

Component 2 - Research Report

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Executive summary

In this assignment, the main issue that has been identified is the use of technologies to enhance collaboration in UWTSD or the University of Saint Trinity Saint David. It has been analysed and the efficient design, methods and strategies of the research have been identified accordingly. The importance of the research on implementing these strategies has been analysed and the issues associated with the steps have been discussed as well. The researcher has considered ethical consideration that brings assurance for the participants to attempt the survey session. It can be detected that data analysis and results bring effective outcomes such that it can bring assurance about the ways they can bring for growth.

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1. Introduction

Technologies have a huge impact on businesses and organisations. It has become an integral part of modern-day businesses and the smooth flow of operations (Hubbard *et al.*, 2020). In this report, the use of contemporary technologies to improve the efficiency and the collaboration of the workforce will be discussed and aligned with UWTSD or the University of Saint Trinity Saint David. In addition to this, the competency for the use of data handling in workplaces will be discussed and evaluated. An efficient structure of the research report will be constructed framing the research methods, designs and ethical considerations. Moreover, the results and the discussions are based on the research topic that will be discussed as well as analysed.

2. Research design

A research design is basically considered as the method, technique or framework that can be used by researchers. The research design is based on a lot of factors and it depends on the type and the purpose of the project that is taken into consideration (Asenahabi, 2019). Consideration of the research design in a project is very much essential to ensure that efficient methods are implemented so that the research topic can be broken down into small finite steps. This helps the individuals and the leaders to take one step closer to success and sharpen the factors related to the research project aligned with the topic.

Data Collection

As the research is based on primary research as the data related to the topic will be gathered directly from adept sources. Unlike secondary methods of research that are based on the concept of decrypting data from previously researched sources, primary data are collected from relevant sources directly (Groenland and Dana, 2020). In order to generate the idea for the use of different contemporary technologies and their impact of them on modern-day businesses, a survey will be done involving 10 teachers selected from UWTSD in the UK. This will help the researchers to collect the data more accurately and appropriately as there are no chances of dilution in the process.

Data Analysis

In order to analyse and gather important and relevant data aligned with the topic, an effective process of data analysis will be conducted based on the data collected from the employees (Dufour and Richard, 2019). This will be highly essential for the project to gather relevant information for the use of contemporary technologies in UWTSD, and their impact on enhancing employability and competency in workplaces and amongst the students. Quantitative research is highly essential to find out the averages and the patterns, test the

casualties in relation to the subject, and make accurate predictions aligned to the subject. This will be highly beneficial for the researchers to figure out adequate information to construct results based on the topic.

Data Sampling

Data sampling is considered the process by which relevant sources of information are collected through techniques such as surveys and interviews. The data sampling method is primarily used as a part of the primary research procedure (Mahmud *et al.*, 2020). There are certain techniques to collect data through sampling but in order to gather efficient and accurate data for the particular topic chosen here, a survey will be more beneficial to gather the pieces of knowledge aligned with the research project. This will be of high benefit for the subject and will be of great assistance to find out the use and the advantages of using technologies in UWSTD. The accuracy, validity and reliability of the subject can be determined and it will have a high impact on the construction of the whole project and maintain the high quality of the subject as well.

Considerations

However, quantitative research sampling is associated with a lot of disadvantages as well, that need to be kept in mind while performing the research adequately. It is very much mandatory for the researchers to figure out efficient ways of mitigating them in the process. One of the primary issues faced by the researchers while performing primary data analysis is the inability to understand the human interactions involved with the subject (Mohajan, 2018). The thoughts of the participants and their feelings need to be considered as well while performing the sorbet including the teachers of UWTSD.

2.1 Research Question

- How do provide efficient measures for the students, teachers and the faculty of UWSTD to have efficient collaboration amongst themselves?
- What are the issues associated with the use of technologies in UWSTD?
- How can the issues that are recognised in the process through the research be mitigated?
- What are the activities that are done to ensure that the technologies are implemented within the organisation effectively to enhance collaboration amongst one another?
- How will the solution that is provided here be beneficial for the individuals associated with UWTSD?

2.2 Method

A research method is defined as the process by which the data and information can be collected and analysed according to the subject considered in the research. The method that is chosen for research depends on some factors like the process by which the data will be collected, analysed and can be processed (Browne, 2019). The use of qualitative or quantitative analysis depends on the fact that whether numerical, information or data needs to be processed. Additionally, the primary and the secondary data collection methods suggest whether the data will be collected from different real-life sources or will be based on relevant information collected from previous research. On the other hand, descriptive or experimental methods provide the processes of collecting data based on measurements as the process or based on experiments.

The research has been conducted based on the primary data collection method in which a survey will be conducted based on 10 teachers of UWSTD. This will be highly essential to gain valuable insights into implicating efficient methods of collaboration with the use of technologies (Nayak and Narayan, 2019). Additionally, the quantitative data collection procedure will be used to enable the collection of adequate data associated with the subject. A data sampling technique will be analysed to collect adequate data from relevant sources as well as the information gathered through feedback. Moreover, the research design that is intended to follow here will be based on the results drawn on the subject as well.

