

Cost of reskilling employees versus the profitability of a business: a reflection on selected small businesses in Mthatha, Eastern Cape

Baseza Wonderful Totobayo*

Sookdhev Rajkaran**

Cebile Ntuli***

Abstract

The aim of this study was to establish the impact of the cost of reskilling employees on the profitability of a business. This explanatory study collected quantitative data from 56 managers of small businesses in Mthatha, Eastern Cape province, South Africa. A pilot study was conducted prior to the actual fieldwork. This study used self-administered questionnaires which contained both closed and open-ended questions. The quantitative data were analysed using SPSS whereas the qualitative data were analysed by means of thematic analysis. The data were further tested statistically to establish the significance levels and the correlations between the variables. The analysis on the impact of the cost of reskilling on the profitability of a business showed that reskilling the current workforce improves the profitability of a business. The empirical result of this study indicates that the benefits of reskilling the current employees of a business outweighs the costs involved in the process. This study also found that it is less costly to a business to retain and reskill the current workforce than to recruit new employees. This indicates that small businesses should invest in reskilling their workers.

Keywords: reskilling workforce, Fourth Industrial Revolution, 4IR, automation, profitability, small businesses

* Walter Sisulu University. Email: btotobayo@wsu.ac.za

** Walter Sisulu University. Email: srajkaran@wsu.ac.za

*** Walter Sisulu University. Email: cntuli@wsu.ac.za

1. Introduction

The study focused on establishing the impact of the cost of reskilling on the profitability of a business. The advent of the Fourth Industrial Revolution (4IR) threatens to reduce human activity and relevance in the workplace through the automation of jobs.¹ The paradigm shift in the realisation of tasks in the workplace from labour-intensive to technologically reliant raises the need to investigate reskilling with the objective of retaining the current workforce, who might find their roles being automated.² Employees in these lower-skilled positions include (but are not limited to) office staff and administrative assistants, and also those in production and manufacturing positions.

According to a report published by the World Economic Forum in 2019,³ approximately 1,37 million workers in the United States who were projected to be completely displaced from their roles may be reskilled to new viable (ie, a similar skillset) and desirable (ie, higher wages) growing roles at a cost of USD34 billion.⁴ The report includes an innovative quantitative cost–benefit analysis for companies considering whether to reskill their current employees or dismiss them and hire new employees.⁵ If a company decides to reskill, the costs incurred include reskilling costs, wages and lost productivity while the worker retrain; the benefits include post-training productivity gains.⁶

According to the World Economic Forum report,⁷ with a total investment of USD4,7 billion, the private sector in the United States alone could reskill 25% of all workers in diminished jobs with a positive cost–benefit balance. It therefore indicates that, even without contemplating any additional qualitative factors or the significant indirect societal benefits of reskilling, it would be in a company's financial interests to take on 25% of the reskilling of its at-risk employees.⁸

South Africa is faced with a high rate of unemployment and a growing mismatch of skills needed in the employment sector with

¹ F Stephany & O Teutloff 'What is the price of a skill? The value of complementarity' (2024) 53(1) *Research Policy* 104898.

² M Xu, JJ David & SH Kim 'The Fourth Industrial Revolution: Opportunities and challenges. (2018) 9(2) *International Journal of Financial Research* 1923–4031.

³ World Economic Forum 'The global risks report' (2019), available at <https://www.weforum.org/reports/global-competitiveness-report-2019>

⁴ The Council of Economic Advisors (2018) 'Economic report of the president February 2018' (2018), available at <https://www.whitehouse.gov>

⁵ Council of Economic Advisors (n 4).

⁶ World Economic Forum (n 3); Government Accountability Office *Additional Opportunities to reduce Fragmentation, Overlap, Duplication, and Billions in Financial Relief* (GAO 2019).

⁷ World Economic Forum (n 3).

⁸ World Economic Forum (n 3).

the skills that job-seekers possess (Stats SA, 2023).⁹ This widens the gap between employment and efforts to reduce unemployment, with many visible consequences in the rural areas such as Mthatha, where crime and birth rates escalate, the majority of households living below the poverty line and the economy being in a dire state, owing to a high rate of unemployment.¹⁰

Consequently, the automation of jobs in the 4IR, which seeks to replace human input in the workplace with machines and robotics, calls for accelerated efforts to retain jobs which may otherwise be rendered redundant, through reskilling the current workforce.^{11,12} However, the cost of reskilling employees is burdensome on small businesses. Therefore, this study sought to understand the impact of the cost of reskilling employees on the profitability of a business: its main objective.

2. Literature review

In this section, we consider factors such as the cost of reskilling, the new skills required of workers in small businesses facing the 4IR and the research gap that this study set out to fill.

2.1 Cost of reskilling

Approximately 1,37 million workers, projected to be entirely removed from their positions over the next decade in the United States, could be reskilled to different feasible equivalent abilities and attractive higher-wage positions at a cost of USD34 billion, an estimated cost of USD24 800 per removed worker. According to a 2016 report by the World Economic Forum,¹³ about two-thirds of companies across all industries are considering investing in the reskilling of their current employees as part of their change management strategy and future workforce planning efforts and as a priority strategy in preparing the future workforce. According to a study conducted in 2018, it was reported that, in the United States and Europe, companies are starting to recognise and prioritise reskilling their current employees as an

⁹ Stats SA *Quarterly Labour Force Survey 2022*), available at <http://www.statssa.gov.za> [Accessed 31 August 2023].

¹⁰ GS Goda, E Jackson, LH Nicholas & SS Stith 'The impact of Covid19 on older workers' employment and Social Security spillovers' (2022) 36 *Journal of Population Economics* 813–846.

¹¹ Xu, David & Kim (n 2).

¹² Z Asmal, H Bhorat, LC Martin & C Rooney 'Technological change in the insurance sector in South Africa' (DPRU Working Paper 202306, 2023).

