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Future of Work: The Impact of Intelligent Technologies for Leaders and Knowledge Workers

Ainsley Robin Anesone
Victoria University of Wellington, New Zealand, a.anesone@nus.edu.ws

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ABSTRACT

The future of work (FOW) is being influenced by emerging technologies such as machine learning, artificial intelligence (AI), and predictive analytics. With 89% of businesses adopting digital strategies, experts predict that AI will enhance productivity and proficiency over the next decade. However, concerns about the impact of AI on employment and the workforce remain. The pace of AI development contradicts stakeholder expectations, leading to uncertainty about AI automation, competitiveness in local markets, online disruptions, job and skill redesign, and high pressure on the workforce.

AI has shown benefits in automating processes and improving productivity, quality, and reliability. Descriptive analytics tools like Office 365 Delve (O3D) can help reinforce working relationships, improve work-life balance, and support communication. However, there is a gap between organizations and employees when it comes to adopting new technology tools. A case study was conducted at Achievers Point University (APU) to examine the use of O3D, its impacts, and user perceptions.

The results showed that non-users do not trust the implementation of O3D, but users who use it effectively view output accuracy as well as input. In terms of well-being and trust, 62% of respondents trust O3D as a tool for improving work performance in time management and capturing work activity data. The findings from this case study can inform C-suite executives, decision-makers, and business leaders about developing strategies to mitigate risks during technology implementations.

Key words: Artificial Intelligent, Ethical Consideration, Future of Work, Knowledge Workers, Leader.

1. INTRODUCTION

Today, the impact of intelligent technologies on the future of work is considered a high priority for leaders. In many respects, the 'future of work' (FOW) is not coming, it's already here, and it is perceived as one of the biggest issues today. Several definitions of FOW have been proposed, mostly referred to because of many forces of change affecting three connected dimensions of an organization: work, the workforce and the workplace [1], [2], describes the concept FOW as complex disruptive forces that transform businesses, the nature of employment, workplaces and the way people work.

According to [3], the concept of FOW is automation and will be transforming businesses in the future, leading to economic growth via contributions to productivity [4]. Several organizations are using artificial intelligence (AI) to try to minimize operating costs, maximize efficiency, generate revenue and enhance user experience.

AI is proven to be disruptive [5]-[9] is perceived in an adverse light, projecting a future in which robots are taking away jobs from workers. The term AI is defined by [10], as an intelligent system capable of thinking and learning. This view corresponds with [11] definition of AI as the concept of machines being able to perform tasks in a manner that we would consider smart. These technologies, without a doubt, will transform the nature of work, and the workplace itself [4].

[12] states that a potential job loss of around 35% in the next two decades will be due to technology automation. Similarly, reports by [13] estimate that automation could replace 45% of work currently carried out by humans, replacing not only physical but also cognitive capabilities, while only 5% of employment could be substituted fully by technology.

The implementation of new digital technologies such as AI in workplaces influences not only the levels of employment but also the well-being of employees such as job satisfaction and safety. When innovation trends continue to evolve in the workforce, workers feel pressured as they continually try to adapt to new methods and techniques. As stated by [14] once employees are trained in new technologies, they are experiencing more stress at having time from work responsibilities for retraining activities. New technologies are contributing to the increase in task difficulty, and the need for workers to acquire new skills and knowledge to perform new tasks, adding more pressure on staff [15].

Other changes brought by AI is the change how workers perform their duties such as employees that can operate from any location can have their cell phones in hand or on leave, but in case a message arrives that needs immediate attention [14], [16] revealed the latest scandal emerging from Amazon Warehouse centers regarding the company's new innovative wristband, which gives the ability to track and record employees' hands in real-time. The Amazon workers identified the software as a dystopian form of surveillance. AI has restructured how knowledge workers (KW) perform day-to-day tasks. Who is

referred to as KW? As [17] points out, in every business, there are employees whose roles are primarily involved in acquiring and using information in a creative way, these individuals are referred to as KW. [17] defines KW as people with a high level of education and expertise and the focus of their job is to use and apply knowledge in a creative and innovative way. Are all employees' knowledge workers? Some may disagree, but all employees could and should be regarded as professional workers because everyone is an expert at anything [17]. Vora 2004 cited in [18], defines the term KW as valued human assets because they are key agents of change in organizational development. Brynjolfsson and McAfee 2011, cited in [19], argued that technological advancement had competing effects on employment as it entered more cognitive domains. According to [19] latest findings documented the decline in the demand for technical skills in the workforce over the last decade, but the demand for workers with higher education has continued to grow. Replications of the Frey-Osbourne method in the New Zealand environment produced similar findings, with 46% of the sample found to be at high risk of automation [20]

