PREPARATIONS UNDERTAKEN BY IBM EMPLOYEES FOR OFFICE AUTOMATION IN THE PHILIPPINES

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Abstract

The study examined the preparation of IBM Human Resource Transformation and Operations (HRTO) employees for the implementation of office automation in the Philippines. The study employed mixed methods type of research combining both quantitative and qualitative types of research. This study focused on one selected segment through which the company operates: Global Business Services (GBS). The population of the study were bona fide active employees of IBM. The respondents were also explicitly working at IBM Eastwood Libis, Quezon City site under the Human Resource Transformation and Operations (HRTO) department of IBM Business Services, Inc.

In terms of the selection of the respondents being studied, purposive convenience sampling technique was utilized. The study was done in two (2) stages. The first stage is about the respondents' personal profile such as age, educational attainment, and years of service in the company and their Career Adaptability Scales. The data collection ran from December 18 – 31, 2019. The study was conducted in 1800 Building of Eastwood Libis, Quezon City site where approximately 150 professional employees of HRTO are presently working. Only the respondents who were able to finish the questionnaire within the 2-week period were included in the conduct of the study. Data was collected from 102 respondents.

The first section was conducted to aid the selection participants for the second stage of the study. From 102 respondents, the researcher reached out to 20 participants who were selected based on their willingness and availability to proceed with the second stage of the research which is the interview process. While it was intended to evenly distribute the representation of respondents per age range, educational attainment, and length of service, the scheduling conflicts to conduct interviews as well as the limited number of respondents for certain demographic groups proved the endeavor not feasible. Nevertheless, the researcher has managed to get representatives from each group from the original population of 102 respondents.

The result of the study revealed that the institutionalization of office automation in the HRTO department of IBM has significantly impacted the career paths of the employees. The employees are very adaptable to office automation and they continue to mold their careers by constantly adapting to technological changes. All of the IBM HRTO employees are very aware, and they are preparing for their vocational future. Certainly, the employees have strong beliefs about their personal responsibility to prepare for their careers.

The study concentrated on employees from one type of industry. The researcher recommended a quantitative study on the effects of automation to the job security of employees within the same industry. Other researchers could also look for further study from other companies where automations are being implemented for differentiation and validation of results. The

researcher also suggested further research from other industries where automations are directly impacting human work and compare the displacement and productivity effects of automation. A review of current curriculums of educational institutions and align with what skillsets are being sought by future employers were highly proposed too. Lastly, a further study and review of national and international policies regarding employee severance since organizations are more likely to displace employees due to technological advancements.

Brief Introduction

Since the beginning of time, people have seen machines as tools to help us do more than we are capable of. From simple machines of the Stone Age to the complex machineries of today, technology has augmented our capability for survival and convenience. This paradigm started to shift immensely in the late 1700s during the Industrial Revolution. The perspective that machines can be a threat to the economic security of the working class began to take hold.

As the world progressed to the 20th century, we saw continuity in this conflict of perspective. At the same time, technology has gone from big machineries to smaller robots than can perform more sophisticated jobs. Computer controlled machineries can now operate with precision and efficiency, especially in the assembly lines of manufacturing industries, as capitalists seek higher production rates and increased productivity.

Human resource, nevertheless, has also evolved. Throughout history, innovations have been introduced constantly to the market making old value streams cease and new ones emerge. Human workforce had to adjust continuously in response. Some professions and jobs become obsolete while new ones are created. With the threat of new machines eliminating established jobs, social changes have also occurred to adapt to the new work environments. Technology companies, like IBM, have capitalized and thrived with these technological changes.

International Business Machines (commonly referred to as IBM) is an American multinational technology and consulting corporation headquartered in Armonk, New York. The company offers information technology infrastructure, hosting and consulting services in areas ranging from mainframe computers to nanotechnology. While IBM made its name in computer hardware, the company's information technology, business services, and software units are now among the largest in the world. IBM now focuses primarily on its business services, which accounts for most of the company's revenue. IBM operates in more than 175 countries, with an increasingly broad geographic distribution of revenue. While some business units in IBM continued with traditional office work environment, the company started an initiative to integrate automation across all offices worldwide. This initiative was slowly rolled out to the IBM offices in the Philippines for the past several years. The impactful initiative has started to shake office professionals as old jobs are now being eliminated, while new jobs are created requiring new skills and expertise.

Employee adaptation to office automation is a critical factor in IBM's initiative as advancement can ignite sweeping organizational and even industry level changes in workforce administration and business operations. This study seeks to query into how employees prepare for

disruption with IBM as the paragon workplace where jobs become volatile in the face of advanced technological changes.

Statement of the Problem

The general problem of the study is: "How do the employees of IBM HRTO prepare for the implementation of office automation?"

