

**University of the Witwatersrand, Johannesburg**

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Course or topic

**Digitizing Operations**

Course or topic name(s)  
Paper Number and title

**BUSA7467A**

Examination/Test\* to be held during  
month(s) of ...  
(delete \* as applicable)

**May**

Year of Study  
(Art & Science leave blank)

**2020**

Degrees/Diplomas for which  
this course is prescribed  
[BSc(Eng) should indicate which branch]

**Masters of Management:  
Digital Leadership**

Faculty/ies presenting candidates

**FACULTY OF COMMERCE, LAW  
& MANAGEMENT**

Internal examiner(s) and telephone  
and extension number(s)

Dr P. Oba  
011-717-3976

External examiner and internal moderator

Dr Bingwen Yan (external)  
Prof Mjumo Mzyece (internal)

Time allowance

**09 May 2020 (09:00)**

Instructions to candidates

**INSTRUCTIONS:**

1. ANSWER ALL QUESTIONS
2. STRUCTURE, FORMAT & REFERENCE YOUR ANSWERS APPROPRIATELY
3. COMPUTER-GENERATED SUBMISSIONS ONLY (NO HAND-WRITTEN ANSWERS ALLOWED)
4. SUBMIT VIA SAKAI

**EXAM-EQUIVALENT  
INDIVIDUAL ASSIGNMENT**  
(TOTAL MARKS: 100)

## INSTRUCTIONS

**Start:** Saturday, 09 May, 2020 at 09H00

**Submission Deadline:** Saturday, 09 May, 2020 at 12H00

When assessing your exam-equivalent individual assignment, the following aspects will be considered:

1. The comprehensiveness, rigour and logical coherence with which you deal with the subject matter.
2. Your ability to apply the frameworks, insights and knowledge gained during the course.
3. The originality, creativity and clarity of your answers, including your ability to marshal compelling research findings, facts, data and other evidence.
4. The level of attention to structure, formatting, writing style, grammar, exhibits (figures, diagrams, charts, tables) and referencing of your assignment. Use APA Referencing.
5. **Please note:** This is not a cut-and-paste exercise. Do not merely copy and paste texts from different sources and present those as your answers. While you must certainly consult and reference various sources to develop your answers, they must indeed be your answers, written in in your own words. Rather than just copying-and-pasting, read the sources carefully and try to understand the underlying concepts and information, and then integrate and synthesise these elements with your own ideas into coherent answers. All submissions will be subjected to Turnitin plagiarism checks and severe penalties will be applied to submissions that violate Wits/WBS standards of academic integrity.

### **Mode of Submission:**

An electronic copy of the written assignment should be submitted via SAKAI **before the deadline**. Please allow enough time to complete the exam and do not wait until the last minute to submit it.

**ALL THE BEST!**

*Note: The numbers in round brackets ( ) after each question specify the mark allocation for the different parts of the question.*

## **APPLICATION / CASE QUESTION**

**(100 MARKS)**

**Three case studies (Case study A , B & C).**

### **Case study A**

**(30 marks)**

#### **The management approach at the Fordsburg Car Centre**

Dylan van Rooyen is the managing director of Fordsburg Car Centre (FCC), an automobile repair shop with 22 branches nationally. FCC is a family business that opened its doors in the suburb of Fordsburg, Johannesburg, South Africa in 1994. Shaun van Rooyen, Dylan's father, started FCC to service cars in Fordsburg offering a variety of car services in the community. He took advantage of the economic outlook offered by the end of apartheid. It was clear that a significantly growing market started to emerge for automobile tune-up and lubrication shops. This demand came about because of the change in the newly led government affected consumer buying patterns as the majority of people in South Africa were joining the middle class.

In FCC's early days, Shaun's leadership and hands-on management approach was very critical to set the company on the success path. Shaun learned of the different strategies organisations could use to compete. His philosophy, which he always shared with his staff, would later become the organisation's motto: 'Always offer what the customer wants, as they will dictate our business strategy – always.'

Back in the 90s, FCC started with one workshop, which has become a landmark of pride for the entire Fordsburg community. FCC provided high-quality services to its customers – the types of services that one could expect from businesses in the wealthy suburb of Sandton.

