

Impacts of Robotic Process Automation on Global Accounting Services

DAHLIA FERNANDEZ & AINI AMAN

ABSTRACT

The aim of this study is to understand the impact of Robotic Process Automation (RPA) on Global Accounting Services (GAS) using the institutional logic lens. This study uses an in-depth case study approach in one of the largest global business services firm that provides global accounting services. The result of the study showed that RPA technology has significant impacts on individual and organization resulted in the change and reduction of work, thus reducing the number of employees. Nevertheless, the introduction of new technology in the organization creates unnecessary competition between humans and robots. Although the RPA technology could solve issues involving humans such as disciplinary problems, employee productivity, and human resource shortages, high level of works such as analytical aspect could not be completely replaced by robots and can only be done by humans.

Keywords: Robotic process; automation; global business services; institutional logic; accounting services

INTRODUCTION

Global Business Services (GBS) is a service that integrates global practices and functionalities within an entity to maximize processes, achieve scalability and reduce organizational costs (Aman, Yunus, Maelah, Embong, Mohamed, Adznan, Ahmad, Nurzafirah & Fernandez 2017; Wirtz, Tuzovic & Ehret 2015). The organization uses provider services from third parties for strategic functions while maintaining ownership control for some operational processes. Among the functionalities inherent in the GBS industry are information and communication technology, human resources, engineering design, as well as finance and accounting services (Aman 2016). This paper will focus on Global accounting services (GAS) that include accounting services such as invoicing, payroll, preparation of financial report and other company's financial activities such as cash flow, investment, debt, financial planning and decision making. These services cover a variety of countries globally, but it is operated by an entity that standardized the processes, operations, and technologies (Aman 2016).

Many organizations have automated the technology used in the finance and accounting services (F&A) to increase productivity and to optimize operating costs. Among the transformation of automation technology used in F&A is Robotic Process Automation (RPA). This technology comes with a variety of custom features or generic programs that can be tailored to current business operations (Lacity & Willcocks 2015). RPA is defined by IRPA (2014) as the use of technology that enables employees in a company to configure computer software or 'robots' to capture and interpret existing applications to process transactions, manipulate data, and communicate with other digital systems. In addition, the Financial Express (2016) article has defined RPA as a set of automated software tools

used by firms for repeat processing and complex tasks (low-end) without any human involvement. In this study, RPA is defined as a system used in an organization that involves the automation configuration of a process and work to facilitate and increases the productivity of the work.

According to a study conducted by legal experts Robert Half Financial Services (2016), 54% of traditional financial services firms such as banks and investment firms are planning to increase their spending on automotive or RPA technology over the next 12 months (Parker 2016). This shows that RPA is increasingly gaining attention by large organizations, especially those involved in the GAS sector. This is because RPA offers the ability to increase the productivity of the organization, reducing costs, improving the accuracy and speed of a work process, reducing human negligence and improving the competitiveness of the organization. The success of the new technology depends on the organization's management support and planning. Support from top management and information technology units, as well as system suppliers are important to enable the system users to gain sufficient knowledge and information. A well-planned and complete management plan should be available to support the adoption of the new system and to tailor the workforce to the newly-reorganized task.

Despite that, there are negative impacts that may be encountered as a result of using inappropriate technology. For example, employee retrenchments may impact the motivation and employees' emotions as well as the productivity of the employee. Some organizations implement new technologies because of trends (Fernandez, Zainol & Ahmad 2017). This may not be in line with the organizational own processes and unique cultures. When an organization performs a re-structuring of technology, it is assumed that the current technology is not sufficiently efficient. However, this does not necessarily happen since

current technology is likely to be the most appropriate technology for the organization's processes (Fernandez, Zainol & Ahmad, 2017; Poston & Grabski 2001; Zainol, Fernandez & Ahmad 2017).

Based on the above issues, the aim of this study is to understand the impacts of RPA on global accounting services (GAS) using the institutional logic lens. Institutional logic shaped the consciously and rationally behaviors, as well as individual actors that formed and altered the logic of the institution (Thornton & Ocasio 1999). This study's objective can be achieved in particular by looking at the effects of the RPA on the behavior of individuals and organizations based on the professional logic lens. To achieve this objective and to explain the subject clearly and accurately, this study will explore the following research questions: (1) How does RPA implementation impact individual behavior in global accounting services from a professional logic lens? (2) How does RPA implementation impact organizational behavior in global accounting services from a professional logic lens?