Specifically, this study sought answers to the following questions:

1. What are the Career Adaptability Scales of the IBM HRTO employees under the following dimensions?
    1.1. concern
    1.2. control
    1.3. curiosity, and
    1.4. confidence?
2. How may the utilization of the current office automation at IBM be described?
3. What adaptive responses are being done by the IBM HRTO employees towards office automation?
4. What career adaptation strategies may be proposed to help the employees adapt to office automation?

Integrated Review of Related Literature and Study

Career Adaptability is a psychological resource helping individuals deal with perceived challenges, while relevant work experience moderated one's strategies to catch opportunities. As a future-focused dimension of career adaptability, concern references the extent to which individuals are opportunity-oriented, possess career-related forethought, and prepare for upcoming career tasks, changes, and challenges. Individuals who score high on concern are likely to think about and prepare more for their vocational future, including carefully planning how to achieve their career goals. Control means the extent of self-discipline as shown by being conscientious and responsible in making decisions. Control entails a strong self-determination component (Ryan & Deci, 2000), enables individuals to become responsible for shaping themselves and their environments, and thus reflects mastery over the domain in which they enact their career (Rossier, 2015). Control also manifests as positivity, self-directed decision making, responsibility, efficacy, and strivings toward self-preservation (Savickas, 2012).

On the other hand, curiosity thus involves exploring possible future selves and associated career prospects and thinking about how such opportunities may influence different work roles and environments (Zacher, 2014). Lastly, reflecting self-confidence and self-assurance, confidence refers to an individual's belief in themselves and their abilities to attain their career goals (Savickas, 2012). Confidence echoes the degree of self-efficacy one has to pursue their vocational aspirations (Dries & Esbroeck, 2012), beliefs in one's ability to solve problems and to succeed (Zacher, 2015), and a strong belief in the capacity to overcome one's career barriers and

to focus on success when approaching such barriers (Negru-Subtirica & Pop, 2016). People that are more confident perform tasks more efficiently, and take care to do so well.

Zhang, Guan, et al (2019) revealed on their results the positive effects of career adaptability on job crafting and career adjustment using the Career Adapt-Ability Scale (CAAS) for the measurement of participants' career adaptability in reaction to automation technology. Their results further showed that career adaptability and work experience moderated the relationships of one's opportunity and threat perceptions towards their job crafting behavior and long-term career adjustment plans (Savickas, 2012).

Chin, Maricourt, et al (2016) studied the career perception facing automation of jobs among current workers and students. Most of their respondents do not see immediate changes, which can be linked to the feasibility of implementing robotic process automations. The undergraduate students however gave greater importance to automation and are conscious to adjust their career decisions and skills.

Petropoulos (2017) looked at both positive and negative impacts of automation on employment. He found out that the negative side called "displacement effect" where employees may actually lose their jobs; while the positive side called the "productivity effect" where more job opportunities are created. One example of productivity effect is the reduction of bank tellers with the introduction of Automated Teller Machines. The cost reduction of the bank allowed the opening of a few more branches and new job opportunities.

Locally, office automation has been implemented in some local government units. Clavecilla, et al (2016) concluded that resistance to office automation by employees are mostly due to knowledge gap, lack of training, and low educational attainment after they studied on the impact of automation on the job performance of employees in the local government unit of Baao, Camarines Sur.

With all the ever-increasing advancement in technology and better performing artificial intelligence, these related literature and studies might as well just be predictions or applicable only to the current technological setting. Perceptions on this topic continue to evolve and therefore have yet to be documented or considered, and the aim of this study is to explore more of the responses towards automation in a localized setting.

Methodology

The study employed mixed methods type of research combining both quantitative and qualitative types of research. These were used primarily to uncover trends in thoughts and opinions and dive deeper into the problem with the employees' preparation for office automation. While most published qualitative studies in this topic call for significant improvement in the employment of qualitative research due to rigorous academic standards this study can only draw attention and impart small contribution to the literature of studies and advocate urgent discussions involving similarly impacted populations (Bimrose and Hearne, 2012).

A letter requesting to conduct a study was given to the managers for permission and discussed the purposes of the study, as well as the information the researcher needed. Permission

to conduct the survey was responded positively by IBM management. The researcher then approached the selected respondents and explained the objectives of the research. Those who agreed to be part of the research study were then given the instruments and were personally interviewed by the researcher. The researcher requested the participants to answer the instruments honestly and to complete it within the allocated time.

The researcher also advised the respondents not to share IBM confidential data and share only their personal answers. No IBM confidential data are retrievable from the interview transcriptions and the researcher used general categorizations to mask accidentally gathered IBM confidential information.

Lastly, the study was based purely on public data gathered from the internet, books, research, journals, and personal answers of the respondents that are only related to the study entitled "Preparations Undertaken by IBM Employees for Office Automation in the Philippines". No data was manipulated to fit the researcher's bias. All responses were cited appropriately, and data gathered are fully retrievable from the researcher.

In terms of the selection of the representatives of the population being studied, purposive convenience sampling technique was utilized to assess the individuals to be included as respondents.