¹³ World Economic Forum 'The future of jobs' (2016), available at https://www3.weforum.org/docs/WEF_Annual_Report_2016_17

urgent business priority strategy to mitigate the skills gap challenge, which is likely to worsen at the peak phase of the 4IR.¹⁴

Illanes, Lund, Mourshed, Rutherford and Tyreman¹⁵ argue further that companies should consider addressing potential skills gaps related to automation and digitisation within their workforces as a priority, one driven by the sense of urgency brought about by the accelerating pace of enterprise-wide transformation as the economy dives deeper into the 4IR. Similarly, an innovative quantitative cost-benefit analysis for companies' consideration on whether to reskill current workers or to dismiss them and hire new workers conducted by the World Economic Forum¹⁶ has shown that it is less costly for a business to reskill its existing workers than to dismiss them and hire new ones because the costs incurred in the reskilling process are far less than the costs of hiring new employees.

2.2 Required new skills

The World Economic Forum¹⁷ and Deloitte¹⁸ advise that jobs in the 4IR require a workforce that is equipped with the following sets of skills: creativity, emotional intelligence, analytical (critical) thinking, active learning with a growth mindset, judgment and decision-making capabilities, interpersonal communication skills, leadership skills, diversity and cultural intelligence, technological skills and embracing change. These skillsets are elaborated on below.

2.2.1 Creativity

Creativity is described as a desire to create or recognise concepts, solutions or possibilities that may be helpful in solving challenges, interacting with others and entertaining ourselves and others.¹⁹ Skilled employees of the future will need to be creative in order to realise fully the benefits of these new developments for future products, ways of operating and technologies.²⁰ Robots are currently unable to

¹⁴ P Illanes, S Lund, M Mourshed, S Rutherford & M Tyreman 'Retraining and reskilling workers in the age of automation' (2018), available at <https://www.mckinsey.com/featured-insights/future-of-work/retraining-and-reskilling-workers-in-the-age-of-automation>

¹⁵ Illanes et al (n 14).

¹⁶ World Economic Forum 'The global competitiveness report' (2018), available at <https://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018>

¹⁷ World Economic Forum (n 3).

¹⁸ Deloitte 'Global impact report' (2019), available at <https://www2.deloitte.com/gr/en/pages/about-deloitte/articles/global-impact-report-2019>

¹⁹ World Economic Forum (n 3).

²⁰ World Economic Forum (n 3).

compete in creativity with human beings. But the future workplace and workforce will need new ways of thinking, and human creativity is essential to this as it is a method of problem-solving that allows one to see things from a different perspective, which can lead to an innovative way of thinking and inventive solutions to problems.^{21,22}

The reality of creative thinking implies that employees should keep improving their talents by thinking of themselves as creative thinkers, promoting creative thinking in groups, recognising the advantages and comprehending the challenges of creativity and innovation.²³ To foresee the market and plan better to take advantage of it, companies need creative individuals who are able to translate imagination and knowledge into product and process improvements. Soft skills, such as employee creativity, have become more critical than ever in the 4IR, which is driven by automation and technological innovations.²⁴

2.2.2 Emotional intelligence

The capacity of a person to be conscious of, regulate and communicate their own emotions, and to also be aware of the emotions of others, represents their emotional intelligence.²⁵ An individual is known to have a high level of emotional intelligence if they have compassion and integrity and are able to communicate well with others.^{26,27} A machine cannot readily replace the desire of one human being to communicate with another human being, so those with high emotional intelligence would be in demand in the future workplace. However, as the workplace evolves, organisations should begin to allow people to express their emotions at work and to benefit from their emotional intelligence – which has been shown to be even more important in the 4IR.²⁸

Employees in the 4IR are more likely to work in teams rather than alone, and great managers are realising that understanding emotions can lead to happier workplaces.²⁹ Employees should be aware of their own and others' emotions and act appropriately, because employees with higher emotional intelligence are adequately prepared to adapt to

²¹ Deloitte (n 18).

²² World Economic Forum (n 3).

²³ M Tripathy 'Career development and job satisfaction' (2018), available at <https://www.academia.edu>

²⁴ SN Elidemir, A Ozturen & SW Bayighomog 'Innovative behaviors, employee creativity and sustainable competitive advantage: A moderate mediation' (2020), available at <https://www.mdpi.com/2071-1050/12/8/3295>

²⁵ Deloitte (n 18).

²⁶ Deloitte (n 18).

²⁷ World Economic Forum (n 3).

²⁸ World Economic Forum (n 13).

²⁹ World Economic Forum (n 13).

a rapidly changing digital age such as the 4IR.³⁰ Furthermore, leaders with stronger emotional intelligence have happier employees who remain longer, reducing attrition costs, and work harder, increasing productivity.³¹

2.2.3 Analytical (critical) thinking

An individual with logical thinking skills can provide new approaches and concepts, solve difficult challenges by using reasoning and logic and analyse arguments. The first step in analytical thinking is to evaluate the flow of knowledge from a variety of resources.^{32,33} After observing, someone who is a good critical thinker would focus on rational thinking rather than intuition, gather the pros and cons of a situation and be open-minded towards the best possible approach. People with good critical thinking skills would be expected to manage the human-machine partnership continuum to enhance labour productivity.³⁴

The rapid emergence of digital gadgets and other technologies that are taking over more and more human duties intensifies the requirement to comprehend and interact with data and graphics. This emphasises the necessity of developing and harnessing critical thinking abilities in a modern society's workforce.^{35,36} It is also worth remembering that critical thinking can always be improved, either through experience or by being taught the fundamental principles of rational thinking in a formal or an informal setting.³⁷ Critical thinking is an essential skill for all aspects of an employee's job, because it helps with problem-solving, creativity and teamwork.³⁸ It also translates well into the workplace, where it can distinguish an individual with leadership skills as valued. Investing extra time in assessing situations objectively, making logic-based decisions and expressing those decisions appropriately will help an employee to achieve their goals successfully within the team in which they operate.^{39,40}

³⁰ McKinsey & Company 'The future of work in South Africa' (2019), available at <https://www.mckinsey.com>

³¹ McKinsey & Company (n 30).

