

Budgeting tool for Restaurant X

Uyen Thi My Nguyen

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Author Uyen Thi My Nguyen	Group or year of entry GloBBA 2010
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Teachers Jaana Melamies, Anne Arkima	
<p>In order to improve profitability and advance a company's commitment to organize growth, details plans which are called budgets are required. A budgeting tool is a beneficial asset for a company because it helps the budgeting preparation process become easier and faster. Thus, the aim of this thesis is to create a budgeting tool for Restaurant X.</p> <p>This thesis is product-orientated. There are three tasks conducted in this thesis. First one is to cover all relevant theories about a budget. The second task is to design a complete product-budgeting tool for Restaurant X. The tool is designated on Microsoft Excel and consists not only five budgets: sales budget, direct material budget, labour cost budget, overhead budget and budgeted income statement, but also a performance report. The third task is to conduct a performance report by benchmarking the result generated from the budgeting tool against the actual outcome in First Quarter of 2014 by using the budgeting tool.</p> <p>The thesis began in December 2013 and completed in March 2014. The budgeting tool was designated from January 2014 to February 2014.</p> <p>This thesis concluded with the finalised budgeting tool that is able to operate according to the restaurant manger's requirements and demands, as well as the performance report for Quarter I/2014 that provides informative benchmark between actual outcome and budgets.</p>	
Keywords Budgeting tool, performance report, budgets, benchmark, revenues, expenses	

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1 Introduction

This thesis presents product - oriented study which was performed from December 2013 to March 2014. The commissioning party of the thesis is a company working in restaurant and hotel environment in Vietnam. In Vietnam, service sector increased by 6.25% in first nine months 2013, while in 2012 there was 5.66% increase. Service sector has had the biggest increase for many years. In service sector, accommodation and catering service was one of the highest increases (Baomoi 2013). Moreover, in 2011, Mastercard published the result of survey which was about consumer spending priorities in Asian countries. Vietnam was the biggest spender in dining and entertainment expenditure. 89% of Vietnamese agreed that they prioritized spending on dining and entertainment (Vnexpress 2011). Therefore, restaurant service has been one of the most promising businesses; the competition has become harsher and harder. Company X's stake holders aim to improve the restaurant service. Braun and Tietz (2013, 515) state that profitability improvement and advancement of a company's commitment to organization superiority require detail plans to accomplish. These plans are expressed in financial terms, through budgets which reflect and bolster organization's strategies. Therefore, the commission party demands to have a budget tool for its restaurant in order to forecast the sale in the future, control the revenues and costs as well as fulfil its key responsibilities of planning, directing and controlling process. This tool will provide the company a profound perspective into the restaurant's financial position in the future. Due to the confidential financial statistics and information, the commission party and the restaurant will not be addressed. In this thesis, the commission party is referred as Company X and the restaurant is also referred as Restaurant X.

1.1 Product objective and product tasks

The product objective of the thesis is to conduct a budgeting tool for Restaurant X. Budgeting tool provides its profit position in the future so that Company X is able to benchmark real outcomes against estimated budgets which are conducted by basing on the company's goals and expectations. Moreover, the budget tool offers the company a flexible position to catch opportunities and overcome obstacles, as well as a profound analysis about the future change and profitability.

Product tasks:

1. Product task 1 (PT1): Literature review
2. Product task 2 (PT2): Designing complete product-budgeting tool for Restaurant X
3. Product task 3 (PT3): Conducting performance report for Quarter I/2014

In task 1, the thesis's writer will cover all theories that are related to the topics in task 2 and task 3. Task 2 is the main task in this thesis. The writer will design a complete product which includes the budgeting tool for Restaurant X in a Microsoft Excel file and a user guide for the budgeting tool. The tool consists of Performance Evaluation and five budgets which are Sale Budget, Direct Material Budget, Labour Cost Budget, Overhead Budget and Income Statement Budgets. The thesis writer will also provide the restaurant manager the user guide to instruct the tool. Furthermore, the writer will conduct task 3 by establishing a performance report. Firstly, the writer will test the budgeting tool by using it to estimate the sales and profits for the Quarter I of 2014. After that, the writer will benchmark the result generated from the budgeting tool against the actual outcome in First Quarter of 2014. The result generated from budgeting tool will be considered as an evaluation standard to evaluate the restaurant's actual performance in Quarter I/2014.

1.2 Demarcation

The budgeting tool is created to satisfy the restaurant manager's demands and requirements. Therefore, it cannot be used for other restaurants in the same industry. As stated above, the restaurant service has grown superiorly in Vietnam. Consequently, the manager demands to have a tool that provides a profound perspective in future periods as well as a measure and standard to evaluate the actual performance. **Table 1** describes how the thesis topic is demarcated.

Table 1. Demarcation table for product-oriented thesis.

Case company	Company X's restaurant
Department focused	Managerial Accounting
Directing of communication	B2C
Geography	Ho Chi Minh, VietNam
Industry	Restaurant service
Phenomenal aspect	Fact, statistics, perception, expectation, opinion
Purpose of research	Applied
Research method	Qualitative (interview)
Researcher's interest	cost, profit, strategy, goals
Stake holders	Restaurant manager, company's owner.

1.3 Case company

Company X is a private limited company which was established in 2010. It specializes in accommodation and restaurant service for customers with high-quality service, and product diversification. Located in Ho Chi Minh city, the company has one restaurant and one hostel. In 2014 it intends to expand the business, improve restaurant service and open a new restaurant. The company employs about 40 full-time staffs and varied contractors and partners. Company X's mission is committing to create the best accommodation and restaurant services. It aims to provide customers services with consistent quality, competitive prices.

Company X's revenue structure is contributed by 65% restaurant revenue and 35% hotel revenue, while 80% of customer is Vietnamese and only 20% is foreigners. In 2013, its revenue was about €856 000.

Although Company X provides two kinds of service: hotel and restaurant, this thesis focuses on only the restaurant department; all statistics, figures and data belong to Company X's restaurant department. Budgeting tool is applied only for its restaurant.

