

# ACCT2019 Management Accounting

## Group Assignment

Semester 2, 2022

### Instructions for Parts A & B

**Scope:** There are two parts in this assignment. Part A is a group assessment and Part B is an individual assessment. **Part A** requires students, as a group, to carry out an analysis of the case study (Krishang's Kitchen – described in this document) and submit an executive report in PowerPoint format. **Part B** requires each individual student to map the Krishang's Kitchen case study data in the SAP accounting system and complete several transactions and reports and submit a document. This assignment requires students to demonstrate their:

i) **Ability to identify and apply relevant management accounting concepts and techniques to practical business contexts and make recommendations with a focus on the usage of qualitative and quantitative information.**

ii) **Specialist SAP software skills by mapping the business scenario in SAP, determination of relevant master data and transactions, their creation and/or execution and producing relevant reports from the SAP accounting system.**

Weighting: Part A – Case analysis – Group (15%)

Part B – SAP component – Individual (15%)

Due date: 14 October 2022, 4 PM AEDT

**Submission:** • Two files should be submitted. One for Part A and one for Part B.

- Both files must be saved and submitted in PDF document format.
- Please submit in Canvas in the two folders in the 'Assessment' section:

i) Part A – Case analysis – Group

ii) Part B – SAP Component – Individual

Your Part A PDF file should include the cover page, PowerPoint report, appendices, and the peer evaluation form.

## KRISHANG'S KITCHEN

You and your management accounting team have been recruited by Natwar who runs Krishang's Kitchen, a mid-range contemporary casual dining restaurant. This is a family-owned restaurant in inner Sydney that has been operating successfully for over 7 years. The business prides itself on authentic Indian cuisine and has been attracting Australians on account of its food quality and trendy restaurant interior. The restaurant has received good reviews from popular newspapers, magazines and online review guides and directories for the 'meal experience' it has been providing customers. Besides, the restaurant owner, Natwar, uses environmentally safe products and cooking methods. The restaurant has won many prestigious awards in this regard.

Natwar has spent considerable time in periodically refining the restaurant's menu in order to distinguish the restaurant from other popular Indian restaurants in Sydney. The restaurant has set menus consisting of 5 different set menu combinations, with each combination comprising a bundle of 6 different traditional and fusion menu items plus drinks. They have an average of 200 customers visiting the restaurant a day on weekends and around 80 customers a day during weekdays. Each customer-order provides the business an average revenue of \$50. The restaurant is open for 350 days in the year (100 weekends days and 250 weekdays). Given the wide range of Indian restaurant options in Sydney and strong internal competition, Natwar is very interested in gaining more popularity for his restaurant.

The business has been spending \$140,000 on advertising and have 3 highly skilled full-time chefs who were paid \$75,000 each annually. They also have casual helpers and waiters. Helpers were paid \$10 per hour and waiters were paid \$15 per hour. On weekends, they hired 2 helpers for one 10-hour shift each and 4 waiters for one 8-hour shift each. On weekdays, they hired 1 helper for one 8-hour shift and 3 waiters for one 6-hour shift each. No one was paid overtime. Annually, the restaurant paid \$9,000 for food licensing, \$20,000 for shop insurance, \$1,000 for third party liability insurance, \$5000 a month for rent, \$3000 a quarter for utility (electricity and gas), and \$13,000 annually for miscellaneous administration expenses. They also had equipment (stove, oven, fridge, freezer, fryer, tandoor oven and grill) and furniture worth \$1,000,000 all of which were expected to have a 10-year life period and were depreciated on a straight-line basis. On average, the cost of food and drinks was \$10 per customer, and the cost of food spoilage averaged around \$0.75 per customer. Natwar purchased all grocery items from various wholesalers and kept a strong focus on the quality of the ingredients as customers often judged a restaurant by how it compares with others.