³² Deloitte (n 18).

³³ World Economic Forum (n 3).

³⁴ World Economic Forum (n 3).

³⁵ Deloitte (n 18).

³⁶ World Economic Forum (n 3).

³⁷ L Murawski 'Critical thinking in the classroom ... and beyond' (2014), available at <https://files.eric.ed.gov/fulltext/EJ1143316>

³⁸ LG Snyder & MJ Snyder 'Teaching critical thinking and problem solving skills' (2008), available at <https://dme.childrenshospital.org>

³⁹ Murawski (n 37).

⁴⁰ Snyder & Snyder (n 38).

2.2.4 *Active learning with a growth mindset*

In contrast to a fixed-mindset person who believes that intelligence is inherited and that little can be done to change it, an active learner with a growth mindset adopts learning styles and attitudes that enable them to become reflective, resilient and independent, motivated by the belief that intelligence can be cultivated through persistent learning.⁴¹ People need to learn and develop constantly in the future of the working age. An individual with a development or growth mindset knows that their talents and intellect can be improved and they recognise that their attempts to create skills can result in higher levels of achievement.⁴² They will also face obstacles, learn from their mistakes and constantly pursue new insights.

Employees and leaders with growth mindsets are great assets in organisations as they view setbacks as opportunities to develop and learn from their failures and apply that knowledge to avoid repeating the same mistakes in the future.⁴³ Individuals with a growth mindset also recognise the importance of hard work and determination, and they are more likely to avoid distractions that could cause them to lose track of their goals. In addition, people with a growth mindset will look for new ways to further their education and will take inspiration from others.⁴⁴

2.2.5 *Judgment and decision-making capabilities*

Making good decisions necessitates anticipating what will happen if certain options are chosen.⁴⁵ In the absence of clear-cut relevant data or an obvious path, judgment is the ability to integrate personal qualities with relevant knowledge and experience to formulate opinions and make effective decisions by selecting options or compromises that will help to fulfil business objectives.⁴⁶ Employees with strong judgment and decision-making abilities often help businesses because of their ability to carry out managerial responsibilities, evaluate management performance, create and implement policies, and also choose the best solutions and run a successful firm.⁴⁷

⁴¹ Murawski (n 37).

⁴² H Fenton (2019) 'Complex problem solving, creativity and critical thinking – core soft skills required in the workplace of the 4th Industrial Revolution' (2019), available at <https://innovationmanagement.se/2019/11/08>

⁴³ Fenton (n 42).

⁴⁴ World Economic Forum (n 3).

⁴⁵ Deloitte (n 18).

⁴⁶ P Aspers & U Corte 'What is qualitative in qualitative research?' (2019), available at <https://link.springer.com/article/10.1007/s11133-019-9413-7>

⁴⁷ A Likierman 'The Elements of Good Judgment' (2019), available at <https://www.iwecfoundation.org/news/the-elements-of-good-judgment/>

Human decision-making in the workplace of the future will become more complicated and sophisticated. Whereas computers and data will process knowledge and offer perspectives that would be difficult for human beings to obtain, eventually they would need to make judgments that understand the wider consequences of those decisions in other fields of industry, on staff, and also the effects on other human sensitivities, such as morality. Once technology takes away more small, repetitive and tedious activities, human beings will be left to participate in higher-level decision-making.⁴⁸

2.2.6 *Interpersonal communication skills*

Interpersonal communication is the process of two or more employees exchanging information, ideas and thoughts through verbal or non-verbal means. These typically include face-to-face communication in the form of voice, facial expressions, body language and gestures, and they can be measured by the effectiveness of transferring messages from one person to the other.⁴⁹ Internal employee communication, client meetings, employee performance reviews and project discussions are all examples of interpersonal communication that are commonly used in an organisation. Furthermore, in the 4IR, online interactions account for a significant number of employee interpersonal interactions in the workplace.⁵⁰

The ability to share knowledge and meaning between people is a critical skill in the 4IR. This suggests that people can develop their abilities so as to interact efficiently with other human beings so that they can say the right words, using the proper tone of voice and body language, in order to get their messages across effectively.⁵¹

2.2.7 *Leadership skills*

In order to encourage learners and future employees to pursue lifelong learning, diverse forms of formal and informal education and training must be integrated into the workplace environment.⁵² Leaders will need to lead from the periphery, adopt the correct technology, promote a new vision of organisational culture and develop innovative people strategies for the future of work as organisations operate increasingly distributed business models or lead employees who are working

⁴⁸ World Economic Forum (n 3).

⁴⁹ V Jouany & K Martic 'Interpersonal communication: definition, importance and must-have skills' (2020), available at <https://blog.smarp.com/interpersonal-communication-definition-importance-and-must-have-skills>

⁵⁰ Jouany & Martic (n 49).

⁵¹ Deloitte (n 18).

⁵² World Economic Forum (n 3).

from home.⁵³ Micromanagement and command-and-control leadership styles must be replaced actively with collaborative, motivating and empowering ways of managing.⁵⁴

Characteristics generally identified with leadership – such as being inspiring and encouraging people to become the better versions of themselves – would be important for the future workforce. Although today's traditional organisational chart may not be as prominent, people may need to take on leadership positions in project teams or collaborate with other personnel to resolve problems and create new solutions.⁵⁵ For these reasons, these individuals should display the capacity to recognise potential and to inspire and execute such potential in the best way to produce the desired outcomes.