Several companies have started implementing AI to simplify and boost repetitive or ineffective procedures. In fact, 66% of those surveyed are leveraging AI technologies primarily for business process optimization, this is often seen as a great option as it can deliver fast changes [21]. Although the benefits of AI are appealing, one of the main issues surrounding this concept concerns chief information officers, or leaders, and acceptance. Implying that AI is not necessarily about the technology itself, but it is rather about the people, processes and culture being enablers of acceptance [22]

A leader is identified as the person in charge and who conceives other people to follow [23]. [24] draws a distinction between management and leadership, whereby management is defined as dealing with complexity, and leadership is defined as coping with change.

Cultural barriers, on the other hand, often takes a certain amount of time before we see that the disturbance or cost that will inevitably result from the change of policies, processes or the adoption of new systems will be worth the potential benefits that they offer [25]. When leaders do not have the support from the entire staff, the implementation of AI will stall. There are still barriers for most organizations seeking to adopt AI or switch to other data-driven technologies. [26], also confirmed that one of the challenges leader's faces is the lack of suitable applicants to take up machine learning field positions, such as a data scientist who is experienced in problem-solving and can explain algorithms. The risk of AI adoption is the leaking of data, it is thought that deploying machine learning may go wrong or show strange behavior about privacy issues [26].

However, AI's passionate reservations and potential implications, see the technology offering great potential for human empowerment and provides the tools needed to automate redundant activities. AI can identify trends inside new and existing information and discover valuable insights that have the capacity to make our lives easier [21]. The automation of basic tasks to render increasingly complex processes smarter, AI can significantly improve the way companies operate. [27] announced that 89% of businesses have adopted or are intending to follow a digital strategy. What needs to be done to identify ways to deliver benefits? To drive digital strategies, leaders are looking at how AI can work together with people to improve performance but also to help knowledge workers by reducing stress through new opportunities and ways of thinking. This case study was looking at how AI prescriptive tool used and perceived by users. The goal is to investigate the perceptions of knowledge workers and leaders on AI-based productivity tool, intended to help workers for the better. Organizations and decision-makers may see the potential of AI, which is designed to carry out most of the work done by staff and to support the way in which they operate. Such changes should be driven by good leadership until any changes are made. The advancement of AI initiatives provides the potential for success in organizations is enormous but for some cases, organizations and decision-makers are not on the same page with their employees during new technologies implementation.

1.1 Significance of the issue

The significance of the issue will help any organization, business leaders and decisions makers to realize the concerns of employees when organizations push for AI adoption intending to help employees to be more productive and to reduce stress to improve well-being. Every organization makes improvements in its operations for the good of its workers, but to reduce uncertainties in the implementation of new technology, it is important for managers and decision-makers to pay close attention to the people-centric lens of where you can begin to improve the staff experience.

Achievers Point University (APU) located in New Zealand was the organization researched in this case study. APU has made a significant contribution to major government projects and public policy initiatives with an increasing level of entrepreneurial education. Data were obtained from the three schools of APU: School of International Business (SIB), School of Accounting (SOA) and School of Instrumentation Engineering (SIE).

This case study was undertaken to examine the perceptions of managers and knowledge workers within APU about the ramifications of the organizational use of intelligent technology called Office 365 Delve (O3D), an enabled software application of the Office 365 suite. APU has upgraded its software applications from an older version of MS Office to (O3D), a suite of services offered by [28].