The remainder of the paper is structured as follows. The next section which is literature review gives the overview of the Global Business Services (GBS) and Robotic Process Automation (RPA). It is followed with the theoretical framework used in this study which focuses on two impacts of RPA technology which are individual and organizational. The research methodology section is then presented, followed by the findings and analysis section. The final section provides the conclusion and implications of the study.

LITERATURE REVIEW

GLOBAL BUSINESS SERVICES (GBS)

GBS model is different as compared to the traditional model of shared services and outsourcing services (Wirtz et al. 2015). GBS exists when various processes and functions are shared within a global entity operating unitedly, with the goal of achieving scalability, cost reduction, and utilizing processes. As an alternative to operating with various shared service centers and running the outsourcing vendors independently, GBS providing integration of business practices and locations to all shared services and outsourcing activities across the organizations. It is an integration of services made from the competitive strategy that leverages information and communication technology, accounting, finance, human resources, and engineering design services (Aman 2016). Malaysia has successfully positioned itself as a destination that can offer high-quality services. There are more than 400 firms that have made Malaysia a destination for GBS operations, where at least 80 firms are multinational firms (MNCs). These include firms competing in major global industries such as Kerry Logistics, Sime Darby, Sutherland, Citibank, HSBC, and DHL.

This article will focus on Global Accounting Services (GAS) firm that provides accounting services

including to company's financial activities such as cash flow, investment, debt, financial planning and decision making to their counterparts. In the GBS industry, the GAS covers a variety of countries, but it is operated by an entity that standardizes processes, operations, and technologies (Wirtz et al. 2015). GAS services drivers are with a continuous search of competition in terms of cost savings, innovation, and market growth (Aman 2016). This is because the service involves complicated and high volume transactions. This service is usually still dependent on employees with specialized expertise to operate, which results in a risk to the organization if the individual is absent or stopped working (ACCA 2015). Among the steps in GAS organizations to improve their organizational performance is to take the right resources as a new and sophisticated disruptive technology to accelerate work processes within the organization. Today, more organizations are increasingly keen to know and become more aware of the transformations that can be taken by automation technology, in particular, robotic technology.

ROBOTIC PROCESS AUTOMATION (RPA)

The emergence of the 'Robotic Process Automation' term began around early 2000. The term Robotic Process Automation (RPA) though sounds like a physical robot that runs human operations, in fact, it is a computer software configuration that replaces humans in doing a task (Willcocks, Lacity & Craig 2015). Bataller, Jacquot, Torres (2017) defines RPA as a method, system, and tool, including computer programs coded into computer storage, to automate manual processes. Method, system, and tool include measures to identify processes manually executed by users who interact with computers and automate the process by a robot that is configured to interact with other computers.

According to Lacity and Willcocks (2015), RPA is an easy-to-configure system where system users running business operations can execute them without programming and users can be trained to independently automate the process in just a few weeks. Based on these definitions, in this study, RPA is defined as a business process automation system that uses software tools to interact with existing applications and replace humans. The RPA software that replaces this person is best suited to being called a "swivel chair" where people take input from a set of systems (eg. e-mails), processes the input, and then puts the output into a record system (eg. ERP) (Willcock et al 2015). RPA interface with all customer payment portals, which enables easy integration with ERP and legacy systems. RPA automatically create invoices together with the billing documentation and send or upload it to the customer's portal in a few seconds or minutes, not days or weeks. The company estimates that its new order-to-cash efficiency is saving hundreds of thousands of dollars annually. It can automate processes that require manual intervention in ERP system in order to justify the costs, resources, and risks. For instance, the RPA system

can eliminate redundant and repetitive work in dealing with high numbers vendor invoices and company billing invoices.