Nowadays, consumers have better buying power, which allows them to purchase more vehicles than they did in the 90s when FCC started operating. With the South African economy struggling with slow economic growth, more customers have changed their spending pattern and a shift in strategy was needed to cater for the changing demand.

FCC now aims to provide economical preventative maintenance and interior auto cleaning, primarily to vehicles owned by individuals (as opposed to businesses), in South Africa while respecting the environment. FCC workshops perform minor and major services, oil changes, lubrication, and interior cleaning in a spotless environment. At FCC, the customer is greeted by service representatives who are graduates of the internship programme run by FCC through the Johannesburg Central College, in Doornfontein. The greeter takes the customer order, which typically includes fluid checks (oil, water, brake fluid, transmission fluid, differential grease) and the necessary lubrication, as well as filter changes for air and oil. Service personnel in neat uniforms then move into action in an environment where safety is key. The standard three-person team has one member of staff attending to the service tasks and repairs if necessary, and another in the garage pit, removing the oil filter, draining the oil, checking the differential and transmission, and lubricating as necessary. Another is

assigned to interior vacuuming and window cleaning. Precise task assignments and good training are designed to put the car in and out of the bay in ten minutes. The idea is to charge no more, and hopefully less, than the competing automotive repair chains, and auto dealers, while providing better service.

### **Case questions**

1. What constitutes the mission of FCC and which performance objective(s) is FCC achieving in order to be more competitive? Support your answer by providing extract(s) from the case study. (7 Marks)
2. FCC is planning to automate its operation by introducing robotic process automation. How would you decide what to automate Support your answer by providing extract(s) from the case study. (6 Marks)
3. What Governance issues will you consider in executing the automation: (2.5Marks)
4. What will be the ideal robotic process automation team required to carry out the automation (4.5 Marks)
5. How would you measure the digitization success (10 Marks)

## Case study B

(40 marks)

### **Operations function: The driver of strategy at the Commercial Bank of Mzansi**

The Commercial Bank of Mzansi (CBM) was started in 1985. at that time, present chairman of the board Damien Mahlangu was appointed as the CEO. CBM has observed a steady growth since its humble beginning and has managed to develop a loyal customer base in the previously disadvantaged communities of Johannesburg. Today, there are 25 bank branches located throughout the South Africa, with the company's corporate head office in Waterfall, Midrand.

The bank provides a wide variety of banking services to commercial and non-commercial customers and has regarded itself to be a conventional, yet innovative, business. Its various branches are opened Monday to Friday 9 to 4 and Saturday 9 to 12. CBM ensured that most of its branches are located next to well-known shopping centres and the banks has installed multiple ATM machines. However, CBM's growth has brought on various issues. One of the challenges CBM is facing is ensuring that the bank has the right number of tellers available. The banks' management is aware that some of its commercial customers had recently expressed their frustration due to long waiting time. Another issue is the parking lot, which often becomes crowded during peak periods.

At the time CBM was going through a growth period, the general banking industry had been experiencing tougher competition. Competitors' strategies were to increasingly offer lower interest rates on loans and higher yields on savings accounts.

Under the leadership of Mr Mahlangu, CBM's board decided to develop a more aggressive strategy for the bank. It was evident that many of CBM's competitors were competing on cost. For that reason, it was imperative for the board to decide that to differentiate itself from its competition CBM should focus on customer service. The bank had already begun moving in that direction by setting up an online facility that would offer a 24-hour customer service department aimed at answering customers' banking questions. Although this seemed like a step in the right direction, difficulties, such as poor staffing and a lack of telephone lines, started appearing. When asked about the new strategy CBM was implementing, Mr Mahlangu explained that he wanted CBM to be able to attend to and solve all customer service issues in an aggressive manner. These were related to the main problem areas namely staffing, layout, and facilities. The chairman of the board emphasised on the creativity needed when adding improvements in customer service, such as on-line banking, and mobile apps. He believed that improving most aspects of the bank's operation would give CBM a competitive advantage.

The board presented their new strategy to Miss Thandeka Mbatha, vice president of operations. Thandeka, had joined CBM three years earlier and had worked her way up the corporate ladder. She was eventually promoted to the executive director level and understood the importance of operations management. She was requested to identify the important changes that should be made in the operation function to support this new strategy and present them

at the next board meeting. Since joining the bank, Thandeka had been hoping for an opportunity to prove herself. This was her chance.