In the **year 2020**, due to COVID, the restaurant had considerable disruptions in its operations for 25 weeks (July to December) when it could only have half the number of customers it used to usually get before. Given this situation and the corresponding burden to reduce costs, they reduced the number of helpers and waiters to half. For the **year 2020**, your team has been asked to:

- (i) Provide a breakdown of fixed and variable costs (in an itemised format) during **normal functioning** (before COVID times) and during **restricted operations**. Since Natwar was quite worried about the weeks when he had restricted operations, he wants you to calculate and analyse net profits for both periods separately.
- (ii) Calculate the breakeven point separately for the period when the business had restricted operations and for the time when it was functioning at full capacity. Natwar wants you analyse in detail why there is a difference in the breakeven point between these two periods. Natwar also wants you to complete all other relevant CVP-based calculations and provide a critical analysis of the two separate periods.

Though operations continued with restricted operations for the first six months in the **year 2021**, with the Delta variant spreading fast and COVID cases increasing, the restaurant had to shut down

operations for the second half of the year till December 2021. Given the increased pressures to cut costs even further, 2 of the full-time chefs were made redundant and there was no need for any waiters or casual helpers. The business also reduced their regular advertising cost to \$25,000 with a focus on attracting home deliveries. Their third-party liability insurance reduced by 50% as there were no customers entering the premises during this period. Additionally, their utility bills reduced by 40%. To make home deliveries more attractive, instead of having a set menu, Natwar decided to introduce a 5-course set meal offering ONLY during weekends for an attractive price of \$40 per meal. Since they only cooked a 5-course set meal, they were able to now reduce the cost of food to just \$8 per customer delivery. There was no necessity to cook food in advance as they exactly knew the number of orders. During this period, the food spoilage cost averaged at \$0.2 per customer. They had to spend \$10 per hour on delivery staff who altogether worked for 30 hours a week. Natwar did consider registering with UberEats specifically, but in the end, he decided against doing so.

In this situation, Natwar wants you to calculate the number of home deliveries and the sales revenue required to breakeven. He also wants you to calculate all other relevant CVP-based calculations (Hint: Calculate these figures only for the 6 months till December 2021). Krishang's Kitchen had 50 home deliveries a week. If this is the case, what income did they receive from home deliveries during total lock-down? What was their total net profit/loss for the year 2021? Was the restaurant's capacity utilised optimally? Given how critical this period was, Natwar wants you to provide a critical analysis of the calculation results in order for him to understand if his decisions were on the right track and the kind of modifications that would be most appropriate for 2022.

In the first half of the year 2022, expecting things to return to normal, Natwar decided to introduce a food truck in western Sydney (operating for 3 evenings a week, on Fridays, Saturdays, and Sundays) together with welcoming guests back to dine-in at the restaurant. Natwar was hoping that the food truck would help the business achieve not only a healthy recovery from the previous one-and-a-half years but also boost the business's sales and profits above and beyond recovery. To attract and engage customers, the food truck was designed using inspiration from Indian truck designs with vibrant art, garlands, and colourful signs. So, now they expect their advertising cost to increase by 10% of the original advertising expenses (pre-COVID). Natwar needed to hire three more chefs, each with a wage of \$80,000 per annum. 4 helpers at \$12.50 per hour and 5 waiters at \$17 per hour also had to be hired. Natwar expected that each helper would work for 25 hours a week and waiters 35 hours a week. With the cost of living going up, the cost of food is expected to increase by 15% of the pre-COVID cost. Food spoilage cost would now average at \$1 per customer. Other costs remain unchanged from what they were during pre-COVID times. Natwar expects to have 100 customers per weekday and 220 customers per day during weekends each spending \$50 per order.

Though Natwar expects an increase in clients coming into the restaurant, he would like to know how many customers and how much sales revenues he would need in total (inclusive of both the dine-in restaurant and the food truck) per week to earn a net profit of \$460,000 in 6 months. He would also like you to conduct all relevant CVP-based calculations for the food truck and the dine-in restaurant (separately) and provide a critical analysis of the results.