THEORETICAL FRAMEWORK

This study uses the institutional logic as it helps in answering the questions of this study in more depth. This logic helps in clarifying changes that occur to individuals or organizations because of the technology being introduced. Institutional logic can be interpreted as a symbol or idea that creates cognition, emotion, and action by providing express or implied values about how individuals or organizations interpret reality, what constitutes appropriate behavior, and how to succeed (Thornton, Ocasio & Lounsbury 2012; Thornton 2004). Friedland and Alford (1991) define the logical theory of institutions as a theory built specifically to illustrate heterogeneous patterns and changes. Thornton and Ocasio (1999) define the institutional logic as a socially constructed, practical material in the historical order, assumptions, values, beliefs, and rules in which individuals produce and reproduce their material lives, arranging time and space, and give meaning to their social reality. The institutional logic consists of a set of values that define how the institution is structured, the nature of the change, the distributed resources and the purchased and developed technology (Thornton & Ocasio 1999). More specifically, Lounsbury (2002) defines the logic of the institution as a principle that controls the selection of technology, determines the type of perpetrator who is authorized to make claims, form and also restricts the possibility of actor behavior, and determines the criteria for effectiveness and efficiency.

The institutional logical concept introduced by Friedland and Alford in 1991, provides some organizational principles that offer practical guidelines for behavior to guide the individual's attitude. According to Sahay, Sæbø, Mekonnen and Gizaw (2010), the institutional logic is made up of various levels that cover internal and external institutions. A decision is not based on an individual, but it is formed by an institution in which the behavior operates, and from which they establish identity and legitimacy (Nicholson & Safe 2012; Friedland & Alford 1991). According to Thornton and Ocasio (1999), the institutional logic also shaped the way consciously and rationally behaviors, as well as individual actors formed and altered the logic of the institution.

This study focuses on the changes that take place on individuals and organizations using professional logical lenses. Professional logic is one of the lenses contained in the logic of the institution. According to Qiu, Gopal and Hann (2011), professional logic works in parallel with personal capitalism, where personal reputation, personal networks, growth and firm capitalism are emphasized. Professional logic also refers to the impact of individual assignments and occupations as well as organizational performance when new ideas or technologies are taken and used. When a new technology is introduced to

the organization, it has the potential to affect how the organization collects, stores, transfers and uses data (Fernandez et al. 2017). Any changes in institutions and organizations will result in new issues as well as the issues in which they must act to address the issues that apply based on individual professionalism and judgment (Thornton 2004). This mechanism also includes changes in professional beliefs and behaviors (Qiu et al. 2011). This situation usually occurs when individuals undergo career transition and identity change and result in skills, behavior, and interaction patterns aligned to meet new demand (Ebaugh 1988; Jain, George & Maltarich 2009; Louis 1980; Van Maanen & Schein 1979). Changes to the roles and actions of these individuals or organizations will result in different accounting processes (Sutton 2006). Individuals will use certain logic to assist in problem-solving and be a new determinant for organizational decision making (Thornton 2004). Impact on individual and organizational processes will be discussed in more detail in the next section.

IMPACT ON INDIVIDUAL

Automation technology promises a very simple and fast concept to execute in comparison with technologies that require human involvement. Automation technology is also widely applied in accounting and finance assignments because according to professional logical lenses, it is seen to improve work accuracy, reduce working cycles and more flexible (Schatsky, Muraskin & Iyengar 2016). Just like industrial robots that reproduce the manufacturing industry by creating higher production rates and better quality, RPA also has the potential to revolutionize the way individuals think and govern business processes, support IT processes, and workflow processes (IRPA 2014). Consequently, according to professional logical lenses, RPA can have an impact on individual work systems and firms. Individuals will reflect and act according to the methods and behaviors that are believed to be most effective and efficient for the organization (Thornton et al. 2012).

The impact of the automation technology to the users can potentially have a positive or negative impact on individuals and firms. For example, Chen, Yan Huang, Chiu and Pai (2012) found that the accountants' supervisors agreed that the implementation of automation technology results in the change in the role of accountants. According to the professional logic lens, the change in the role of the accountant may occur as accountants will begin to form a new role when attempting to adapt themselves to new usage and workflows resulting from the use of automation technology being implemented. Additionally, the findings showed that the major impact on accountants after they implemented the automation technology is the improvement of work efficiency, reducing work routines, improving the quality of statements and management analysis, improving motivation in learning and innovation, improving IT and professional skills, and also improving competition pressure. The results of

this study are supported by Kanellou and Spathis (2013), where they have found that automation technology system makes data collection and processing easier and faster. In addition, automation technology provides more flexibility to accounting department.