The APU Information Technology Services (ITS) objectives are to provide infrastructure, services and support for most of the university's information, communication and technology systems [29]. It involves staff, teaching and research staff and student learning and user access services. ITS also holds and maintains became part software for some core business units [29]. Any IT shift for the organization or business must be aligned with its' process to deliver value. The benefit of the change is to align APU's IT and business strategies to support its objectives and the

development and management of the APU's core applications. For instance, students' academic-focused application, business analysis, solution development, applications management and support system, web integration and database administration [29]. This issue was identified when knowledge workers of APU received a weekly report from O3D informing them of their user insights and how they might use these insights to enhance work patterns by receiving a report looking at four areas:

- Focus time or Focus hours
- Collaboration
- Network
- Wellbeing

O3D fosters collaboration between documents and facilitates interactions among employees. The Outlook Calendar allows the user to create and track appointments and meetings. The user can create multiple calendars, link and share to other people's calendars internally or externally. The user can access email, calendar entries and contacts from any device [28]. Microsoft Office Delve is a tool for data visualization and discovery that includes elements of social networking and machine learning with the search capability of the Microsoft Office 365 suite [30]. O3D is a new feature which among other things sends its users a weekly productivity report known as My Analytics (MA). The MA report [28] summarizes how consumers spend their time at work and how they can work more intelligently such as from reducing unproductive meeting times to improving work-life balance.

1.2 Benefits and Implications of the Delve Tool

APU adopt O3D to increase the efficiency of staff, minimize the stress level for the greatest benefits, however, there are implications (see Table 1) below:

Table 1: Benefits and Implications of the Delve Tool

	Benefits	Implications
Improve Collaboration Time	It will increase the user's collaboration time through team meetings and a support network partnership with users. The users will connect with everyone else internally or externally through the use of their own profile page. The profile page can help the user to identify the information about those the colleagues to create, edit and share documents. It also allows users to embed documents, videos and images (Microsoft Office, 2019).	Users are still cautious of creating a profile page in case files can be exchanged with others. Even though there is a chance to choose not to share using privately or publicly options.
Productivity Enhancement	The user will use the MS Outlook Calendar to make appointments in order to collaborate with others. This will avoid double booking of meetings or appointments to see students thus will eliminate obstacles, avoid multi-tasking and concentrate on core priorities (Office, 2016).	Not all users were able to use the device. If there is no proper training many choose to use their diaries instead of using the tool because they are not confident using the device.
Well-being improve	O3D provides a weekly report to users, and they can reflect from their insights about whether they are working smart in helping them to reduce working hours and improve well-being. (Office, 2016).	The O3D insights is beneficial to those who use the tool, so those who choose not to use it will never see the value of the tool.
Flexibility	APU also guarantees that its employees have options or flexibilities about where to work whether from home or office space. Not only the mobility of sites but also O3D is compatible to any devices eg cell phones or tablets.	Due to flexibility of locations and compatible devices, users would certainly be operating 24/7, constantly interrupted and can increase stress.

Table 1 shows the benefits and implications of using the delve tool when APU implements the O3D.

2. METHOD

2.1 Research Approach

Qualitative methodology semi-structured data collection interviews were used for the study method. The data collected from the twenty-six participants is used to assess and discuss the findings.

The approval by the Achievers Point University (APU) Human Ethics Committee was granted to start the case study. Interviews were held between May and August 2019 with a few respondents from the three schools of APU.

The three schools participating in this case study were:

- School of International Business (SIB)
- School of Accounting (SOA)
- School of Instrumentation Engineering (SIE)

2.2 Participants

Two interview sessions were held at each of the three schools identified. Participant's key element was to be current lecturers who use or do not use the Office 365 Delve tool, and those in our first interview included: (see Table 2)

- three (3) senior management lecturers
- thirteen (13) lecturers
- three (3) administrative officers

The second[1] interview session consisted of seven participants, six of whom were re-interviewed, and the other participant was a new interviewee:

- five (5) lecturers
- two (2) administrative officers

Participation was voluntary and respondents were identified via APU's website and nominated by our supervisors of the various schools that agreed to take part. Head of Schools and participants were provided with an Information Sheet and the Individual Consent Form requesting their consent to gather their information. The information gathered is kept confidential and is presented only to the researcher and the supervisors of the course. All interviews were held on the workstation of each participant and ranged from 15 minutes to 20 minutes in length.