2.2.8 Diversity and cultural intelligence

Diversity and cultural intelligence refer to the ability to adapt and operate well, both of which are necessary for working in a culturally varied workplace with a variety of personalities, as is the situation in the 4IR. It is a form of intelligence that focuses on identifying, inferring and acting successfully in circumstances with cultural variety.⁵⁶ Organisations in developed countries have paid more attention to diversity and cultural intelligence, or the ability to function effectively in such an environment, as the business environment and the composition of the workforce have become more diverse in the 4IR. Accordingly, various attempts must be made to measure and develop leaders and staff members' diversity and cultural intelligence.⁵⁷

When a society and workplaces grow more complex and open, it is important that people have the capacity to learn, appreciate and collaborate with others, including those who represent variations in ethnicity, culture, language, age, gender, sexual orientation, political or religious views, and so on.⁵⁸ The willingness to understand and relate to those who may have different ways of perceiving the environment will not only change the way individuals communicate in an organisation, but also make the production of goods and services in an organisation more efficient and effective.⁵⁹

⁵³ World Economic Forum (n 3).

⁵⁴ World Economic Forum (n 3).

⁵⁵ M Korejan & H Shahbazi 'An analysis of transformational leadership theory' (2016), available at https://www.researchgate.net/publication/323732677_An_analysis_of_the_transformational_leadership_theory

⁵⁶ SY Lee & AJ Hong 'Psychometric investigation of the cultural intelligence scale using the Rasch measurement model in South Korea' (2021), available at <https://www.mdpi.com/2071-1050/13/6/3139>

⁵⁷ Lee & Hong (n 56).

⁵⁸ Lee & Hong (n 56).

⁵⁹ Deloitte (n 18).

2.2.9 *Technological skills*

Technology has allowed people around the world, through its reaches that cannot be harnessed, to connect to high-quality education and jobs. Greater income inequality, increased unemployment, growing dependence on government and more mass migrations are a few of the most pressing problems that are leading countries and organisations to fail to train the next generation of workers for the digitally driven economy.⁶⁰ The time has come for the business community to reposition itself in a technologically driven economy by investing in innovative ideas and approaches to skilling employees for the future of work and to create more inclusive avenues for technologically enabled employees.⁶¹

The 4IR is driven by technological innovations such as artificial intelligence, big data, virtual reality, block chains, and more.⁶² This ensures that everyone would need to develop a certain degree of technological ease. At the simplest level, workers in most positions would be expected to view and decide how to operate using the data.⁶³ This includes a range of professional skills.⁶⁴ More importantly, everyone needs to be able to grasp the possible effects of emerging technology on their market, their companies and their jobs.

2.2.10 *Embracing change*

If they are to remain competitive in the marketplace, organisations must examine their capabilities, strategy, culture and skills to drive innovation and technology so as to fulfil their customers' needs.⁶⁵ To begin the transformation process, employees must embrace change in order to align the organisation and develop the appropriate interventions to offer new goods and services.⁶⁶ Because of the pace of change in the future workplace, employees would have to be resilient and ready to accept and embrace transition. Not only would employees' minds need to be resilient, but they would also need to be adaptable when they have to respond to changing workplaces, standards and skills. The willingness to see progress not as a challenge but as an opportunity to develop and innovate is an important skill during the 4IR.⁶⁷

⁶⁰ HC Zwane, TN Radebe & V Mlambo 'Is youth entrepreneurship key to addressing youth unemployment? Interrogating South Africa's youth unemployment dilemma' (2021), available at <https://www.researchgate.net/publication/35757853>

⁶¹ W Naudé 'Entrepreneurship, education and the 4IR in Africa' (2017), available at https://www.researchgate.net/publication/356314447_Entrepreneurship_Education_and_the_Fourth_Industrial_Revolution_in_Africa

⁶² Xu, David & Kim (n 2).

⁶³ Naudé (n 61).

⁶⁴ Naudé (n 61).

⁶⁵ Deloitte (n 18).

⁶⁶ Deloitte (n 18).

⁶⁷ Xu, David & Kim (n 2).

2.3 Research gap

According to the literature, a great deal of research has already been done on the cost of reskilling employees for the 4IR.⁶⁸ However, the focus of the reviewed literature placed emphasis on big companies that are well established and self-sustaining, as opposed to small businesses. Moreover, the reviewed literature does not provide evidence of studies conducted in rural areas where the labour force is dominated by unskilled and semi-skilled workers. This study therefore seeks to redress this gap.

3. Theoretical framework

This study was underpinned by Human Capital Theory. This theory is based on the belief that people's learning capabilities are of comparable value to those of other resources involved in the production of goods and services.⁶⁹ Nafukho, Hairstoon and Brooks⁷⁰ argue further that Human Capital Theory seeks to explain the gains of educating and training workers as a form of investment in human resources development. Olaniyan and Okemakinde⁷¹ concur that the main emphasis of Human Capital Theory is that the development of skills in workers is an important factor in production activities.

4. Methodology

In this study, a quantitative approach was adopted to collect, analyse and present the primary data. This approach places emphasis on the use of numbers and figures in the collection and analysis of data from a predetermined sample size. It imperatively saves time and resources which the researcher would have invested in describing the data of their research because numbers, percentages and measurable figures can easily be calculated using computer software such as SPSS, and generalisation is also possible with the quantitative approach.⁷²

⁶⁸ World Economic Forum (n 13); Illanes et al (n 14); Deloitte (n 18); World Economic Forum (n 3).

⁶⁹ FM Nafukho, N Hairstoon & K Brooks 'Human capital theory: Implications for human resource development' (2004) 7(4) *Human Resource Development International* 545–551.

⁷⁰ Nafukho, Hairstoon and Brooks (n 69).