In addition, according to Lacity & Willcocks (2015), among of the main benefits of automation technology are the enhancement of work accuracy, better time cycle, and increase productivity in transaction processing. According to IRPA (2014), RPA has the potential to change the way boring work and repetitive tasks are. Automated technology that employs a large-scale workforce for regular and repetitive tasks as well as high transaction tasks, potentially to increase capabilities, save money and time (IRPA 2014). Improved spirit of work, the most appropriate task and process for automation is usually the heaviest and least enjoyable and relieved employees of them can further refocus on rewards and higher value activities. However, not all of the technological effects are positive. RPA causes changes or changes in work. Changes in the work process are commonplace and must be faced by all organizations to remain competitive in the marketplace. However, according to professional logical lenses, it creates a fear of workers due to changes in the work process to be encountered (Arnold, Hunton & Sutton 2000). Employees are frightened and hard to learn about the use of new technologies. There are employees who are already comfortable with their job position and are reluctant to change their work processes. Additionally, it also creates fears for employees because of the worries of their jobs being taken over by robots. This results in the introduction of new technology acceptance problems and should be addressed well by firms. Based on the professional logic lens, this is an issue that needs to be stressed as it can jeopardize their job opportunity (Dobson 2017). Firms that apply PRA to replace human beings will cause competition between humans and robots.

IMPACT ON ORGANIZATION

The advance of automation and digitalization will continue to change the way it works. Since RPA is a very sophisticated

and up-to-date technology, almost every job will be reworked. Consequently, organizations should consider how they plan their work, organize work, and plan future growth. Organizations also should provide a continuous support to the employee. Besides that, to continue to be competitive, the organization needs an appropriately skilled worker. Investment in the development of ongoing skills for the workforce is important not only for talent management strategies but also for the prospects of organizational success. Furthermore, among the features of the RPA is that it can function at any time the organization demands, and this gives an advantage to the use of RPA compared to humans (Lacity & Willcocks 2015). The features of the RPA are very good as it can improve the organization's performance. Automation technology that uses robots and replaces humans is better because it can solve issues involving humans such as disciplinary problems, employee productivity, and human resource shortages. The previous studies stated that when automation technology is introduced into the organization, it will result in the change of work and also the reduction of labor (de Castro & de Olieveira 2015; Gable, Palmer & Sedera, 2002; Gorla, Somers & Wong 2010). According to profit-oriented market logic lenses, the reduction in the number of employees is good for firms. The technology used is to reduce costs especially from the cost of work. However, studies conducted by Kanellou and Spathis (2013) showed that automated technology, the ERP did not succeed in reducing the number of employees that resulted in no cost to the organization. Figure 1 shows the theoretical model for this study.

RESEARCH METHODOLOGY

A qualitative approach is used to carry out this study. Qualitative research approaches are a systematic question mod for understanding human beings and also the nature of transactions between themselves and the environment (Ormston, Spencer, Barnard & Snape 2014). This approach is carried out to get a real picture based on the human experience itself. Typically, this approach involves a small sample size, unique and focused. This approach attempts

Professional Logic	Impact on Individual	<ul style="list-style-type: none"> • quality and work accuracy (Lacity & Willcocks 2015) • save the accountant's time (Lacity & Willcocks 2015) • change of tasks and roles (IRPA 2014) • technology creates fears for workers (Smith & Anderson 2014) • lesser job opportunities (Dobson 2017; de Castro & de Olieveira 2015; Gorla et al. 2010)
	Impact on Organization	<ul style="list-style-type: none"> • requires proactive planning (Lacity & Willcocks 2015) • support from management and support from information technology (Lacity & Willcocks 2015) • requires appropriately skilled worker (Lacity & Willcocks 2015) • work at any time (Kanellou & Spathis 2013) • reduce the number of workers (Lacity & Willcocks 2015)

FIGURE 1. Theoretical Framework

to explain ‘how’ and ‘why’ an event occurs through more flexible data collection such as speech, document, observation, and the reaction of respondents. In addition, this approach is the best way of knowing the value, motivation, behavior, perception and individual feelings toward an event (Ciborra & Willcocks 2006). Additionally, according to Jacks (2017), qualitative methods are ideal for studies that use institutional logical lens due to the theoretical context that requires deeper emphasis and concentration. In line with the objectives of the study to understand the influence of RPA in the accounting and financial services process, this study has chosen a single case study method as it is appropriate to gain a thorough and detailed understanding of the issues studied (Yin 2013). A single case study can help researchers to understand the influence of RPA at every level of management in the accounting and financial services within the chosen company.