Restaurant X is located in the heart of Ho Chi Minh City - District 3. It offers one main product line which is grilled-barbecue food in three styles Vietnamese food, Korean food and Western food with about 70 dishes. Besides, there are also drinks, beer and other supported products. The restaurant's menu list is in the **Appendix 1**. The restaurant opens every day, from Monday to Thursday from 10am to 22pm; and during weekends it opens from 10am to 23pm. The restaurant has about 60-75 seats. At this time, the restaurant has 16 employees and its last year revenue was about €557 000.

1.4 Key concepts

There are some key concepts that need defining and explaining in order to facilitate the thesis and other elaborate theory which will be mentioned in the next chapter.

Horngren, Datar, Foster, Rajan & Ittner (2009) define those cost terminologies and cost accounting below:

- *Cost behaviour*: cost behaviour pattern consists of two basic types: variable cost versus fixed cost. Fixed cost is defined as a cost that remains unchanged in total for a given period of time, in spite of wide changes in total activity or volume. On the other hand, variable cost is the cost that changes with respect to a specific activity or volume for a given time period.
- *Relevance range*: relevance range is the band of activity which has boundaries as minimum and maximum amount. Within the range, cost behaviour is valid. Only in relation to a wide range of volume or total activity, fixed cost is fixed for a given time of period. When conducting a budget for a future span, a company assumes that the business operate within the relevance range of activities. Budgeted cost and revenues are more likely to be accurate if the actual activity volume is within the relevance range.
- *Direct material cost*: direct material cost is the cost of all materials that actually comprise the cost object and can be directly traced to the cost object.

- Overhead cost: Overhead is the cost that includes all other costs except for direct labour and direct material.
- Contribution margin: contribution margin is the difference between total revenues and total variable cost. Contribution margin ratio is the percentage of contribution margin over total revenues.
- Operating expenses: operating expenses are all the cost for operating the business, service or product, such as labour cost and overhead.
- Operating income: operating income is the amount of profit that equal to total revenues minus all the costs, except interests and taxes. Operating income is also called as earnings before interests and taxes.

1.5 Thesis structure

The thesis is going to present three tasks that were mentioned above.

1. Product task 1 (PT1): Literature review
2. Product task 2 (PT2): Designing budgeting tool for Restaurant X
3. Product task 3 (PT3): Conducting performance report

The Literature review of this product oriented thesis will concentrate on budgets and it will be written in a separate chapter. Theory of budget focuses on those budgeting terms and formulas that are relevant to budget.

The final chapter will be dedicated to the conclusion of the thesis. In the conclusion, a summary of main results, recommendations, further development as well as personal learning and evaluation are discussed.

2 Literature review (PT1)

In this chapter, all theories that are related to task 2 and task 3 are defined, describes and explained carefully. The literature review is divided into three sub-chapters. The first one describes budgeting theory which helps the writer design the budgeting tool for Restaurant X. The second sub-chapters mentions theories about performance report which will be conducted in chapter 4. Last but not least, the final one discusses how those theories are applied in the Restaurant X.

2.1 Master budgets

Drury (2004, 419) defines budgets as various detail plans which contain company strategies and action for future periods. Budgets involve in many aspects of the business, such as the production plan, sale plan, purchasing plan and financing plan. A company uses budgets to control the revenues and costs that are related to the plans as well as fulfil its key responsibilities of planning, directing and controlling process.

As Braun and Tietz (2013, 516) state, budgeting is a continuing cycle: organizational strategies result in detailed plans, which give a rise to action. Then, actual results are benchmarked against the budget to deliver feedback to managers. The feedback supports managers to correct actions or revise strategies. Then, the cycle starts over again.

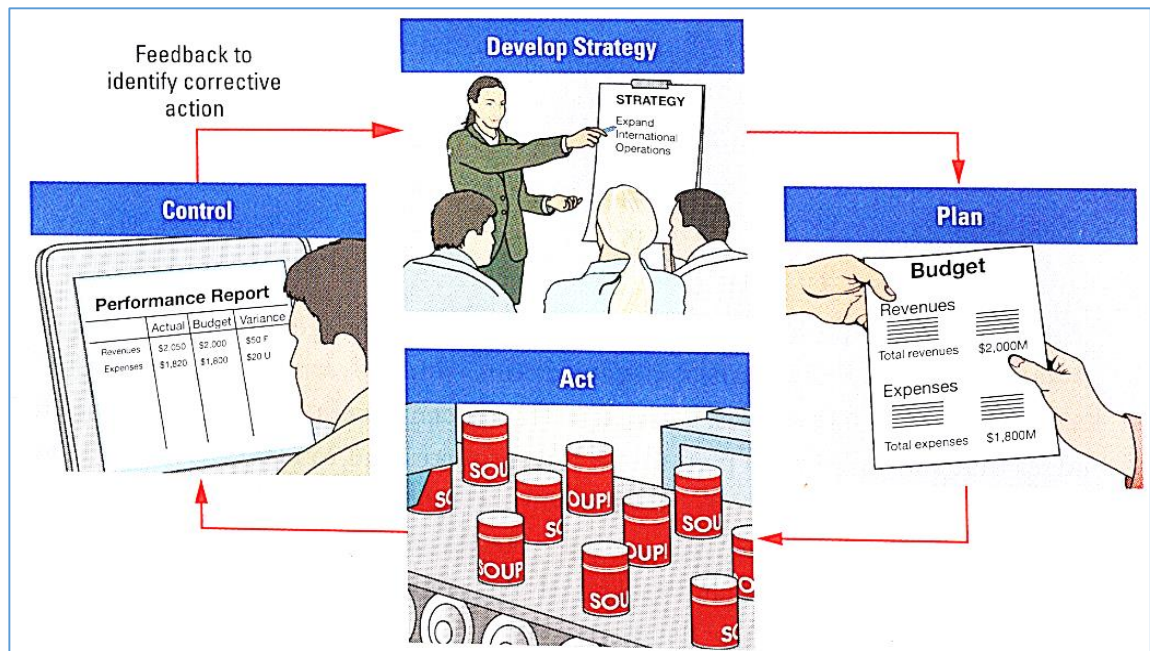


Figure 1. Managers use budgets to plan and control business activities (Braun & Tietz, 2013, 516)