2.3 Ethical Considerations

The researcher has conducted a survey session among 10 teachers of UWSTD so that it provides an enormous knowledge about contemporary technologies to improve workplace efficiency and employability by gaining collaboration. The competency of workplace data handling is also being enabled for analysing from employees. Hence, it has been considered that research participants do not face any threat or harm while performing the survey session. The researcher showed dignity and respect to the employees or participants so that they can feel to get prioritised (Suri, 2020). The protection of data privacy has been ensured that provides a scope to the participants to gain its reliability over the survey session. **Data protection Act 1998** has been implemented by the researcher so that all privacy and security of participants' credentials can be maintained. It provides individuals with the authorisation to take other data and information in order to develop an analysis of a study (Krempel and Beyerer, 2018). Transparency and honesty are being maintained by the researcher while arranging for the questions related to the aims and objectives of the research topic. Misleading information and presenting primary data findings in a biased way have also been restricted. It can be considered to bring for an effective outcome such that it can bring effective responses from the survey questionnaires.

3. Results

How do contemporary technologies improve workplace efficiency and collaboration in UWTSD?

Options	Percentage of respondents	Number of respondents	Total number of respondents
Increases productivity	30	3	10
The gain in manufacturing process effectively and efficiently	50	5	10
High generation in revenue and sales	20	2	10

Table 1: Contemporary technologies improve workplace efficiency and collaboration in UWTSD

(Source: Created by the Learner)

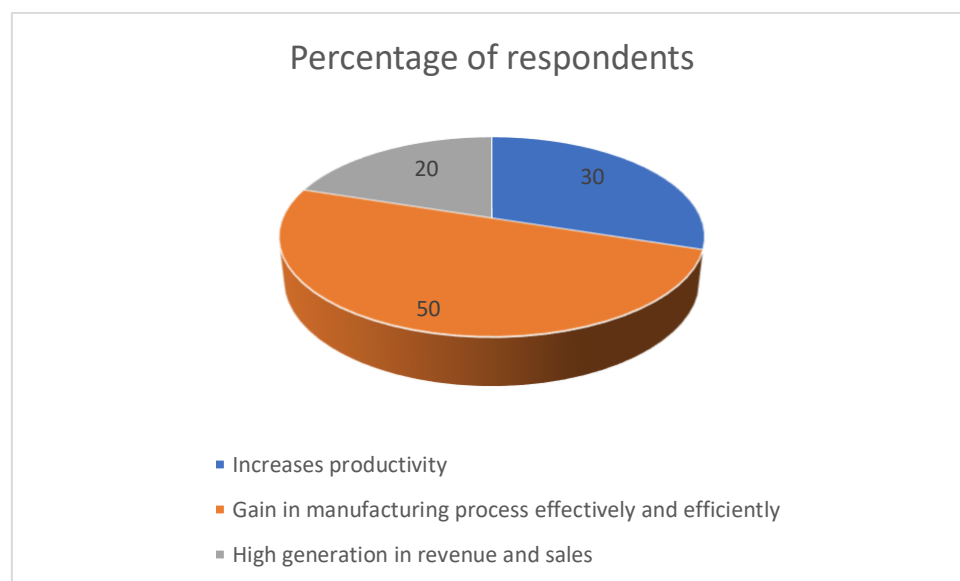


Figure 1: Contemporary technologies improve workplace efficiency and collaboration in UWTSD

(Source: Created by the learner)

From figure 1, it can be understood that 5 employees answered that contemporary technologies improve workplace efficiency and collaboration within employability resulting to gain in the manufacturing process. 3 employees answered that technologies increase

productivity within organisations. 2 employees detected those organisations get a chance to increase their selling proportion and revenue.

Is the working improvement acquired through advanced technologies in UWTSD?

Options	Percentage of respondents	Number of respondents	Total number of respondents
Yes	80	8	10
No	20	2	10
Maybe	0	0	10

Table 2: Working improvements are acquired through advanced technologies in UWTSD

(Source: Created by the learner)