A GBS company (later named as Company A) from oil and gas sector was selected as a case study. The study has selected based on purposive sampling which is often used in qualitative research to identify and select the information-rich cases (Patton 2002). This involves identification and selection of individuals or organization that are proficient and well-informed with implementation of RPA in GBS company. Company A has been using RPA technology since 2015 and is seen as a strong giant company and always keeps updated to the latest technological developments in the market as well as having great competition in the Malaysian and international markets. The acquisition of new technologies has the potential to result in various effects on individual assignments and occupations as well as organizational performance. Therefore, by selecting this company, this study is able to provide significant implications and contributions to various parties. The company is using RPA in many ways. In finance and accounting functions, the RPA can automate tasks that are repetitive, tedious and required manual effort. Examples of functions of RPA in that company are it enable automatic login to ERP system, able

to read the documents automatically in order to prepare the sales invoice from sales orders, post revenue records into the system, verification of accepted inventory and make adjustments, calculates price and quantity differences, debt monitoring by automation, matching between documents to confirm payment accuracy, update comparative figures for financial statements and generate reports in various formats.

Qualitative data is gathered through semi-structured interviews with various respondents that are using the RPA system in F&A unit. The questions were made based on the research framework and theme. Interviews were originally scheduled to last for one hour but in some cases lasted up to two hours. In total, 19 hours of interviews were undertaken with eleven respondents including the vice president of F&A unit, the human resource manager, the operational manager, team manager, continuous improvement manager, and also the operational specialist in F&A unit. This is shown in Table 1. Each interview has been recorded and copied verbatim and is recorded according to the category as in the framework as a guide to analysis on the influence of RPA (Ismail, Heeks, Nicholson & Aman 2016, Walsham 2006). After the transcription process is completed, researchers identified the issues, translations and identified themes continuously by repeatedly reading the transcripts.

FINDINGS AND ANALYSIS

The following sections explore the results for the influence of RPA towards the individual and organization based on the lens of professional logic.

IMPACT ON INDIVIDUAL

RPA technology has potentials to provide a simple and fast concept to execute in comparison with technologies that still require human involvement. It helps to automate mundane, routine, standardized tasks, thus creating higher productivity and value. This is acknowledged by the Continuous Improvement Manager A;

TABLE 1. Details of Interviews

	Name and Position	Interview Session	
		Frequency	Duration (hours)
1	Vice President of F&A Unit	1	2
2	Human Resource Manager	1	2
3	Operational Manager	2	5
4	Team Manager	1	1
5	Continuous Improvement Manager A	1	2
6	Continuous Improvement Manager B	1	2
7	Continuous Improvement Manager C	1	1.5
8	Continuous Improvement Manager D	1	1
9	Continuous Improvement Manager E	1	1
10	Operational Specialist in F&A Unit	1	1.5
	TOTAL		19

“... RPA allows routine tasks to be deleted and it achieves the specified processing goals.”- Continuous Improvement Manager A.

Besides that, automation technology is capable of improving productivity and making the work process more efficient and accurate (Chen et al. 2012; Fernandez et al. 2017; Kamhawi 2008). According to the Continuous Improvement Manager B;

“... RPA also managed to eliminate errors as it was done by robots. It does not have the flaws of accidental mistakes made by humans.”- Continuous Improvement Manager B.

RPA technology is also widely applied in accounting and finance assignments as it is seen to be able to reduce the time. The saved time allows them to apply not just their knowledge and expertise, but their nuanced creativity and intelligence. This is acknowledged by Vice President of F&A unit.

“... RPAs can be convenient and time-saving. Now, the time of workers is not only wasted to enter data and do routine and repetitive work, but they are given more challenging tasks such as analyzing data.”- Vice President of F&A unit.