There are three crucial benefits of budgeting. The first benefit is that budgeting process compels managers to spend time projecting for the prospect, rather than merely focusing themselves with daily operations. The sooner managers conduct and develop detail plans and have time to perform on the plans, the more probable they will accomplish their goals. The second one is that budgets improve a company's coordination and communication. It forces the improvement in relations among operations throughout the whole value chain. Different departments and operations are required communicating and supporting each other to achieve the goal set in budgets. The final benefit is that budgets provide benchmark against actual outcome. This benchmark helps companies evaluate and investigate performance. Budgets are targets that companies attempt to achieve, so that managers are able to use budgets to compare against actual performance. Budgets provide managers large variances that need investigating. (Braun & Tietz 2013, 518.)

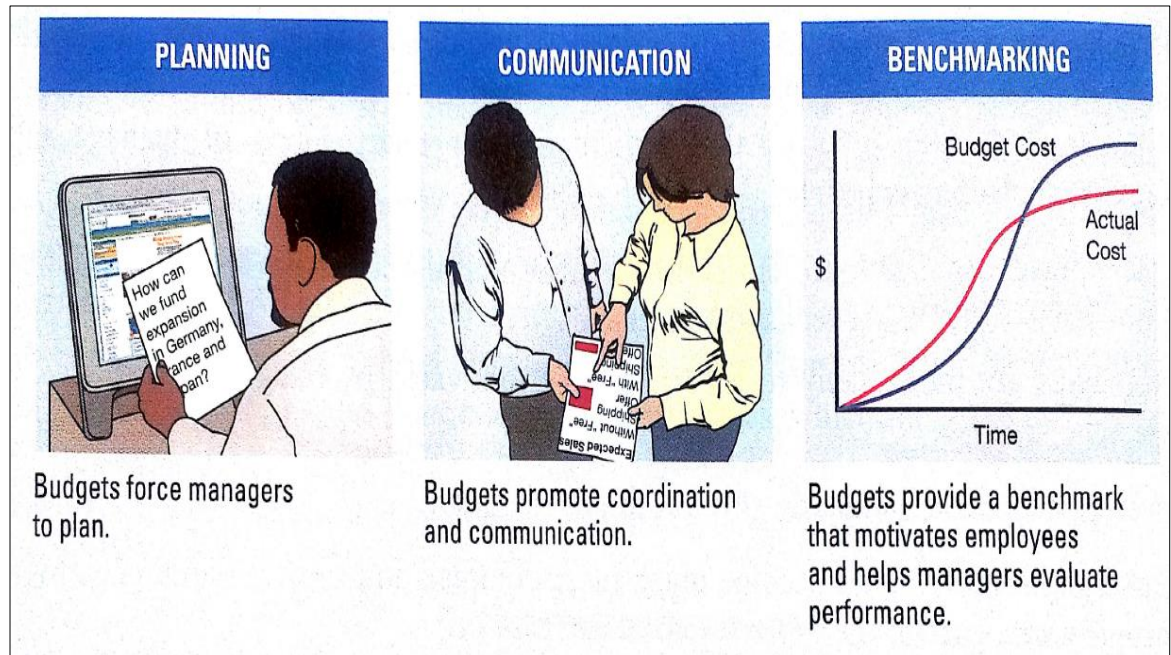


Figure 2. Benefits of Budgeting. ((Braun & Tietz 2013, 518)

The comprehensive plan for the entire company is called as the master budgets. It comprises many supporting budgets in order to generate the organization's budgeted financial statements. The figure below describes all the component of a mater budget for a manufacturer as well as the order to create one. (Braun & Tietz 2013, 516.)