The study was conducted in 1800 Building of Eastwood Libis, Quezon City site where approximately 150 professional employees of HRTO are presently working. The data collection ran from December 18 – 31, 2019. Only the informants who were able to finish the questionnaire within the 2-week period were included in the conduct of the study.

There are two stages of the study. The first stage is about the respondents' personal profile such as age, educational attainment, and years of service in the company and their Career Adaptability Scales. The first section was conducted to aid the selection respondents for the second stage of the study. From 102 respondents who participated on the first stage, the researcher then reached out to 20 participants who were selected based on their willingness and availability to proceed with the second stage of the research, which was the interview process.

For the first part of this study, descriptive statistical techniques were used such as mean, percentage, and frequencies distribution. The collected data were converted to numerical coding for a simple and easy understanding of the results. The numerical coding scheme will help with the easier development of the data matrix. The matrix primarily helps the easy organization and presentation of the results of the data.

The results were organized, processed, and analyzed statistically using frequency distribution, mean and percentage in the result of the study. Frequency distribution were used to determine the employees' response to the evaluation of the results of each variable indicated in the questionnaire.

Conversely, mean was used to analyze the average of every result of the variables. The percentage was used to show the ratio of the frequency distribution results based on the total respondents of the study. The data was presented in a tabular form, which will serve as the basis for presenting the analysis and interpretation.

Significant Findings

In this age of rapid technological advancement, this research entitled "Preparations Undertaken by IBM Employees for Office Automation in the Philippines" sought to determine the career adaptability of IBM HRTO employees and their preparations to adapt and overcome career challenges. To meet the objective, research questions formulated and with the answers from the respondents, the researcher attests the findings as summarized below:

1. What are the Career Adaptability Scales of the IBM HRTO employees?

The Career Adaptability Scales of the IBM HRTO employees were described using the concern, control, curiosity, and confidence dimensions.

All of the IBM HRTO employees are very aware, and they are preparing for their vocational future. Certainly, the employees have strong beliefs about their personal responsibility to prepare for their careers. Furthermore, the employees have a high tendency and the ability to explore professional environments, for example, by exploring and learning about types of work and occupational opportunities inside and outside IBM. Finally, the IBM HRTO employees have high confidence to suggest that they have perceived self-efficacy to solve problems and the ability to successfully do the necessary actions to overcome career challenges.

2. How may the utilization of the current office automation at IBM be described?

IBM is currently implementing mostly Robotic Process Automation, Cloud-based Solutions, and Machine Learning. All of these currently automation initiatives are localized and are brought about from the ground up wherein employees are introducing process improvements inspired by IBM's innovative culture. These small automations are collectively preparing IBM further into a more technologically advanced future that involves artificial intelligence, blockchain, and even more robotic process automations.

3. What adaptive responses are being done by the IBM HRTO employees towards office automation?

All the respondents are constantly learning and training to upskill. This includes workshops, job shadowing, involvement in automation projects, and even learning how to learn. These opportunities to learn are provided by IBM but learning is still self-initiated by IBMers. From the behavioral perspective, IBMers are aware, responsible, curious, and confident that they can adapt to the automation initiatives in IBM.

4. What career adaptation strategies may be proposed to help the employees adapt to office automation?

Based on the observations and information collected throughout this study, the following are the proposed career adaptation strategies:

1. Technology awareness. Office automation is always about new technology. Employees need to keep themselves aware of technological advancements and how it can impact their work.

2. Adaptive reskilling and upskilling. Old skills can easily become obsolete. Professionals need to constantly upgrade and learn new skills.

3. Continuous learning. As manual work is becoming automated, work is becoming more holistic and multi-faceted than ever. Professionals need to broaden their knowledge outside their career comfort zones.
4. Intentional career planning. Without career plans, professionals can easily find themselves struggling to adapt with the opportunities and threats of office automation.
5. Hopeful mindset. Employees will find it easier to adapt to office automation if they are hopeful and positive that technology can offer a lot of betterment to the world.

Recommendations

This study focused only on one selected segment through which the company operates: Global Business Services (GBS). It focused on the analysis of the Human Resource Transformation and Operations (HRTO) of IBM Business Services, Inc. employees and their preparations for the office automation initiative of IBM. Since this study concentrated on employees from one type of industry, the researcher would like to recommend the following:

1. A quantitative study on the effects of automation to the job security of employees within the same industry to draw more empirical conclusions regarding the effects of automation to job security.
2. A further study from other companies where automations are being implemented for differentiation and validation of results.
3. A further study to examine the relationship between individual careers goals and employer business goals from a business management standpoint.
4. Further research from other industries where automations are directly impacting human work and compare the displacement and productivity effects of automation.
5. A review of current curriculums of educational institutions and align with what skillsets are being sought by future employers.
6. Lastly, a further study and review of national and international policies regarding employee severance since organizations are more likely to displace employees due to technological advancements.

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