⁷¹ DA Olaniyan & T Okemakinde 'Human Capital Theory: Implications for human resource development' (2008) 5(5) *Pakistan Journal of Social Sciences* 479–483.

⁷² D Eyisi 'The usefulness of qualitative and quantitative approaches and methods in researching problem-solving ability in science education curriculum' (2016), available at <https://files.eric.ed.gov/fulltext/EJ1103224.pdf>

The researchers used a correlational study design. In a correlational study, the researcher uses the correlation statistical test to describe and measure the degree of relationship between sets of scores or variables.⁷³ However, there are two types of correlational design: explanatory and predictive. This study used an explanatory design, which Hayyi⁷⁴ states studies the association between two or more variables and makes use of correlation statistical analysis when analysing data so that conclusions can be drawn from the studied sample to make inferences about the whole population.

The target population for this study was constituted by small business managers in Mthatha. A simple random sampling technique was used to recruit the respondents in this study, a sampling technique that gives every instance an equal probability of inclusion in the sample.⁷⁵ However, the researcher also used the convenience sampling method to collect data from the sample. This sampling method implies that elements which make up the sample size were selected based on their accessibility and availability.⁷⁶

An online self-administered quasi-structured questionnaire which was dominated by structured questions was used to collect primary data from the respondents. However, if a respondent required a hard copy of a questionnaire, the researcher had to deliver it in compliance with the rules of the nationwide Covid-19 lockdown, which included, among other precautions, the regular sanitising of hands, practising a social distance of at least one-and-a-half metres apart from another person, and the proper wearing of a face mask.

The questionnaire was divided into two sections: section A covered the biographical data of the respondents, where the respondents selected one of the suitable options that best refers to them from the multiple choices provided. However, if a respondent could not find an option, they chose 'other', then specified it. Section B of the questionnaire was based on a five-point Likert-type scale in which the participants would indicate their degree of agreement or disagreement on a scale from one to five (1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree, and

⁷³ JW Creswell 'Educational research: Planning, conducting, and evaluating quantitative and qualitative research' (2012), available at <https://www.scribbr.com/reference/ReferencesPapers.aspx?ReferenceID=757162>

⁷⁴ A Hayyi 'The correlation between grammatical knowledge and writing ability of students' (2014), available at http://repository.upi.edu/7096/1/S_ING_0900713_Title.pdf

⁷⁵ I Etikan & K Bala 'Sampling and sampling methods' (2017), available at <http://medcraveonline.com/BIJ/BIJ-05-00149.pdf>

⁷⁶ K Nikolopoulou 'What is convenience sampling? definition & examples' (2022), available at <https://www.scribbr.com/methodology/convenience-sampling/>

5 = Strongly agree) with the statements in the questionnaire.⁷⁷ In the case where a respondent disagreed or strongly disagreed with a given statement, they were asked to give their reasons.

The data collected for this study were analysed quantitatively using the Statistical Package for the Social Sciences (SPSS), a computer program which is a set of programs meant to manipulate, analyse and present data.⁷⁸ The research instrument was designed using an extensive review of the literature as well as expert scrutiny to ensure its validity and reliability. Prior to the actual study, a pilot study was conducted to assess the instrument’s suitability. The instrument’s Cronbach’s Alpha results were evaluated to ensure its reliability. The researcher adhered to ethical matters such as permission, informed consent, confidentiality and the anonymity of the respondents.

5. Results

For the purposes of this study, the reliability of the instrument which was used to collect data was tested on Microsoft Excel, using the following formula:

$$\alpha = (k/(k-1)) * [1 - \Sigma(s^2_y)/s^2_x]$$

where:

K = the sum of the test items

Σs^2_y = the sum of the item variance

s^2_x = the sum of total score

Table 1 indicates the interpretation of the test results according to Cronbach’s Alpha.

Table 1: Interpretation of Cronbach’s Alpha test

Cronbach’s Alpha	Internal consistency
0.9 and above	Excellent
0.8–0.89	Good
0.7–0.79	Acceptable
0.6–0.69	Questionable
0.5–0.59	Poor
Below 0.5	Unacceptable

⁷⁷ KJ Sileyew ‘Research design and methodology’ (2019), available at <https://www.intechopen.com>

⁷⁸ Eyisi (n 72).

Using the above formula, Cronbach’s Alpha produced the results which are shown in Table 2.

Table 2: Results derived from the formula, based on Cronbach’s Alpha

Managers	K	Is the sum of the test items	17	Excellent
	$\sum s^{2y}$	Is the sum of the item variance	10,73	
	s^{2x}	Is the sum of total score	72,19	
	α	Cronbach’s Alpha	0.9	

Table 2 illustrates the results for Cronbach’s Alpha on a five-point Likert-scale questionnaire which was used to collect data from the managers of small businesses. The items on the five-point Likert-type scale were: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree and 5 = Strongly agree.

According to Taber,⁷⁹ an acceptable Alpha result for an instrument should be 0.7 and above. The Cronbach’s Alpha value of the instruments for this study was equal to 0.9. This means that the instrument was ‘excellent’.⁸⁰ Based on the results above, it can be concluded that the instrument used to collect data was reliable and it measured the variables which the study purported to measure.

5.1 Profile of managers

Table 3 illustrates the managers’ background attributes.

Table 3: Managers’ background attributes ($n = 56$)

Background attribute	Value label	Frequency	Percentage (%)
Age	<20 years	1	2
	20–29 years	11	20
	30–39 years	25	45
	40–49 years	16	29
	50–59 years	1	2
	≥60 years	1	2



⁷⁹ KS Taber ‘The use of Cronbach’s Alpha when developing and reporting research instruments in science education’ (2018), available at <https://link.springer.com/article/10.1007/s11165-016-9602-2>

⁸⁰ Taber (n 79).