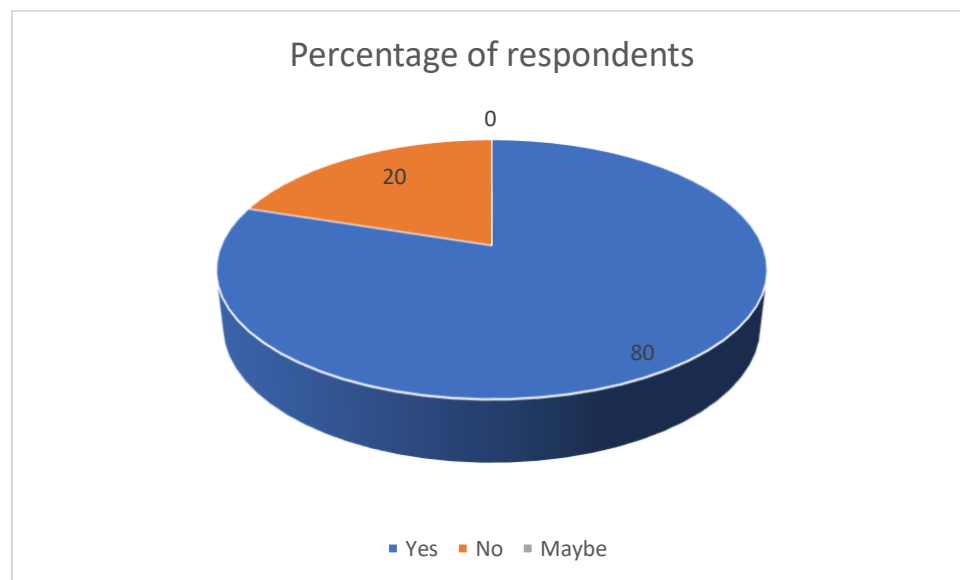


Figure 2: Working improvements are acquired through advanced technologies in UWTSD

(Source: Created by the learner)

From the above pie chart, it can be conveyed that 8 employees have answered that technologies bring effective changes within the workplace and the workforce can conveniently work by gaining productivity. 2 employees have not provided a positive response by implementing technologies within the workplace.

How is the competence performed in workplace data handling?

Options	Percentage of respondents	Number of respondents	Total number of respondents
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The gain in organisational training and development	50	5	10
Groups of employees are required to get into new projects	30	3	10
Build a strong corporate culture	20	2	10

Table 3: Competence performed in workplace data handling

(Source: Created by the learner)



Figure 3: Competence performed in workplace data handling

(Source: Created by the learner)

According to figure 3, it can be termed that competence is being performed after implementing the workplace data handling process. Likely, 5 employees answered that training and development by organisations can help the workforce to gain its capability and stability to perform effectively. 2 employees detected that workplace data handling gains working collaboration such that it can create a chance for the university to get all together to gain their operational performance.

4. Discussion

Technologies are being utilised within organisations to gain workplace collaboration that creates much more change to complete a specific number of tasks. It can be confined that diversity among organisations can gain due to collaboration and teamwork performance so that execution of tasks or projects can be achieved based on organisational demands. From the data analysis, it can be conveyed that collaboration helps individuals to share ideas and views with each other such that it can offer a respective outcome as per requirement (Attaran *et al.*, 2019). Organisations settle for goals and objectives which are acquired when teachers of UWTSD collaborate among reach. Students also receive an effective response from their teachers as they all try to develop their skills and capabilities by sharing their goals with each other. It develops inclusive learning practices so that all students can get an equal opportunity to increase their learning progression irrespective of their lack of skills and physical abilities. Tools and technologies are also used to increase collaboration within a working environment. Hence, file sharing tools help teachers to share and transfer files and documents so that all learning necessities can be developed.

The shared files can be of various forms like documents, videos, books and also software. It helps to share files with students which helps them to gain knowledge and information. Even collaboration tools also allow teachers to communicate with each which helps them to stay focused on a specific task and perform effective performance correspondently (Manley and Williams, 2022). The employees of UWTSD pay much more attention to their students so that they can enhance and explore their educational context. Instant messaging among teachers is required for those students who are unable to accompany with the studies they are continuing. Video conferencing is also required among teachers with teachers and students' interaction so that they can get assistance to get a pathway through which they can enhance education. Whiteboards are also required for students so that they can get live interaction with their studies by showing graphics and drawings which creates a better understanding of the subject topics. From the results and analysis, it can be conveyed that organisations are required to serve training and development to the staff so that they can gain competencies. Hence, it helps teachers to get into new projects and traverse their focus toward other educational approaches. It helps students to grow and expand knowledge when teachers start to collaborate with each other.

5. Conclusion

It can be concluded that UWTSD has utilised working collaboration by involving collaboration tools and techniques such that it can create a scope for the students to enhance their educational context. Detecting the results from data analysis, it can be assured that organisations are required to arrange for educational training and development so that they

can get to know about the approaches required to be taken to increase students' viability of education. In order to gain collaboration among teachers and students, collaboration tools are much more required so that they can communicate with each other which resolves queries.

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7. Appendix A

Survey questionnaire

1. How do contemporary technologies improve workplace efficiency and collaboration in UWTSD?

- Increases productivity
- The gain in manufacturing process effectively and efficiently
- High generation in revenue and sales

2. Is the working improvement acquired through advanced technologies in UWTSD?

- Yes
- No
- Maybe

3. How is the competence performed in workplace data handling?

- The gain in organisational training and development
- Groups of employees are
- required get into new projects
- Build a strong corporate culture