Since they are introducing a food truck, the following are also expected:

1. The cost of the food truck was \$110,000 with an expected life of 11 years, with depreciation being done on a straight-line basis. The yearly cost of maintaining the truck would be \$2,500.
2. Bio-degradable and compostable packaging items, plates and cutleries to cost around \$1.25 per customer.
3. Food cost is expected to be the same as the cost relating to the restaurant. Food spoilage cost would be \$0.3 per customer.

4. Miscellaneous expenses (initial product inventory, permits and licenses, uniforms, smallwares, fire extinguishers, etc.) to amount to \$12,000 per annum.
5. Natwar expects to have around 35 customers per day in a week with an average revenue of \$35 each.
6. The chef who was already working during COVID lockdown in the restaurant will now run the food truck for 3 days a week and will be given a salary increase of \$15,000.
7. 1 waiter and 1 helper will be partly allocated to the food truck. The waiter would spend 15 hours and the helper 10 hours of their allotted work hours each week working for the truck.

For the purpose of calculations and managerial decisions, Natwar has made a judgement to attribute 35% of the advertising cost, 30% of the food licensing cost, and 20% of the administration cost to the food truck. Natwar wants you to prepare a set of budgets (sales and revenues budget, materials budget, labour budget, overhead budget – keeping the fixed and variable components separate, income statement budget) for the first six months of 2022. The budget should clearly show the net income from the restaurant part and food truck part separately. Natwar wants your team to critically analyse all the detailed insights that emerge from the budgets. In 2022, Natwar is contemplating adopting the SAP accounting system and wants to trial the adoption before committing to a full-scale implementation. For convenience and efficient management, Natwar has structured Krishang's Kitchen into four departments – Finance (F####), Kitchen (K####), Service (S####) and Food Truck (T####). Finance (F####) looks after accounting and HR-related activities for both the restaurant and the food truck. Kitchen (K####) is responsible for backend operations including purchasing and preparation of food items, and cooking in the restaurant. Service (S####) looks after order management, customer service, delivery, cleaning and maintenance of the equipment and facilities in the restaurant. While Food Truck (T####) is responsible for the cooking, order management, customer service, delivery and cleaning in relation to the food truck.

**In the SAP accounting system, Natwar would like you to map the costs and transactions for the year 2022 as 'actual costs' and the costs in the year 2021 as 'planned/budgeted costs'. Further, while posting and/or doing cost allocations in the SAP accounting system, he would like you to assume that the yearly costs for 2021 and 2022 (the annual costs) you calculate – both the budgeted and the actual) as the costs for the 'current month' and post them accordingly.**

To make it easier, Natwar would like you to consider the following cost elements while mapping in SAP – fixed labour costs, variable labour costs, food (materials) cost, food spoilage costs, advertising costs, rent cost, food licensing, Administration, Food truck operating costs (truck maintenance, miscellaneous truck-related expenses and packaging items, plates & cutlery) and miscellaneous costs (that include insurance, depreciation and utilities). In SAP, with regard to the costs associated with the dine-in restaurant, he wants fixed labour costs, food licensing, administration, rent cost and advertising costs to be charged to Finance (F####); variable labour costs and food costs (both food materials and spoilage) to be charged to Kitchen (K####); miscellaneous costs (that include insurance, depreciation and utilities) to be charged to Service (S####); and food truck operating costs to Food truck (T####). As mentioned earlier, 35% of the advertising cost, 30% of the food licensing cost, and 20% of the administration cost are to be charged to the Food Truck (T####), in addition to all other relevant calculated costs for the food truck (ie. Food truck operating costs). Natwar wants, except rent, all other actual costs (i.e. costs calculated for the year 2022) to be posted directly into the general ledger (and charged as indicated above in this paragraph); while all the planned/budgeted costs (i.e. costs calculated for the year 2021) are also to be recorded and charged to various cost centres as described above.

Based on an invoice submitted by a Real Estate agent (called ####Jayblack), Natwar makes payments towards the restaurant's rent. For administrative purposes, in the SAP accounting system, Natwar

would like these rental costs to be allocated in equal proportion to the three departments (i.e. Finance, Kitchen and Service), using an appropriate method of allocation that clearly identifies rent as a cost head in the individual receiver cost centre reports.