Background attribute	Value label	Frequency	Percentage (%)
Gender	Female	25	45
	Male	31	55
Race	African	41	73
	Coloured	12	22
	Indian	3	5
Number of years in managerial position in the business	<5 years	17	30
	5–9 years	15	27
	10–14 years	20	36
	15–19 years	4	7
Level of education qualification	Primary education	1	2
	Secondary education	1	2
	Higher certificate	7	12
	National diploma	8	14
	Bachelor’s degree	25	45
	Honours degree	7	12
	Master’s degree	6	11
	Doctoral degree	1	2

Table 3 shows that 37 (67%) of the respondents were 39 and younger. Furthermore, Table 3 indicates that 31 (55%) were male respondents and 25 (45%) were females. Forty-one (73%) of the respondents were Africans. As can be observed, 20 (36%) of these respondents had been in managerial positions in their respective businesses for a period ranging from 10 to 14 years. Twenty-five (45%) have a bachelor’s degree as their highest level of educational qualification. About 70% have a qualification higher than a national diploma; this implies that they understood the questionnaire and that their views were trustworthy.

These data imply that most small businesses in Mthatha are managed by youths who are between the ages of 30 and 39 years. This sample also reveals a small gender imbalance in management roles, with more men than women represented in these positions. However, the International Labour Organization (ILO) has long recognised gender inequality in the workplace as being a problem that has to be resolved, particularly regarding leadership positions. Unfortunately, the ILO⁸¹ report shows that during the previous ten years, there has been only a minor improvement in women’s full and effective

⁸¹ International Labour Organization (ILO) ‘World employment and social outlook trends 2022’ (2022), available at https://www.ilo.org/global/research/global-reports/weso/trends2022/WCMS_834081/lang--en/index.htm

involvement and in providing women with equal access to leadership roles in the workplace.

This sample also shows that many small businesses in Mthatha are owned by Africans. The reason for this overwhelming evidence is the well-known fact that the target area of study where the research was carried out is predominantly populated by black persons.⁸² The results illustrate that most of the respondents' highest level of education is a national diploma, which is supported by the majority age distribution of the respondents (30–39 years) and which also justifies the fact that most of the respondents had between ten and 14 years of experience. This implies that these managers started working as managers when they were at least 25 years old.

5.2 Reskilling employees improves the profitability of a business

Figure 1 illustrates the impact of reskilling employees on improving the profitability of a business.

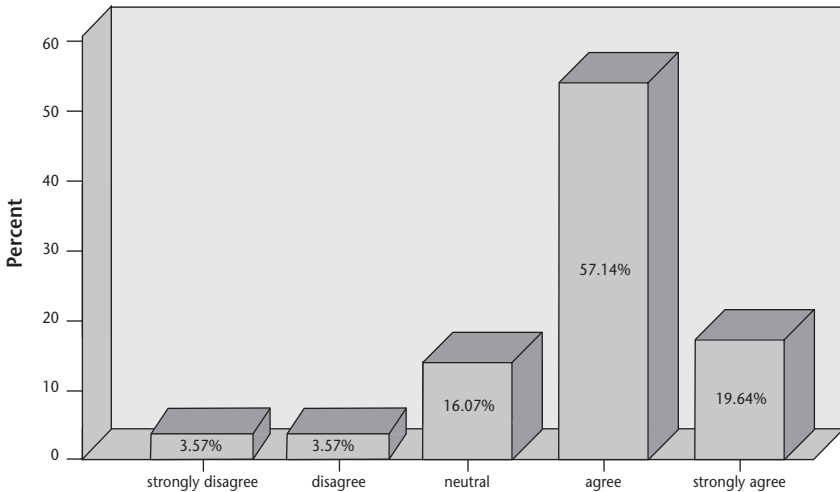


Figure 1: Reskilling employees improves the profitability of the business

Figure 1 shows that 43 (77%) of the respondents agreed that reskilling employees improves the profitability of the business. However, nine (16%) of the respondents were neutral, followed by five (8%) who either disagreed or strongly disagreed.

⁸² Cooperative Governance and Traditional Affairs (CoGTA) 'Profile: OR Tambo District Municipality' (2020), available at <https://www.cogta.gov.za>

5.3 Benefits of reskilling outweigh the cost of sourcing new talents

Figure 2 illustrates the percentage distribution of responses according to whether the respondents indicated that the benefits of reskilling outweigh the cost of sourcing new talents or not.

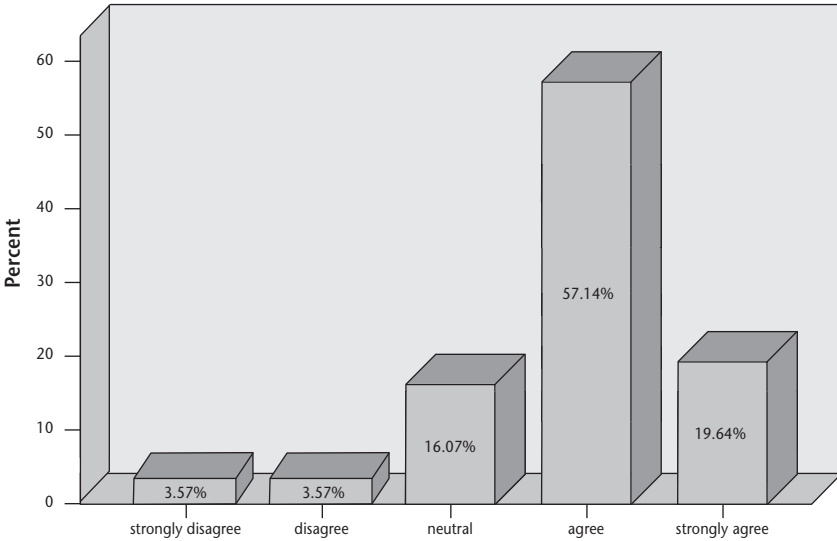


Figure 2: Benefits of reskilling outweigh the cost of sourcing new talents

According to Figure 2, 43 (77%) of the respondents either agreed or strongly agreed that the benefits of reskilling the current employees of the business outweigh the cost of hiring new talents. This was followed by nine (16%) of the respondents who were neutral to the statement, and a further five (8%) who either disagreed or strongly disagreed.