### **Case questions**

1. Why is the operations function important in implementing the strategy of an organisation? Explain why the changes that Thandeka and her team make could either hurt or help the bank. (5 Marks)
2. Identify three problematic areas where operations would have to improve at the bank. (3 Marks)
3. Based on the case study, identify ways that the operations function can improve the three problematic areas you have identified in order to support the strategy focused on customer service. How can the operations improve the three problem areas identified earlier? (9 Marks)
4. Think of the improvements identified in answering question 3. How different would these improvements be if the bank had a strategy of cutting cost rather than supporting customer service? (3 Marks)
5. Can the operations in the bank be digitized?

Why? (10 Marks)

How? (10 Marks)

**Production Process at Mami Girl's Bakery**

Mami Girl's Bakery was started by Elizabeth Mothepane Moloi in 1994. Nicknamed 'Mami Girl', Elizabeth opened the home-style bakery in Cresta, Randburg, as an alternative to those commercially produced baked goods. The mission of Mami Girl's Bakery was to produce a variety of baked goods with old-fashioned style and taste. The baked goods included a variety of pies and cakes that were sold to the general public and local restaurants.

The operation was initially started as a Mami's by Elizabeth and some of her friends. Many of the recipes they used had been passed down in their families for generations. The small production and sales facility was housed in a mixed commercial and residential area on the first floor of 'Mami's' home. Elizabeth (Mami Girl) and four of her friends worked in the facility from 6 a.m. to 2 p.m. making and selling the pies. The operation was arranged as a job shop with workstations set up to perform a variety of tasks as needed. Most of the customers placed advance orders, and Mami Girl's Bakery took pride in accepting special requests. The bakery's specialty was the Apple Crumble pie – a rich apple-filled confection in a cookie crust.

**To meet the capacity needs or not?**

At the beginning, sales were slow and the business experienced periods of losses. However, after a few years Mami Girl's Bakery began to attract a loyal customer base. Sales continued to grow steadily. In 2004, a first-floor storage area was lengthened to accommodate the growing operations. However, Mami's Bakery quickly outgrew its current capacity. In May of 2008, Elizabeth decided to purchase the opposite building and move the entire operation into the much larger facility. The new facility had considerably more capacity than needed, but the expectation was that business would continue to grow. Unfortunately, by the end of 2009 Elizabeth found that her sales expectations had not been met, and she was paying for a facility with unused space.

**Seeking operations management advice**

Elizabeth knew that her operations methods, though traditional, were sound. A few years ago, she had called upon a team of operations management students from a local university for guidance as part of their course assignment. They had offered some suggestions and were most impressed with the efficient manner with which she ran her operation. Recalling this experience, Elizabeth decided to contact the same university for another team of operations management students to help her with her dilemma.

After in-depth assessment, the team of operations management students came up with their plan: Mami Girl's Bakery should primarily focus on production of the Apple Crumble pie in large volumes, with major sales to go to a local supermarket. The team of operations management students discussed this alternative with a local chain of supermarkets that was pleased with the prospect. Under the agreement, Mami Girl's Bakery would focus its production on the Apple Crumble pie, which would be delivered in set quantities to one store location twice a week. The volume of pies required would use up all of the current excess capacity and take away most of the capacity from production of other pies.

The confusion in Elizabeth was clearly evident as she wondered whether the alternative being offered to her would solve her capacity problems or not. However, it seemed that the business would be completely different, though she did not understand how or why. For the first time in managing her business she did not know what to do.

**Case questions**

1. Explain the challenge Elizabeth faced in meeting her capacity needs. What should she have considered before moving into the larger facility? (6 Marks)
2. What is wrong with the proposal made by the team of business students? Why? (5 Marks)
3. Describe the process technology currently in place at Mami Girl's Bakery? What type of operation is needed to meet the proposal made by the team of business students? Explain the differences between these two operations processes in terms of variety, volume, and the level of automation (Refer to Figure 8.4, pg 190 in the prescribed textbook). (9 Marks)
4. Elizabeth senses that the business would be different if she accepts the proposal but does not know how and why. Explain how it would be different. (4 Marks)
5. What would you advise Elizabeth with reference to the proposal from the team of business students? (6 Marks)

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THIS IS THE END OF THE EXAM-EQUIVALENT INDIVIDUAL ASSIGNMENT