary Roles & Tasks	Competencies
<b>Administrative Work:</b>	
<ul style="list-style-type: none"> <li>• Document filing management</li> <li>• Managing database</li> <li>• Analyzing data and information</li> <li>• Implementing and maintaining administration procedures</li> <li>• Managing Petty cash</li> <li>• Using variety of software application program</li> </ul>	<ul style="list-style-type: none"> <li>• 78% Critical thinking and analysis</li> <li>• 97% Technology use / savvy tech</li> <li>• 76% Big Data analysis</li> <li>• 82% Analytical thinking and innovation</li> <li>• 100% Active learning</li> <li>• 95% Self-management and creative</li> </ul>
<b>Working with people and business communication:</b>	
<ul style="list-style-type: none"> <li>• Answering telephone</li> <li>• Welcoming guests / clients</li> <li>• Maintaining diaries</li> <li>• Arranging appointment</li> </ul>	<ul style="list-style-type: none"> <li>• 90% Service orientation</li> <li>• 70% Emotional intelligence</li> <li>• 83% Leadership and social influence</li> <li>• 76% Complex problem solving</li> </ul>
Secretary Roles & Tasks	Competencies
<b>Supporting Superior / executives work:</b>	
<ul style="list-style-type: none"> <li>• Arranging manager's business travel</li> <li>• Preparing letters, presentation, and report</li> <li>• Organizing meeting</li> <li>• Minutes Meeting</li> </ul>	<ul style="list-style-type: none"> <li>• 76% Creativity and initiative</li> <li>• 73% Reasoning, problem solving and ideation</li> <li>• 85% Teamwork building</li> <li>• 70% Flexibility and adaptability</li> <li>• 100% Time management and multitasking</li> </ul>



**Figure 6.** Professional Secretary's Competencies According to Changing Roles and Tasks

Figure 6 shows that the research results, which concluded that the role of secretarial administrative jobs is changing and there exists the impact of digital technology; consequently, they have to improve competencies: 100% being

active to learn, 97% tech savvy, 95% self-management, 82% analytical thinking and innovation, 90% service orientation, 83% leadership and social influence, 85% teamwork building, and 100% time-management and multitasking.

#### 4. CONCLUSION

The digitalization of data, information, and communication simplifies secretarial work, and the tools are available to automate routine administrative task. Further duties of secretaries are to become creative savvy tech and capable of utilizing and analyzing data more optimally to solve problems.

Digital technology can indeed replace some secretaries' jobs with new tools, platforms, and software application. Therefore, secretaries are encouraged to keep on learning and trying new tools.

The new role of professional secretaries that can be fulfilled by utilizing and optimizing technology, implementing excellent communication and human relations, while at the same time demonstrating a qualified, initiative, and creative work. The human aspect is still important to be improved for optimizing the achievement of high performance, and it cannot be replaced by technology. The tools of technology can support secretaries' activities to be more effective and efficient.

#### ACKNOWLEDGEMENT

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