Changes in the process of employment are common and must be faced by all organizations to remain competitive in the marketplace. However, according to professional logical lenses, changes in the task and roles will create a fear of workers due to changes in the work process to be encountered (Arnold et al. 2000). There are employees who are already comfortable with their job position and are reluctant to change work processes. There are also workers who are afraid and feel hard to learn about the use of new technologies. Plus, it creates fears for employees because of the worries of their jobs being taken over by robots. This led to the introduction of new technology acceptance problems and should be addressed by the firm well. According to Operational Manager;

“... at first the workers have fear because they are afraid of losing their jobs. They are also worried because RPA involves changes in their work processes, where they have to learn something new.”- Operational Manager.

According to the Vice President of F&A unit, he agreed that RPA significantly changes the role of the accountant. However, it will provide them with more time on value-added opportunities such as performance management, predictive analytics, and decision support.

“...Many are concerned that technology will eliminate jobs, while in fact, the technology is not replacing accountants, but it is developing their role and enhancing their effectiveness and job satisfaction. The RPA helps to eliminate the manual processes and time-consuming, that prevent accountants from delivering the strategy and analysis that drew them to this profession in the first place.”- Vice President of F&A unit.

Despite the advantages brings by the RPA technology, there is an issue that needs to be stressed because it can challenge their job opportunities. Firms that apply RPA to replace human beings will cause competition between humans and robots. This is agreed by the Human Resource Manager;

“... Yes, it cannot be denied that the use of technology has had a huge impact on the present industry. Reducing the number of employees leads to more intense competition. Now, humans need not only compete with each other, but they must compete with technology.”- Human Resource Manager.

However, according to the Vice President of F&A unit, robots still cannot replace the need for full human resources. Humans are still needed for technology control. In addition, humans are required for data analysis and decision making purposes.

“... we still need skills and knowledge in finance and accounting for the control, analysis and decision-making aspects.” - Vice President of F&A unit.

According to professional logic lenses, there is a need in terms of analytical aspect that still cannot be completely replaced by robots. The human resource requirements still required by the firm can still offer job opportunities to employees.

IMPACT ON ORGANIZATION

A proactive planning is crucial in order to implement a new system into the organization. By establishing a proactive planning and building strong governance for RPA implementation, the organization will have a stronger footing over the automation project and is able to ensure that RPA implementation happens as planned, particularly within the expected timeframe and budget. This is acknowledged by the Continuous Improvement Manager A;

“... Planning is very important for RPA implementation. The RPA has been implemented gradually based on several phases as initially, we are unsure about the impact on us. But now, the RPA can be said to reach a matured phase and it showed that our planning is successful and went well.”- Continuous Improvement Manager A.

The support from management and support from information technology units is crucial to the successful implementation of a new technology. In order to increase acceptance and adoption of RPA into operational processes, effective change management and communication strategies that ensure workers understand the facts and benefits of RPA are essential. The continuous improvement manager recognizes the importance of support and training to employees and strives to give the best to all employees.

“... we try to provide enough support and training to employees. Initially, there was a problem in terms of customizing workers with a new task reshuffle. However, that’s our goal of providing solid support and training.”- Continuous Improvement Manager C.

According to the Vice President of F&A unit, he acknowledged on the important role of IT in the accounting profession. There are growing needs for accounting professionals who possess a combination of educational qualifications, professional credentials, and skill-sets that include data analysis and business intelligence. Technology will continue to change at light speed, accountants who not only have basic IT skills but also flexibility and adaptability will always be ready to integrate new, more efficient tools into existing processes.

“... There is also an issue around skill matches and we are progressively looking to hire people with skills around IT technology and analytics.” – Vice President of F&A unit.

Automation technology that uses robots and replaces humans is better because it can solve issues involving humans such as disciplinary problems, employee productivity, and human resource shortages. The reducing number of work errors is something that is desirable for every professional. It can smoothen the service process that is carried out and improve the performance of the organization. The Continuous Improvement Manager B added that the RPA can work at any time the organization wants and this gives an advantage to the use of RPA compared to humans.

“... RPA works for 24 hours and it does not require any human breaks. RPA can also replace the problems faced when hiring people like people taking MC (medical leave), resignation and coming late into the office. This is one of the great impact of the RPA.”- Continuous Improvement Manager B.