Face-to-face interviews were audio-recorded, and all participants groups were asked a range of structured questions.

[1] The numbers in brackets represent participants for the second interview session.

Table 2: Participants Table

Achiever's Point University. 'Participants	School of International Business (SIB)	School of Instrumentation Engineering (SIE)	School of Accounting (SOA)	Total Number of Participants
Senior Managers	1	1	1	3
Lecturers	5 + (2)	5 + (3)	3	18
Administration Officers	0	1	2 + (2)	5
Total	8	10	8	26

Table 2 presents the number of respondents participating in this study titled "Future of Work: The Impact of Intelligent Technologies for Leaders and Knowledge Workers."

The participants include senior managers, lecturers and administration officers, some of whom use O365 in their daily activities while others do not. The number of participants in brackets six of whom were re-interviewed, and the other participant was a new interviewee. There are 26 participants: 8 from the SIB school, 10 from the SIE school and 8 from the SOA school.

2.3 Data Collection

Qualitative semi-structured interviews were conducted to collect data. The interview methodology encouraged the participants to share their views on how they perceive the O3D tool. The interview questions were reviewed and checked by the research team and the course supervisors. The total number of participants was 26 for the 2 interview sessions. Data from face-to-face interviews were transcribed in the order of questions asked. Transcription software called Trint was used to transcribe all the data collected. The transcription data was shared between the three members of the research group for coding. The team uses Google Docs as their point of contact. Any new theme that occurs during the coding process had been discussed with the group to review and update the coding nodes. The emerging themes from the data were used as coding nodes. NVivo 12 has been used for the coding and analysis of data. Each research member selects any theme of interest for the analysis of the data.

3. FINDINGS AND ANALYSIS

The aim of this case study is to investigate perceptions about the implications for managers and knowledge workers of the organizational use of predictive analytics Office 365 Delve.

The ethical considerations of the results of the research have been structured in a manner to indicate the obligations of the researchers' responsibility to protect the confidentiality of each of the participants and their related organizations, so the names mentioned in this case study are fictitious for these purposes.

The findings of this case study were taken from the sample of twenty-six interviews that were transcribed from audio recordings and the data identified a range of themes.

All the transcribed files were exported to NVivo12 software for coding. The themes drawn from the data transcribed were used as coding nodes. The results of this case study concentrated only on the following themes and its sub-themes (see Figure 1) define and analyzed below:

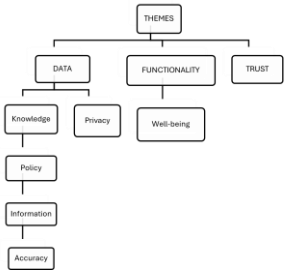


Figure 1: Themes

Figure 1 above shows the themes derived from the transcribed data that were used as coding nodes. The results of this case study focused solely on the following themes and their sub-themes.

3.1 Perceptions on Delve Tool in terms of Data (Knowledge and Privacy)

- **3.1.1 Knowledge**

Respondent's perceptions of the use of O3D depends on their utilization and level of engagement with the tool. Those that do not use it do not trust the logic of introducing this tool and are not officially informed to adopt it. Is the employer electronically monitoring its staff members and their daily activities? Is it a performance management tool? Will management use an individual's weekly data for another purpose? These are the questions asked by our respondents. One respondent signaled double standards.

According to [31] ethical considerations in AI integration concern data privacy and its influence on employment and raise ethical issues such as data privacy and the impact on employment and displacement of labor. Researchers went through ethics approval and participant consent, yet APU failed to adhere to the same standards for its staff members when implementing O3D. Respondents do not mind the tool if it is not in breach of their employment contract.