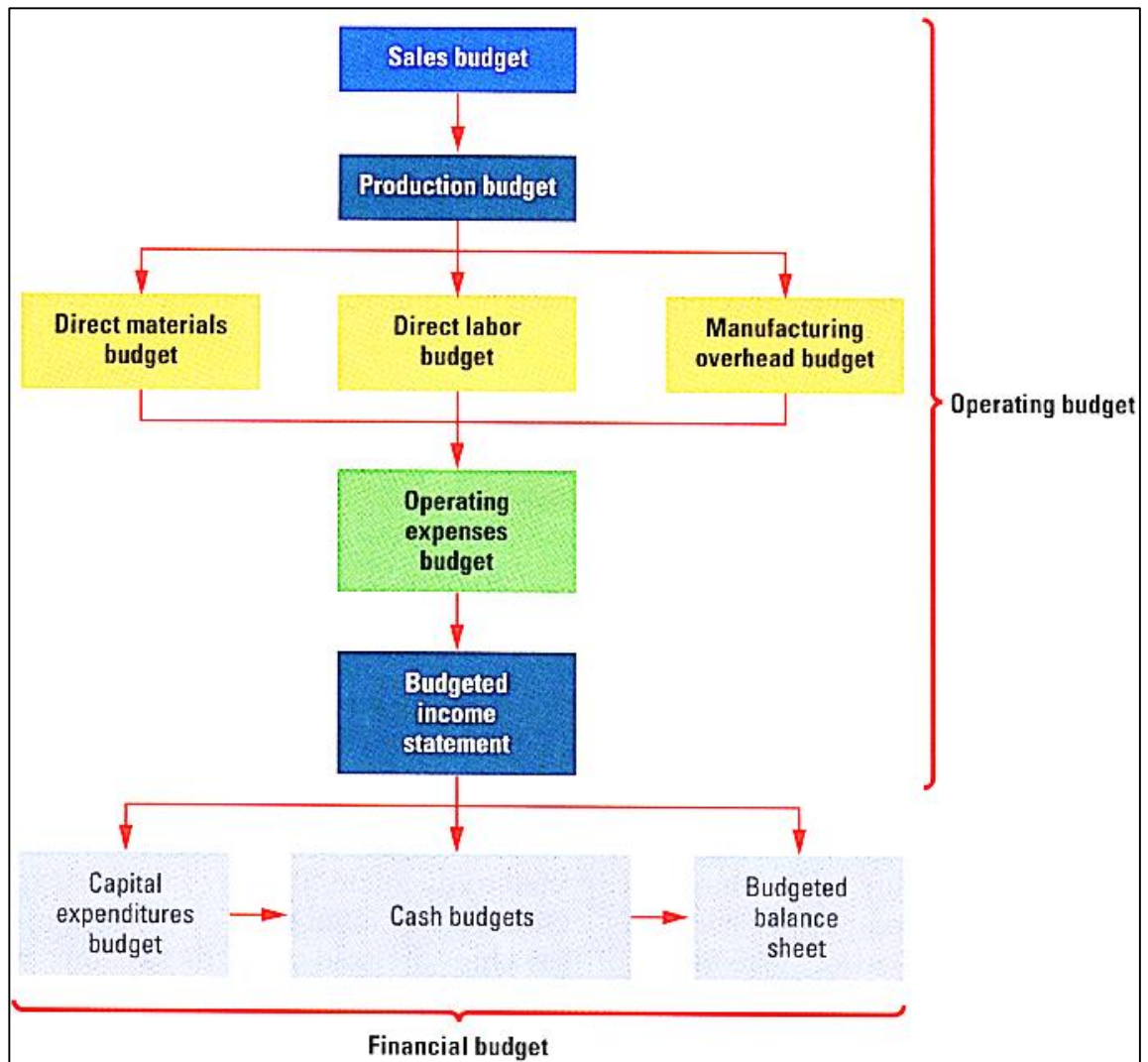


Figure 3. Master budget for a manufacturing company (Braun & Tietz 2013, 519)

Operating budgets are the budgets that are required to conduct the company's daily operation. Operating budgets build up to a budgeted income statement. Due to its effect on other elements of the master budget, sales budget is the preliminary point of operating budgets. In the sales budget, manager estimates how many units are sold and the amount revenue are collected in each period of time. The manufacturer prepares the production budget after predicting sales. The production budget decides the number of units expected to produce to meet the sales estimation. After that, direct material budget, direct labour budget and manufacturing overhead are prepared to satisfy production. Subsequently, operating expenses budget is prepared. When all budgets are constructed, manager is able to prepare the budgeted income statement. As mentioned in the prior section 1.4, when conducting a budget for a future span, a company assumes that the business operate within the relevance range of activities. Budgeted cost and revenues are

more likely to be accurate if the actual activity volume is within the relevance range. (Braun & Tietz 2013, 520.)

Financial budgets are the budgets that plan the cash outflows and inflows, as well as predict the budgeted balance sheet. The organization's plan for purchasing property, plant and equipment is presented in the capital expenditure budget. The cash budget plans the availability of cash inside the organization in order to operate effusively. It also resolves whether the organization has extra cash to invest or the organization is short on cash and need to borrow extra funds. Last but not least, budgeted balance sheet predicts the organization's position at the end of budget period. (Braun & Tietz 2013, 520.)

Different from manufacturing company, service company has no merchandise and tangible product. Thus, its operating budgets contain only sales budget, operating expenses budgeted, and budgeted income statement. However, service company projects the same financial budgets as those of manufacturing company. (Braun & Tietz 2013, 540.)

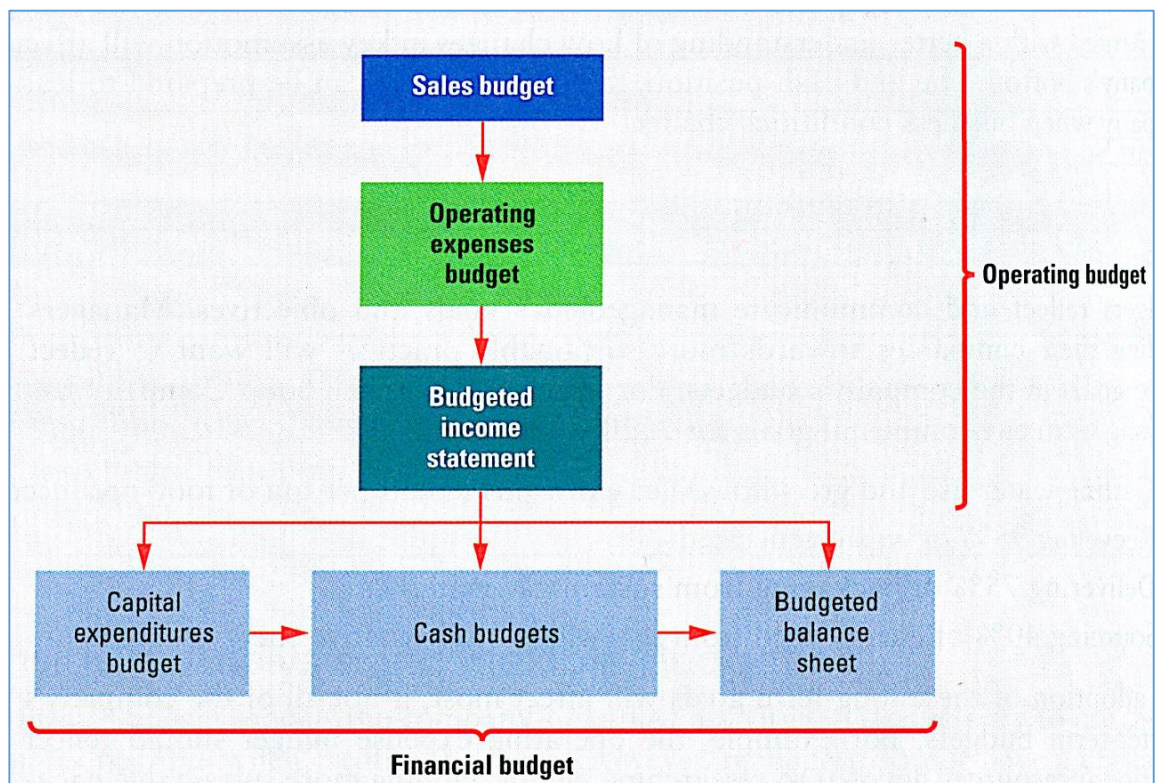


Figure 4. Master budget of service company (Braun & Tietz 2013, 540)