Based on professional logic lenses, RPA has excellent features as it can improve organizational performance. The previous study states that when automation technology is introduced into the organization, it will result in the change of work and the reduction of work (de Castro & de Oliveira 2015; Gable et al. 2002; Gorla et al. 2010). Recognizing this, the vice president of the F&A unit acknowledges that RPA’s implementation has significantly lowered the number of employees in the F&A units;

“... RPA implementation cannot escape with the reduction of the worker where manual assignments have been successfully automated.” – Vice President of F&A unit.

However, collaboration among RPA and human operators will assist to enhance and restructure the existing processes. Besides that, due to the need for RPA computer operator and programmer, additional jobs roles will be created. Figure 2 shows the summary of findings for this study.

CONCLUSION AND IMPLICATIONS

In short, RPA technology implementation gives significant impacts on the individual organizational behavior in global accounting services from professional logic lenses. Among of the impacts identified is the system able to provide a better work quality and accuracy, and hence save the accountant’s time. The fear that occurs from the introduction of a new technological innovation particularly on the aspect of job security is nothing new. Despite the fact that technological innovation certainly causes some form of economic and employment disruption, however, it does not necessarily equate to unemployment as it managed to create new jobs roles and changes the nature of existing ones. Thus, organizations need to give full support to their employees in order for them to prepare for

Professional Logic	Impact on Individual	<ul style="list-style-type: none"> • quality and work accuracy – automate all the tasks and increase tasks accuracy. • save the accountant’s time – additional time can be used for more challenging tasks. • change of tasks and roles - reluctant to change work processes. • technology creates fears for workers - acceptance problems • lesser job opportunities - human jobs being taken over by robots.
	Impact on Organization	<ul style="list-style-type: none"> • requires proactive planning - implemented gradually based on several phases. • support from management and support from information technology - communication strategies. • requires appropriately skilled worker • demand in skills around IT technology and analytics. • work at any time - does not require any human breaks and replace the problems faced when hiring people like a disciplinary issue. • reduce number of workers – reduce cost.

FIGURE 2. Summary of Findings

the technological disruption by educating employees on the usage, advantages, and limitations of RPA.

Besides that, as responsibilities increase in the accounting world, this study managed to found that there is an important role for accounting profession to have IT knowledge apart from traditional finance and accounting skills. Instead of expecting to use the same tool for the next decade, accountants today must be ready to use new technology every year. This requires not just a basic understanding of the technology itself, but the ongoing cultivation of adaptability. Therefore, quality of accounting education is a factor influencing the success of employees and organizations directly. Restructuring of the contents of accounting education by considering present environmental changes are necessary with respect to train graduates having sufficient quality to meet the needs of industry.

Theoretically, this study uses professional logic lenses to understand the impact of new technology, which is RPA. This study builds the theoretical basis for studying the impact of technology in the context of global accounting services, based on the institutional logic lenses. In addition, this study contributes to the literature on the latest disruptive technology, namely RPA used in the GBS industry and in particular global accounting services. Practically, only a few firms are using the RPA technology in the organization and this contributes to a lack of exposure to RPA technology. Thus, this study can help the industry for the planning and management process of the RPA technology in global accounting services by providing empirical evidence and best practice. The findings of this study can be used as guidance and also enlightenment to other organizations who are still considering whether to use RPA or otherwise.

The scope of this study is limited to the impact of implementing RPA in the GBS industry. While this study has successfully exposed the challenges faced in the implementation of the RPA in the GBS industry in Malaysia, future studies may look into each challenge in detail. The challenges may be different in other countries because of the differences in culture and geography (Wyld 2010).

ACKNOWLEDGMENT

We would like to acknowledge UKM Research Grant Scheme (GUP 2016-48) for funding opportunities.

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Dahlia Fernandez*
 Faculty of Technology Management and Business
 Universiti Tun Hussein Onn Malaysia
 86400 Batu Pahat, Parit Raja
 MALAYSIA
 E-mail: dahliafernandez111@gmail.com

Aini Aman
 Fakulti Ekonomi dan Pengurusan
 Universiti Kebangsaan Malaysia
 43600 UKM Bangi Selangor
 MALAYSIA
 E-mail: aini@ukm.edu.my

*Corresponding author