Non-users do not trust why O3D is implemented and not officially instructed to use it:

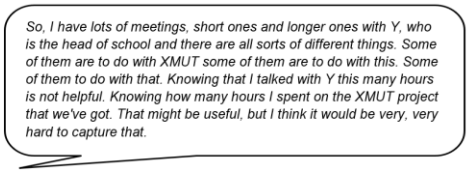
- O3D is a performance management tool electronically monitors a worker's productivity
- The employer may use individual data for another purpose
- No consultation and consent to use O3D for workers a standard required of researchers to get ethics approval and participant consent
- Concern for other stakeholders' consent e.g Tau Maori if data is collected of individuals with cultural projects.

- Individual output may not align with an organization's collective

The output is as good as the input. Some users, for example, do not update their calendars in accordance with the actual activity. When prioritizing between a walk-in student and scheduled appointment, lecturers often choose the student and may not change their schedule to reflect likewise. In addition, the reliability of data is only as entered on the computer but does not account for non-computer activities such as contact via telephone or opportune meetings with a student or client when on a personal errand for instance. O3D is seen as activity-based instead of a task-based tool. It measures the activities but not tasks performed to complete the activity. One respondent's analytics recorded the number of meetings with a certain individual which may be seen negatively but does not show the number of hours spent on a project.

Accuracy of output is as good as input:

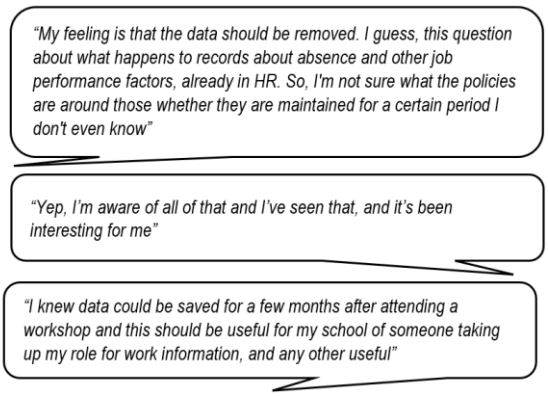
- Users must update their calendars to reflect actual activities that have taken place.
- It is activity-based not task-based. The tool records several activities performed but not time taken to complete a task(s) for the activity. (STUART and XMUT)
- Reliable data is recorded when there is a collaboration of users, for example, a manager meeting with a staff member. The staff members must book their calendar and manager.
- If capitalized can be a good trend identifier
- A user can use it to their advantage to improve on work, time management and applying for employment.



Those that capitalize on O3D can have reliable and useful data providing all collaborators use it too. A respondent's staff are told, to meet means book an appointment online otherwise accuracy of one's analytics is skewed. It is a good trend identifier. One can use it for personal advantage by using it as statistics when applying or transferring to a job, time management or identifying areas of improvement. On the cons side of things will individual output align with a company's collective goals.

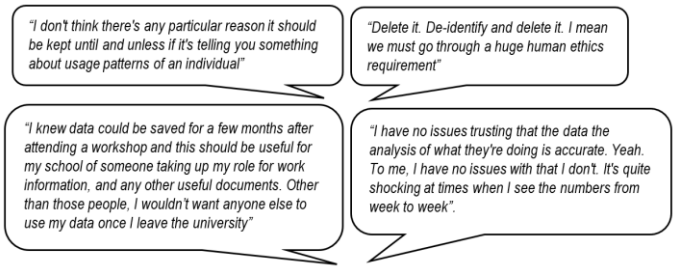
- **3.1.2 Data Collection: Policy**

Respondents are not aware of any policy with regards to O3D data collection and use of data other than the General Data Protection Regulation (GDPR). This knowledge gave them the ability to understand the impact which allows them to make the right decision on how APU should use their data once they leave. Respondents gave a clear message that APU should provide a consistent and clear response across the company in dealing with their data.



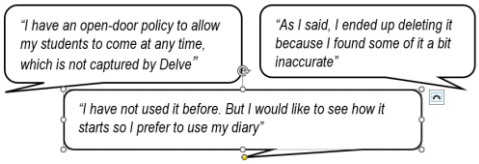
- **3.1.3 Information**

Respondents are conscious of their data collected by O3D, but the majority are worried that APU would use their data without their consent. Their knowledge potential reassures them it is better to delete or remove all data that belongs to them if they leave APU. Respondents that have no concerns about their personal data are also surprised to find out about their weekly statistics on how to use O3D. This inquiry shows concerns from respondent's responses.