2.2 Performance report

Braun and Tietz (2013, 589) assert that actual performance should be benchmarked against the budgets. A performance report is comparison between actual outcome, which are actual revenues and expenses, and budgeted figures. Manager should investigate any large variances. Variances are defined as the differences between the actual performance and the budgets. The **Table 2** is an example of a performance report.

Table 2. Performance report (all figures are hypothetical)

	Actual	Budgeted	Variance	Variance %	
Sales revenue	1200€	1300€	20€	15.4%	U
Direct material	660€	663€	3€	0.45%	F
Contribution margin	540€	637€	97€	15.2%	U
<i>Less: operating expenses</i>					
Labour costs	240€	230€	10€	4.3%	U
Overhead	53€	56€	3€	5.4%	F
Operating income	247€	351€	104€	29.6%	U

Variance percentage is calculated by dividing budgeted figure by variance. Variances are typically classified as either favourable (F) or unfavourable (U). A favourable variance is described as the one that leads to actual operating income to be higher than that of budget. On the other hand, an unfavourable variance is defined as the one that brings about actual operating income to be lower than that of budget. “Management by exception” is a technique used by manager when analysing performance report. “Management by exception” denotes that manager investigates only budget variances that are comparatively large. If the variance percentage or variance is relative large, a company need to investigate the cause of the variance. (Braun & Tietz 2013, 594.)

2.3 Theoretical application in case company

The budgeting tool is built exclusively for Restaurant X. A master budget for Restaurant X is different from a typical master budget for service company or manufacturing company. The reason is that restaurant provides customers not only service but also tangible

products which are dishes. Therefore, the restaurant's master budget consists five budgets: sales budget, direct material budget, labour cost budget, overhead budget and budgeted income statement. The reason why the restaurant's master budget does not include financial budgets is that most transactions are paid by cash and a very small number of transactions are credited. The restaurant's revenues are collected in cash; therefore, the accrual basis is cash basis. Thus, Restaurant X's management does not require a financial budgets.

3 Designing complete product-budgeting tool (PT2)

This chapter discusses about the process of designing complete product. The complete product includes: a fully functional budgeting tool and a comprehensive user guide. Therefore, this chapter will have two sub-chapters: designing budgeting tool and designing user guide.

Because the restaurant has not had a budget before, the thesis writer built the budgeting tool based on mostly primary data. As mentioned before in **Table 1**, the writer conducts qualitative research in order to collect data and figures. Before and during the designing process, the thesis writer gathered all necessary information and statistics through five interviews with the restaurant manager and many emails. Those interviews were operated by Skype and lasted about one hour and thirty minutes. After the process of data collection, the writer analysed information and statistics to support the budgeting tool so that the tool will meet the manager's expectations and needs. The list of interview questions can be found in **Appendix 2**. During five Skype interviews, those topics were discussed with the restaurant's manager:

- 28 Dec 2013: Budgeting tool requirements of the manager.
- 7 Jan 2014: Designing sales budget, forecasting sale.
- 21 Jan 2014: Designing direct material budget
- 10 Feb 2014: Final step of designing budget tool: designing labour cost budget, overhead budget and budgeted income statement.
- 4 Mar 2013: Designing performance report.

3.1 Designing budgeting tool

To design the tool, the thesis writer conducted the first interview with the manager to acknowledge about the manager's requirements, needs and the reason why the restaurant needs a budgeting tool at the current time. The manager requires that the tool should be

user friendly so that a user is able to utilise the tool easily, but unable to delete or change important data or destroy the structure and core of the tool. The tool is also able to create measure standards so that the manager can use those standards to compare against actual outcome. The budgets will be built on monthly basis. The thesis writer used those requirements as a foundation for the process of designing the tool.

The tool is built according to the order of the master budget that is discussed in the Chapter 2. The tool have five budgets: sales budget, direct material budget, labour cost budget, overhead budget and budgeted income statement, as well as the performance report respectively.

- Sales budget:

The second interview was about the specific requirements for sales budget in the tool. The manager requests to have all dishes and products on the sales budget, the budget will be built on monthly basis. Thus, the sales budget is built according to the structure of Restaurant X's menu. The manager requires that a user is able to forecast revenues and contribution margin by inputting the number of each unit sales into the tool.

- Direct material budget:

Before building the direct material budget, the writer made the third interview with the manager to ask for what kinds of information the manager wants to obtain through the direct material budget. The manager demands to know about the amount of required ingredient for production in monthly basis. Moreover, the manager wants to know how the amount of ingredient volume fluctuates according to the market price. Therefore, the direct material budget is built so that a user inputs by himself the market price of an ingredient into the tool. Then, the needed volume of that ingredient is calculated automatically by taking the total cost of that ingredient dividing by the market price of that ingredient. The total cost of an ingredient is calculated based on the estimated sales in sales budget and the estimated proportion of that ingredient in dishes. Because the restaurant does not have menu card which indicates every ingredient used for each dish, the direct material budget is built on the estimation of the restaurant manager. Detailed explanation and calculation of total cost of an ingredient are described more in **Appendix 3** and **Appendix 4**.