5.4 Employees who undergo constant reskilling programmes are likely to be more productive

Figure 3 illustrates the percentage distribution of responses regarding whether employees who undergo constant reskilling programmes are likely to be more productive or not.

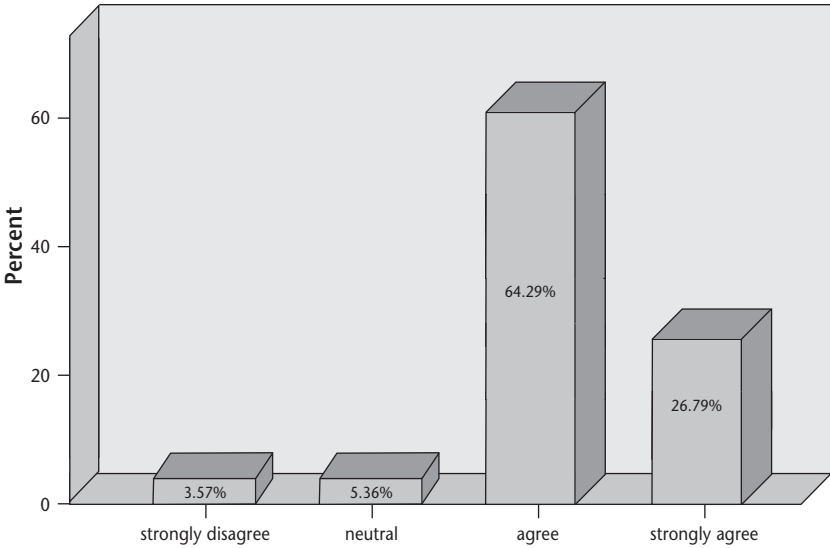


Figure 3: Employees who undergo constant reskilling programmes are likely to be more productive

As it can be seen from Figure 3, 51 (91%) of the respondents either agreed or strongly agreed that employees who undergo constant reskilling programmes are likely to be more productive in the workplace. Three (5%) of the respondents were neutral and only two (4%) disagreed.

5.5 Reskilling employees is cheaper than hiring new employees

Figure 4 shows the percentage distribution of responses to the question whether reskilling employees is cheaper than hiring new employees or not.

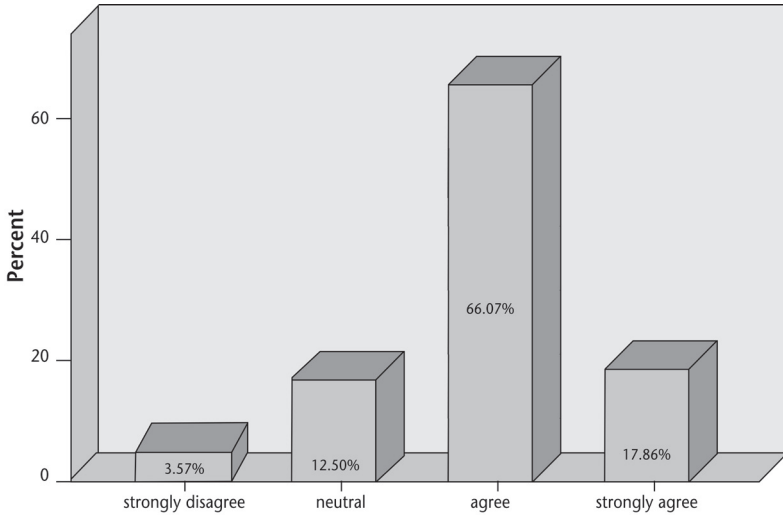


Figure 4: Reskilling employees is cheaper than hiring new employees

Figure 4 shows that 47 (84%) of the respondents agreed or strongly agreed that it is cheaper to reskill current employees than to hire new employees. This was followed by seven (13%) who were neutral, whereas only two (4%) disagreed.

5.6 Reskilling improves the loyalty of employees

Figure 5 indicates the percentage distribution of responses to the question whether reskilling improves the loyalty of employees or not.

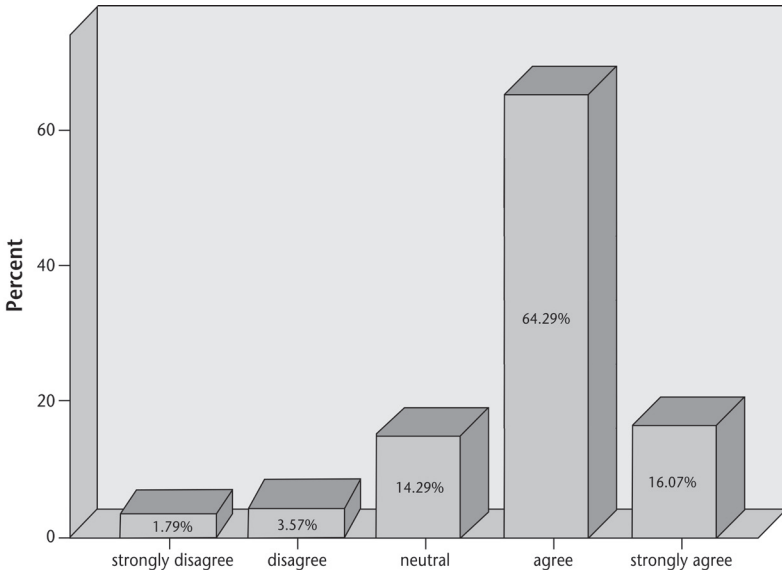


Figure 5: Reskilling improves the loyalty of employees

According to Figure 5, 45 (80%) of the respondents agreed or strongly agreed that reskilling improves the loyalty of employees, eight (14%) were neutral, whereas only four (6%) disagreed or strongly disagreed with the statement.