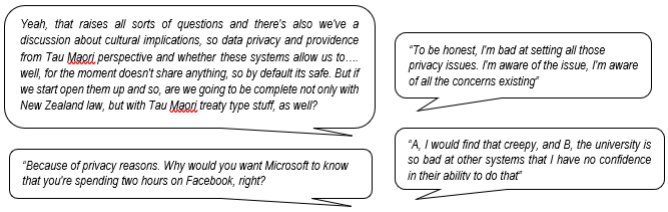
3.1.4 Accuracy of Data Collection

Data can be inaccurate if respondents do not update their calendars in accordance with actual happenings of the day. Some respondents exercise a walk-in policy for students as an example which means a student's needs are prioritized over a scheduled appointment. If the calendar is not updated the outcome is either unproductive, inaccurate or deleted by some. Recorded are some of the responses collected.



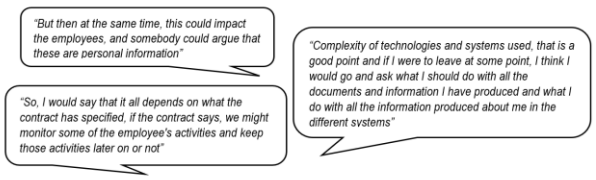
3.2 Data: Privacy

Although Delve was intended to provide accountability in addition to make communication with co-workers simpler, this does not compromise user privacy and company safety. If a file is privately marked, it does not enable any users to access the archive. Security is an essential feature that can be treated less seriously by consumers who do not comprehend the threat of its absence. O3D also enables users the opportunity to experience documents that they were allowed to view. The O3D may not enable users who have not been given access to private records or documents. The personal actions of a client are also not accessible to anyone else. In this case, respondents state that they are sensitive to data privacy and have no confidence in the use of other APU systems. Their technical capabilities facilitate them to identify that data is not secure. Other potential impacts mentioned was APU is employing a lot of systems that are not compatible. Due to these reasons, two of the respondents mentioned that they were deploying their own systems to support their own work. Other respondents are also positive that Microsoft Office is tracking O3D to provide more capabilities for future MS Office software developments.



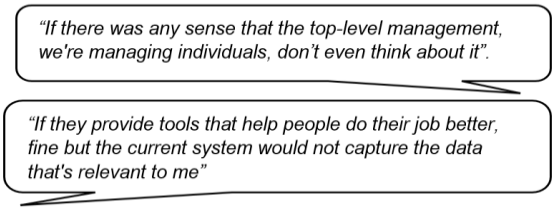
3.2.1 Personal Data

Respondents agree that it is appropriate for APU to use any employee's data if it is stated in the employee's contract. It may influence knowledge workers because they want to make sure that the APU and whatever reasons that data will be used for in the future. This analysis shows fears that each respondent revealed in their responses.



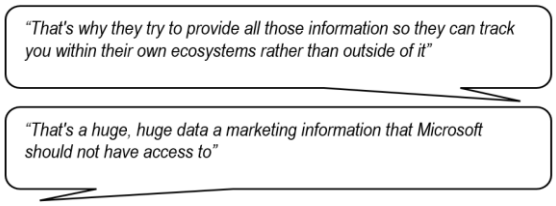
3.2.2 Management

Respondents were not consulted and informed by management of why O3D is introduced. The purpose of its use is unclear therefore insight for everyone is irrelevant and has no impact on their everyday work. Some respondents felt that O3D is an electronic monitoring work productivity too as shown by their responses.



3.2.3 Security

Respondents view the O3D tool provided to trace and/or track staff members. Some effects on workers are when they are unsure about who is using or accessing the collected data. Other respondents also mention that Microsoft also should not access the O3D insights. This analysis suggests doubts that each respondent stated in their responses.