In addition, Natwar would also like the miscellaneous costs to be allocated based on the number of energy units (or equivalent energy units calculated in case of the food truck) consumed by each department using an appropriate allocation method that identifies 'miscellaneous costs' as a cost head in the receiver cost centre reports. For the current month, 1400, 3700, 3600 and 1300 mega joules of energy are expended by Finance (F####), Kitchen (K####), Service (S####) and Food Truck (T####) respectively, while the budgeted figures are 1500, 4000, 3000 and 1000 mega joules respectively.

Natwar would like to allocate the cost of providing maintenance and cleaning services (MS####) by the Service (S####) department to other departments in SAP using an appropriate allocation method. In the current month, the Service (S####) department has provided 150, 350 and 200 hours of service respectively to the Finance (F####), Kitchen (K####) and Food Truck (T####) cost centres respectively. Total planned activity is 630 hours per month and the service rate is \$150 per hour.

For the purposes of business analysis (independent of SAP), Natwar would also like to know what other unexpected costs he could have to run the food truck and any other qualitative factors he should consider in relation to the food truck and the dine-in restaurant. Please also make a qualitative assessment of Natwar's long-term investment decisions.

Overall, he is asking for a critical analysis of his decisions and all calculation results to check that he is on the right track in terms of helping his business recover well in 2022. What issues might he face if he discontinues home delivery and introduces the food-truck instead? What will be the implications of Natwar's various decisions (for 2022) on how the restaurant's capacity will get utilised?

Based on all the information analysed and the calculation your team has conducted, you need to prepare a PowerPoint presentation to report to Natwar. Your report should contain the following:

**a. Executive summary (1 slide limit only)** – provides an overall detailed summary of the report including background, analysis, major findings, recommendations and limitations so that an executive reading the report will have enough detail to attend and participate at a meeting even if he/she has not read the rest of the report in detail). Please note, an executive summary needs to be thorough, detailed, and succinct.

**b. Background** – a full description of all the important issues and their background that are relevant to the case study and your findings.

**c. Analysis** – provides an overview of all detailed analytical/critical *insights* generated in light of the results obtained. Significant calculations should not be included here (do so in the appendices), with this section referencing the appropriate appendices. For example, the CVP calculations and the budgets you have to create for this assignment should be placed in the appendices and not in the body of the PowerPoint report.

**d. Findings** – detail and justify all your key findings/discoveries from the analysis (this should not be a simple repetition/rephrasing of the analysis). Take care to recognise and describe any assumptions or where additional data may be necessary to further understand the situation.

**e. Recommendations** – detail and justify your recommendations from the analysis and findings. For example, your recommendations may include the need for further specific forms of analysis or research on identified issues. Ensure that your recommendations are reasonable/justifiable and directly address the case and/or the analyses undertaken above. Your recommendations should be specific and detailed.

**f. Action Items (Next Steps)** – map out a plan that highlights specific/concrete actions to be taken in order to implement any proposed changes based on the findings and recommendations noted. This should not be a simple repetition/rephrasing of the recommendations.

**g. Limitations** – detail specific limitations from the analyses such as assumptions made and any missing information. You can also take note of the limitations underlying the data, calculations and the case study context.

**h. Appendices** – include all other relevant supporting material such as detailed calculation work (that has been referenced in the body of the report). There should be NO new material or important material in the appendices.

**1. Important note:** *While your calculations are important, the assignment will be assessed largely for its critical analysis, depth and creativity.*

**2. Report:** You are required to prepare your report using PowerPoint. The report must meet the purpose of providing details for a manager with sufficient time to sit and read the slides (you will not be required to present). The body of the report must not exceed 10 PowerPoint slides. The executive summary has a limit of one (1) slide only, i.e., the executive summary and the report together will be a total of 10 slides. Please also include a title slide in PowerPoint with student names and SIDs (this cover slide will not be counted as one of your 10 slides).