- Labour cost budget, overhead budget and budgeted income statement:

The thesis writer discussed about labour cost budget, overhead budget and budgeted income statement with the Restaurant X's manager in the fourth interview. The manager wants to input by himself the number of workers and salary per month. In overhead budget, every cost is considered as fixed cost, except gas cost. Gas is a semi-fixed cost. The restaurant has a fixed cost for gas in the relevance range. Nonetheless, gas consumption is over the maximum spot in peak season and gas consumption is below the minimum spot in off-season. At that time, gas cost is variable. In budgeted income statement, the manager wants to have flexibility in social cost rate, tax rate, depreciation per month and interest per month. Thus, the writer designed the tool so that a user can change the social cost rate, tax rate, depreciation per month and interest per month and those changes will be updated into the budgeted income statement.

-Performance report:

In the final interview with the manager, performance report was discussed and designed. Because the manager required that the tool can help the manager to benchmark the budgets against actual outcome, the thesis writer recommended the performance report built on quarterly basis according to thesis advisor's advice. The performance report is built so that every three-month- budgets are compare with actual outcome. The manager will input manually the actual revenues and expenses, the tool will automatically compare and calculate variance.

3.2 Designing user guide

The user guide is written to instruct a new user of the budgeting tool. Therefore, the user guide is designed to be understandable and clarified. The user guide is in **Appendix 3**. To illustrate what are explained in the text, some tables and parts of the tool are described in the user guide. Before instructing how to use those budgets in the tool, the user guide introduces and describes briefly about the structure, key concepts and special elements of the tool, especially Yellow cells. The structure of the user guide is according to the structure of the budgeting tool. Firstly, the user guide will explain and instruct the sales budget. Secondly, direct material budget will be discussed. Following that is labour cost budget and overhead budget. The final budget in the master budget is the budgeted

income statement. Last but not least, the user guide will tutor how to use the performance report in the tool.

4 Performance report Quarter I/2014 (PT3)

At the beginning of January 2014, sales budget tool was completed and sent to the restaurant manager to assess. After that, the thesis writer and the manager estimated the sales during the second Skype interview. The writer used the budgeting tool to conduct operating budgets for the First Quarter of 2014 and made a performance report. Because performance report does not require any information from direct material budget, direct material budget is not mentioned in this chapter

The **Appendix 5** shows the expected number of unit sales and the total revenues of each month in Quarter I/2014. In Vietnam, December and January is the peak season for restaurant service because that period of time is holiday vacation. During Christmas and Lunar New Year celebration, Vietnamese consumers spend extensively on dining and entertainment. In January 2014, total consumer expenditure was increased by 15-20% compared with other months (Ministry of Finance, 2014). Therefore, unit sales and sales revenues in January were expected to increase by 20% compared to those in March. In February, the restaurant closed for five days due to Lunar New Year celebration. Moreover, after the celebration, customers tend to eat at home with family and meat dishes are not preferred at that time. Therefore, some meat dishes in the menu were expected to be closed and seafood dishes were estimated to be consumed most. The thesis writer estimated that unit sales and sales revenue in February would drop by 26% compared to those in March.

As a result of a significant increase in sales in January, the restaurant was expected to employ more workers, thus, the labour cost would increase. In February, sales were forecasted to drop, thus, less workers would be employed. In March, the restaurant sales would back to normal rate.

Table 3. Labour cost budget Quarter I/2014

		Kitchen worker	Waiter	Manager	TOTAL
January	Number of workers	9	10	1	20
	Salary/month	7 000 000	5 800 000	10 000 000	
	Total	63 000 000	58 000 000	10 000 000	131 000 000
February	Number of workers	6	6	1	13
	Salary/month	7 000 000	5 800 000	10 000 000	
	Total	42 000 000	34 800 000	10 000 000	86 800 000
March	Number of workers	8	7	1	16
	Salary/month	7 000 000	5 800 000	10 000 000	
	Total	56 000 000	40 600 000	10 000 000	106 600 000

As mentioned above in the **section 3.4**, in overhead budget, only gas consumption is semi fixed cost, while the rest is fixed cost. In Quarter I, the overhead budget was forecasted as the **Table 4** below.

Table 4. Overhead budget Quarter I/2014

	January	February	March
Gas	58 351 000	33 740 000	45 000 000
Electric	27 670 000	27 670 000	27 670 000
Telephone	520 000	520 000	520 000
Internet	1 130 000	1 130 000	1 130 000
Garbage	440 000	440 000	440 000
Insurance	7 950 000	7 950 000	7 950 000
Rent	77 000 000	77 000 000	77 000 000
Miscellounous	19 700 000	19 700 000	19 700 000
Repair/Maintenance	9 700 000	9 700 000	9 700 000
TOTAL	202 461 000	177 850 000	189 110 000

Finally, the budgeted income statement in Quarter I was prepared as the **Table 5** below

Table 5. Budgeted income statement Quarter I/2014

	January	February	March	Quarter I
Sales revenue	1 783 473 000	1 097 619 000	1 486 309 000	4 367 401 000
Direct material	794 338 430	487 624 595	662 942 965	1 944 905 990
Contribution margin	989 134 570	609 994 405	823 366 035	2 422 495 010
<i>Contribution margin %</i>	55.5%	55.6%	55.4%	55.5%
<i>Less: operating expenses</i>				
Labor costs	131 000 000	86 800 000	106 600 000	324 400 000
Social costs	30 130 000	19 964 000	24 518 000	74 612 000
Overheads	202 461 000	177 850 000	189 110 000	569 421 000
Depreciation	45 000 000	45 000 000	45 000 000	135 000 000
Operating income	580 543 570	280 380 405	458 138 035	1 319 062 010
<i>Operating income %</i>	32.6%	25.5%	30.8%	30.2%
Interest	43 500 000	43 500 000	43 500 000	130 500 000
Earning before tax	537 043 570	236 880 405	414 638 035	1 188 562 010
Tax expenses	118 149 585	52 113 689	91 220 368	261 483 642
Net income	418 893 985	184 766 716	323 417 667	927 078 368
<i>Net income %</i>	23.5%	16.8%	21.8%	21.2%

At the end to March, the writer was able to collect all the data and figures related to the actual revenues and expenses in Quarter I/2014. After that, the performance report was built in order to benchmark the actual outcome against the budgets.