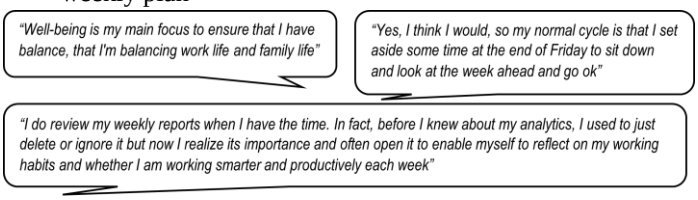


3.3 Perceptions on Delve Tool in terms of Well-being

Respondents observe that the O3D tool offers them value. Employees who take part in decision-making instead of making appointments using the tool, but also help them to work smartly by looking at their weekly insights. Other respondents are reviewing the data provided by the system, useful and starting to work smart. Insights perceived positively by respondents in providing the report that they can reflect on every week. This analysis suggests not only satisfaction but also a self-management tool that each respondent stated in their responses.

O3D is a self-management tool.

- The data it produces helps the user see how their time is allocated
- Informs the user if there is a balance between work, research and personal times
- Tool can be improved to suit the user
- Tool is advantageous to the user not the reverse
- Make improvements to work such as time management and weekly plan

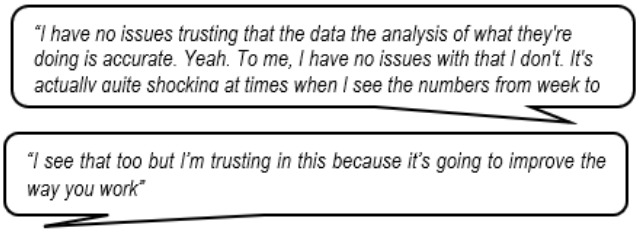


3.4 Perceptions on Delve Tool in terms of Trust

Respondents consider the importance of O3D data to improve the way they function. Respondents show support and how O3D is bringing in new insights that could help them to improve the way they work to enhance their productivity. This analysis reveals the excitement that each respondent stated in their responses.

- Sixty two percent of responses trust O3D as a tool that can help an individual improve their work performance in the areas of time management and capturing work activity data. The remaining responses do not find it as reliable as it does not interpret data, capture work done without the

use of a computer and would not want their work life to be dictated by the tool.



4 RECOMMENDATIONS

Based on the above analysis, four actionable, time-related recommendations for APU for the period of 2020-2030 to implement a policy to accommodate analytical tools (such as O3D) to guide and protect stakeholders.

4.1 APU should implement analytical tools for stakeholders to be protected. All rules and policies should be documented so that everyone is aware of new changes, not only that but also the benefit of disclosing these kinds of policies will foster good relationships between staff and APU. Analytical tools collect data regarding users so with policy in place this will guide the staff member to follow a suitable and recommended course of action. It is better to engage people that are passionate about helping the organization to achieve its purpose.

4.2 Policy should be clear of what type of data is to be collected. If the policy about what type of data that is being gathered is clear and communicates well this will mitigate risks of staff resistance during technology implementations. Staff should also clarify not only what type of data but also the purpose and how the data will help APU's development in the future. Analytical tools can improve to suit the user.

4.3 Ensure all staff are trained before any new technology system is introduced. It is best for the management to have training in place for any new changes. This will help the staff to see the value that the new changes are going to provide not only for staff members but for APU. This method will allow the staff to engage with the changes not only to empower them but to make them feel more comfortable.

4.4 Management should be transparent about the purpose, use and benefits of newly introduced technology. APU should foster transparent culture so that everyone can understand that they are valued by the management in terms of their opinions and feedback. Staff can provide their feedback when they understand what is going on in the university.

REFERENCES

[1] M. Randhawa, "my HR future," 18 June 2019. [Online]. Available: https://www.myhrfuture.com/blog/2019/4/11/how-is-the-future-of-work-shaping-the-labour-market.

[2] Sustainable Business Council, "Future of Work Are you equipped to lead your organisation to thrive in the new realities of work?," SBC Organisation, Auckland, NZ, 2019.

[3] Forrester , "Forrester: The Future Of Work Is Dynamic And Adaptive," 27 June 2019. [Online]. Available: https://www.forrester.com/press-newsroom/future-of-work/.