6. Discussion

Gaining a better understanding of the cost of reskilling employees versus the profitability of the business after reskilling is important in the 4IR era, when many jobs may become obsolete due to the automation and digitisation of work. Employees at one end of the spectrum may be displaced from their routine jobs as a result of the 4IR, whereas businesses at the other end must fund reskilling programmes in order to keep up with the emergence of innovative production strategies and machinery so as to maintain and/or gain a competitive edge in the market.

Valamis⁸³ advocates reskilling employees rather than sourcing new talent. One reason for this is that employees who have been retrained and have a good understanding of the company can work without much supervision and complete tasks more quickly.⁸⁴ As a result, the company can expect higher-quality products, accelerated production and higher profit margins.⁸⁵ Comparably, an innovative quantitative cost–benefit analysis for companies' consideration on whether to reskill current workers or dismiss them and hire new workers conducted by the World Economic Forum⁸⁶ indicates that companies are better off with reskilling their current workforce than sourcing new employees externally, considering that the costs incurred in the reskilling process are far less than the costs of hiring new employees.

Jeni⁸⁷ also concurs that reskilling improves both employees' productivity and an organisation's performance. Organisations that seek to gain a competitive edge in the growing 4IR industry should place a strong emphasis on reskilling their human capital, since a firm's competitive advantage is entirely dependent on its employees'

⁸³ Valamis 'Knowledge management' (2022), available at <https://www.valamis.com/hub/knowledge-management>

⁸⁴ Valamis (n 83).

⁸⁵ Valamis (n 83).

⁸⁶ World Economic Forum (n 16).

⁸⁷ FA Jeni 'The impact of training and development on employee performance and productivity: an empirical study on private bank of Noakhali region in Bangladesh' (2021), available at <https://www.researchgate.net/publication/352816350>

knowledge and competence.^{88,89} Moreover, Valamis⁹⁰ argues that organisations which choose to reskill their current workforce rather than source new skills are in a better position to retain their current employees who would want to pledge their loyalty to the organisation that reskilled them. He adds that it is far preferable to keep reskilling employees so that the organisation may have highly skilled workers who may take up more senior positions in the business.^{91,92}

Although many jobs are on the verge of being automated, which would mean displacing many employees from work, reskilling employees for the 4IR will not only save their employment, but also enable employees to acquire them and possess the skills required to perform tasks and take advantage of the new opportunities that will arise.^{93,94} Employers should conduct skills analyses, comparing the skills that their workforce have with the skills that the future of work requires. After an analysis, the businesses should consider investing in reskilling their employees to equip them with the necessary skills to remain productive in the 4IR.⁹⁵

Managers in small businesses, in contrast, should keep in mind that the costs a business will incur when reskilling its employees will always be a burden at the time of reskilling, even though it will yield greater returns for the business in retaining its employees with much-improved skills, in the process bridging the gap between the skills possessed by the current workforce and the skills needed in the 4IR at a significantly lower cost.^{96,97} Furthermore, if the decision is taken to dismiss employees and recruit newcomers, the organisation will need more time to induct each new employee and the person will need more time to be oriented into the organisational culture in order to have an effect and be productive.

⁸⁸ Jeni (n 38).

⁸⁹ J Jabbari, H Zheng, S Roll, D Auguste & O Heller 'How did reskilling during the COVID-19 pandemic relate to entrepreneurship and to optimism? Barriers, opportunities, and implications for equity' (2023) *Journal of Family and Economic Issues* 1–20.

⁹⁰ Valamis (n 83).

⁹¹ Valamis (n 83).

⁹² Jabbari et al (n 89).

⁹³ Asmal et al (n 12).

⁹⁴ ENA Bahri & W Min 'Job creation vs job destruction following Industrial Revolution 4.0. In *Digital Transformation for Business and Society* (Routledge 2023) 1–22.

⁹⁵ Jabbari (n 89).

⁹⁶ Asmal et al (n 12).

⁹⁷ Bahri & Min (n 94).

7. Conclusion

Reskilling employees benefits a business not only by improving the workforce's talents, but also by increasing productivity and gaining a competitive edge in the market; it also saves jobs that would be lost if routine jobs were automated, as many workers would easily transition into new roles in a business or find employment elsewhere. In contrast to and as an alternative to the redundancy of many lower-skilled roles in the employment industry resulting from the advent of automation and digitisation, reskilling employees plays an important role in creating employment and preserving current jobs.⁹⁸

This study has revealed that reskilling employees can have a positive impact on the profitability of a business, as expressed by the cohort used in this study. Although some businesses seem to be hesitant about reskilling their employees due to the financial costs of doing so, this study has revealed that the benefits of reskilling employees outweigh the costs incurred in reskilling. Although a business bears the cost, this article reveals that reskilling employees improves their loyalty and performance in the workplace and the business has a chance of retaining them for a longer time. Moreover, this article reveals that businesses are better off with reskilling their current workforce than sourcing new talent from outside.

Further studies could increase the sample size and the target population to include other towns and provinces in the country. The research could focus on all forms of businesses besides small businesses, as was the case in this study. The research could also include all employees and not be limited to workers in lower-skilled roles. Other studies could use both quantitative and qualitative (mixed-methods) approaches in collecting data and not only quantitative methods, as in this study. When quantitative and qualitative research are combined, integrated information is produced that best informs theory and practice.

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⁹⁸ Asmal et al (n 11).

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