Table 6. Performance report Quarter I/2014

	Quarter I				
	Actual	Budgeted	Variance	Variance %	
Sales revenue	4 087 620 000	4 367 401 000	279 781 000	6.4%	U
Direct material	1 986 000 000	1 944 905 990	41 094 010	2.1%	U
Contribution margin	2 101 620 000	2 422 495 010	320 875 010	13.2%	U
<i>Contribution margin %</i>	<i>51.4%</i>	<i>55.5%</i>			
Less: operating expenses					
Labor costs	298 800 000	324 400 000	25 600 000	7.9%	F
Social costs	68 724 000	74 612 000	5 888 000	7.9%	F
Overheads	570 700 000	569 421 000	1 279 000	0.2%	U
Depreciation	135 000 000	135 000 000	0	0.0%	F
Operating income	1 028 396 000	1 319 062 010	290 666 010	22.0%	U
<i>Operating income %</i>	<i>25.2%</i>	<i>30.2%</i>			
Interest	130 500 000	130 500 000	0	0.0%	F
Earning before tax	897 896 000	1 188 562 010	290 666 010	24.5%	U
Tax expenses	197 537 120	261 483 642	63 946 522	24.5%	F
Net income	700 358 880	927 078 368	226 719 488	24.5%	U
<i>Net income %</i>	<i>17.1%</i>	<i>21.2%</i>			

As the **Table 6** shows, the actual operating income is less than the budgeted operating income by 22% which is relatively large percentage. The thesis writer employs the technique called “management by exception” to investigate the cause of the variance 22%. The main reason that the actual operating income is lower than the budgeted operating income is that the actual revenues are less than budgeted revenues by 6.4%. Vietnam economy is in the difficult time so that Vietnamese consumer confidence is low, and they have not seen the bright spot of the economy. Therefore, the purchasing power was lower than expectation (Nguyen Tan Dung, 2014). The minor reason is that the restaurant paid more for direct material budget than expectation. During January and February, the cost of ingredient was increased by 1%-2% (Ministry of finance, 2014). Furthermore, there is one important figure that requires emphasizing. The actual labour cost is lower than budgeted labour cost by 7.9%. This is the result of quick action taken by the manager when the manager realized that the sales revenue did not grow as expectation. In January, the manager reduced the number of kitchen workers from 9 to 8 and

the number of waiters from 10 to 8. In March, the number of kitchen workers decreased from 8 to 7. This action from manager helped to shrink the variance between actual operating income and budgeted operating income.

5 Conclusion

In this chapter, the thesis writer will summarise the outcomes of the thesis. The main results, recommendation, further development are discussed throughout the chapter. Finally, the writer will conclude the thesis with personal learning and evaluation.

5.1 Main result

The product-oriented thesis is carried out to create a budgeting tool for Company X's restaurant. All three product-oriented tasks have been completed:

1. Product task 1 (PT1): Literature review
2. Product task 2 (PT2): Designing complete product-budgeting tool for Restaurant X
3. Product task 3 (PT3): Conducting performance report for Quarter I/2014

Budgets are important to the business because they involve in many aspects of the business, such as the production plan, sale plan, purchasing plan and financing plan. A company uses budgets to control the revenues and costs that are related to the plans as well as fulfil its key responsibilities of planning, directing and controlling process. However, preparing budgets is a time consuming process, and requires a considerable source of personnel to conduct. Therefore, a budgeting tool is a valuable asset for a company possessing it. Budgeting tool facilitate the process of preparing budgets. The user of the tool can input some key figures and statistics, and then the formulas and computations are calculated automatically by the tool. Nonetheless, the budgeting tool should be designated according to the specific characteristics and demand of a company. There have been many budgeting tools built for restaurant, however, those tool were built in general assumption and general aspect. Thus, those tools do not meet the specific characteristics and demands of Restaurant X. The thesis writer customises a budgeting tool exclusively for the restaurant.

The budgeting tool is fully designed in a Microsoft Excel file and the User Guide is described and explained carefully in Chapter 3. The budgeting tool was delivered to the

restaurant manager on 16th March, 2014. The manager is implementing the tool and preparing budgets for the rest of the year 2014. The performance report for Quarter I/2014 provides the manager the variances between actual outcome and budgets, indicates which action should take in order to achieve the goal.

5.2 Recommendations

At the present time, Restaurant X has no a formal bookkeeping but they record sales manually. The number of unit sales in menu list has not been recorded. Therefore, the writer is unable to benchmark the actual number of unit sales against budgeted number of unit sales. At the moment, Restaurant X has the budgeting tool to forecast sales and profits, but it does not have a tool to record the actual volume. Because the volume record is missing, the managers cannot take full advantage on the budgets. The restaurant should have a tool to record figures and use that tool to support the control and direct operation. If Restaurant X cannot have a tool to record the actual volume, this thesis's budgeting tool can be used as a temporary substitute. In the budgeting tool, the sales are forecasted based on the expected number of unit sales. To use the budgeting tool as a tool to record actual volume, the manager can input the actual number of unit sales instead of the forecasted number. If the manager wants to follow the suggestion, the thesis writer can adjust the budgeting tool slightly so that the tool can not only record actual volume but also compute the actual profit of the restaurant.

Moreover, budgets is used not only for forecasting sales and profits but also for developing a further and profound profit sensibility analysis. In the future, the company can conduct a profit analysis with the basement that is budgets.

The thesis writer received good feedback from the manager. The manager said that the budgeting tool is beneficial and user friendly, as well as satisfies requirements. The manager and the company owner will take into consider the writer's recommendation.