[4] J. Manyika and K. Sneader, "AI, Automation,and the Future of Work: Ten Things to Solve For," *DSpace Digital Library of Jaipuria Institute of Management, Noida Articles and Research Papers Articles*, June 2018.

[5] I. Diéguez Castrillón and A. I. Sinde Cantorna, "The effect of the implementation of advanced manufacturing technologies on training in the manufacturing sector.," *Journal of European Industrial Training*, vol. 4, no. 29, pp. 268-280, 2005.

[6] N. Forster, "The Impact of Emerging Technologies on Business, Industry, Commerce and Humanity during the 21st Century," *The Journal of Business Perspective*, vol. 10, no. 4, pp. 1-27, 2006.

[7] LatentView, "Data Duplication - Impact on analytics, cost to business and how AI can help.," *LatentView*, 2019.

[8] W. Insider, "AI And The Future Of Work," Engage work and faith, 10 May 2018. [Online]. Available: https://engageworkfaith.org.au/ai-and-the-future-of-work/. [Accessed 16 10 2019].

[9] Ring Central, "Future of Work Resource Hub," Ring Central, 17 May 2019. [Online]. Available: https://www.ringcentral.com/gb/en/blog/future-of-work/. [Accessed 2019].

[10] M. H. Jarrahi, "Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making.," *Business horizons,*, vol. 61, no. 4, pp. 577-586, 2018.

[11] B. Marr, What is the difference between artificial intelligence and machine learning?, Wiley.com, 2019.

[12] F. Carl Benedikt and O. Michael, "Agiletown: the relentless march of technology and London's response," London, England, Deloitte LLP, 2014, London, 2014.

[13] J. Manyika, "Technology, jobs, and the future of work," McKinsey Global Institute, 2017.

[14] T. Hurley, "Impact of Technology on Work Related Stress," 2019.

[15] I. Yamamoto , "Fourth Industrial Revolution. This is how AI is putting stress on workers," *Emerging Technologies*, 2019.

[16] R. Salame, "The New Taylorism.," 20 02 2018. [Online]. Available: https://jacobin.com/2018/02/amazon-wristband-surveillance-scientific-management.

[17] Tallyfy, "Definition - What are knowledge Workers," Tallyfy, 2015. [Online].

[18] K. Carleton, "How to motivate and retain knowledge workers in organizations: a review of the literature," *International Journal of Management*, vol. 28, no. 2, pp. 459-468, 2011.

[19] C. Frey and M. A. Osborne, "The future of employment: How susceptible are jobs to computerisation?," *Technological forecasting and social change*, vol. 114, pp. 254-280, 2017.

[20] New Zealand Productivity Commission, "Technological change and the future of work," Wellington, New Zealand, New Zealand Productivity Commission, Wellington, NZ, 2019.

[21] S. Jha, "The impact of AI on business leadership and the modern workforce," EMERI, 2019.

[22] F. Vig, "Putting people at the heart of AI adoption," People Centered AI, Guildford, 2019.

[23] Vocabulary.com, "Dictionary definition," Vocabulary.com, Inc., 2019.

[24] J. P. Kotter, "What Leaders Really Do," Talented Management & HR, 2011.

[25] B. Marr, "The 4 biggest barriers to AI adoption every business needs to tackle," Forbes, 2019.

[26] P. Bump, "What executives should be asking about AI use-cases in business," EMERI, 2019.

[27] Exclusive Research from IDG , "State of digital business transformation," 2018.

[28] Achievers Point University, "Achievers Point University," 04 12 2019. [Online]. Available: https://www.victoria.ac.nz/its/about.

[29] Microsoft Office, "Microsoft My Analytics," 2019. [Online]. Available: https://products.office.com/en-us/business/myanalytics-personal-analytics..

[30] M. Rouse, "Microsoft Office Delve. Search Content Management," [Online]. Available: https://searchcontentmanagement.techtarget.com/definition/Microsoft-Delve. .

[31] B. D. Mittelstadt , P. Allo, M. Taddeo, S. Watchter and L. Floridi, "The ethics of algorithms: Mapping the debate," *Big Data & Society* , vol. 3, no. 2, p. 2053951716679679, 2016.