You are encouraged to be detailed but also succinct in your writing style (do not waste space on stating the obvious or including tedious calculations or including definitions of management accounting terminologies or providing simplistic and obvious reasonings/interpretations). Also remember that management would normally require as much information as would be required to help them make informed decisions, while at the same time they would not prefer information overload. To reflect this, the slides should be sufficiently detailed and informative but not be over-crowded with words and/or diagrams; sufficiently informative dot-points are encouraged. Each slide must be self-explanatory, with proper headings and sub-headings. ***Make sure to see the Marking Guide for further details.***

**3. Appendices:** You are encouraged to provide all supporting information (including calculations) in the appendices. The appendices do not need to be in PowerPoint format – you may use Word or Excel. The appendices should be no longer than ten (10) A4 pages. Please attach the appendices at the end of the PowerPoint report.

**4. Cover page:** Please provide a separate cover page for your assignment submission (with student names, SIDs and email addresses). Only one submission required per group. Cover pages can be found in Canvas.

**5. Peer evaluation:** Each group is required to sign and submit one (1) peer evaluation form that needs to be attached to the assignment. For example, if you were in a group of three – members #1 and #2 would jointly decide the contribution of member #3; members #2 and #3 would jointly decide the contribution of member #1; members #1 and #3 would jointly decide the contribution of member #2. You will not be required to evaluate your own contribution.

Each member should be aiming for 100% contribution. Contributions of 80% and below warrants investigation by the Unit Coordinator and a potential penalty for **all** group members, whether deemed to have contributed or not. In other words, if you have a non-contributing group member it is your responsibility to get that individual to contribute, and hence this being a group task – you risk being penalised as well.

**Table 1: Master data codes to be used in SAP**

|    | Details of master data and transaction evidence                 | Master data codes  |
|----|---|--|
| 1  | Bank Account  | 100 ###, 101### etc.   |
| 2  | A/P Reconciliation account                                      | 250###, 251### etc.  |
| 3  | Expense accounts (possible twelve account codes to choose from) | 700###, 701##; 710###, 711###; 720###, 721###; 730###, 731###; 750###, 751###; 770###, 771###; 780###, 781###; 790###, 791###; 660###, 661###; 670###, 671###; 680###, 681###; 690###, 691###; |
| 8  | Secondary cost elements   | 810###, 811### etc.  |
| 9  | Cost centres  | As indicated in the assignment scenario  |
| 10 | Cost centre group   | As indicated in the assignment scenario  |
| 11 | Assessment cycle  | A###, A1### etc.   |
| 12 | Distribution cycle  | D###, D1### etc.   |
| 13 | Activity type   | TS###, TS1### etc.   |
| 14 | Statistical key figure  | AR###, AR1###; or EM###, EM1### etc.   |

**Table 2: Generic field values to be used in SAP Master data and transactions**

| Details of field   | Field values   |
|--|--|
| Assessment CEle  | Assessed Costs   |
| AType category – manual entry, manual allocation             | 1  |
| Activity Unit – Hours  | HR   |
| Business area  | BI00   |
| Company code   | US00   |
| Controlling area /Hierarchy area                             | NA00   |
| Cost centre category   | H  |
| Country (vendor record)                                      | US   |
| Currency   | USD  |
| Current year   | 2022   |
| Key fig. cat. (category of statistical key figure)           | Fixed value or Tot. values (to be determined)            |
| Payment Terms – Payable immediately due net                  | 0001   |
| Plan version   | 0  |
| Price Indicator – plan price automatically based on activity | 1  |
| Profit centre  | NA00   |
| Receiver Cost centre group                                   | To be determined   |
| Receiver Rule  | To be determined   |
| Sender Rule  | Posted amounts   |
| Sorting key (posting date)                                   | 001  |
| Stat. Key fig. UnM. (unit measure)                           | MEJ (Mega joules) or PRS (persons) or other relevant UnM |