5.3 Further development

There are always scopes for further development of the budgeting tool although the goal of the thesis is reached. The sales budget in the budgeting tool is built based on the

restaurant's menu list. However, in the future, if Restaurant X changes some dishes, the direct material budgets in the tool will not operate correctly and needs to be revised, whereas other budgets are not effective. Therefore, the budgeting tool can be developed more so that the management can change dishes in sales budget, but these action will not cause other budgets work incorrectly. Moreover, the performance report in the budget can be developed so that the management can benchmark the actual volume against budgeted volume. As mentioned before in the recommendation, budget is the one of the crucial steps for profit sensibility analysis in the future. With budgets, the company can develop a profound analysis about the company profit position.

5.4 Personal learning and evaluation

The thesis is written and conducted from December 2013 to March 2014 which is four-months. The majority of time is dedicated to designate and customise the budgeting tool so that it will satisfy the restaurant manager's needs.

As a student who is in passionate with accounting, I want to develop deeper understand and knowledge about budget. In the thesis, I focused on the method to create a beneficial budgeting tool for a restaurant. To support the process of designing the tool, I studied carefully and deeply the budgeting theory in accounting terms. I reviewed cautiously formulas and calculations to confirm the validity and accuracy of numbers. Moreover, I spent a considerable amount of time to develop computer skills so that I would not face any problem with Excel.

Nevertheless, I confronted some obstacles during the thesis process. When creating a performance report for Quarter I/2014, I had difficulty in collect actual revenues and expenses. I had only two days to collect and analyse data before the thesis submission day. Moreover, some figures were not recorded and missing. Fortunately, the manager provided support during the thesis process by replying constantly to my emails and giving suggestion.

Throughout the thesis process, I have learnt a great knowledge and improved skills. The skill to control and manage the project is the biggest lesson for me. I managed the process so that every step was carried out carefully and completed on time so I could move

to the next stage. I also developed my computer skills, now I can use the Microsoft Excel efficiently and easily.

It is a valuable experience to design a budgeting tool for a real company. Those knowledge and skills that I have learnt and develop during the thesis process surely support me in the future career path.

References

Baomoi 24 Oct 2013. Nhóm ngành dịch vụ đóng góp nhiều nhất vào tăng trưởng GDP (Service sector contributes most in GDP's increase). URL: <http://www.baomoi.com/Nhom-nganh-dich-vu-dong-gop-nhieu-nhat-vao-tang-truong-GDP/45/12246029.epi>. Accessed: 02 Dec 2013.

Braun, W., Tietz, M., Harrison, T. 2013. Managerial accounting. 3rd ed Pearson. New Jersey

Datar, M., Foster, G., Horngren, T., Ittner, C. & Rajan, M. 2009. Cost accounting a managerial emphasis. 13rd ed. Pearson. New Jersey

Drury, C. 2004. Management and cost accounting. 6th ed. Thomson. London

Manager X. 28 Dec 2013. Restaurant manager. Company X. Budgeting tool requirement. Skype interview.

Manager X. 7 Jan 2014. Restaurant manager. Company X. Sales budget. Skype interview.

Manager X. 21 Jan 2014. Restaurant manager. Company X. Direct material budget. Skype interview.

Manager X. 10 Feb 2014 Restaurant manager. Company X. Final step of budget tool. Skype interview.

Manager X. 4 Mar 2013. Restaurant manager. Company X. Performance report. Skype interview.

Manager X. Restaurant manager. Company X. Several emails.

Ministry of Finance 07 Feb 2014. Tang cuong cac bien phap binh on gia Tet Nguyen dan Giap Ngo 2014 (Strengthen measures to stabilize prices in Tet Giap Ngo, 2014). URL: http://www.mof.gov.vn/portal/page/portal/mof_vn/ttsk/3312584?pers_id=2177092&item_id=119547624&p_details=1. Accessed: 28 Mar 2014.

Nguyen Tan Dung 08 Mar 2014. Lam phat thap: do dieu hanh hay do that chat chi tieu (Low inflation: due to operation or tightening spending). URL: <http://nguyentandung.org/lam-phat-thap-do-dieu-hanh-hay-do-that-chat-chi-tieu.html>. Accessed: 28 Mar 2014.

Vnexpress 15 Feb 2011. Ngnoi tieu dung viet nam dan dau Chau A ve chi tieu an uong (Vietnamese consumers is on top of Asia about dining expenditure). URL: <http://kinhdoanh.vnexpress.net/tin-tuc/vi-mo/nguoi-tieu-dung-viet-nam-dan-dau-chau-a-ve-chi-tieu-an-uong-2710551.html>. Accessed: 02 Dec 2013.

Appendix

Appendix 1: Restaurant X's menu list

VAT excluded.

		<i>Unit price (VND)</i>
	Grill/Barbecue	
1	American beef belly	189 000
2	American beef belly roll	189 000
3	American beef brisket	189 000
4	American beef plate	109 000
5	American beef rib eye	219 000
6	American beef rib eye steak Premium	239 000
7	American beef rib finger	189 000
8	American beef shoulder tender- loin	189 000
9	American lean beef bulgogi sauce	229 000
10	Arkshell	55 000
11	Beef bulgogi	55 000
12	Beef roll cheese	55 000
13	Beef roll egg	55 000
14	Beef roll needle mushroom	55 000
15	Breast beef	55 000
16	Breast beef with sour tofu	55 000
17	Breast goat	55 000
18	Chicken leg	55 000
19	Crab	55 000
20	Goat meat	55 000
21	Gochujang pork belly	55 000

22	Nem nuong	55 000
23	Octopus	55 000
24	Oyster	55 000
25	Pork barbecue	55 000
26	Pork belly	55 000
27	Pork belly with bulgogi sauce	55 000
28	Pork cheek meat	55 000
29	Pork ribs	55 000
30	Pork ribs with honey	55 000
31	Pork shoulder with bulgogi sauce	55 000
32	Roast chicken	55 000
33	Roast duck	55 000
34	roast rack	55 000
35	roast suckling pig	55 000
36	Roast-prim ribs	55 000
37	Set: beef	219 000
38	Set: pork	219 000
39	Set: seafood	229 000
40	Shrimp	55 000
41	Skirt meat	55 000
42	Spicy sauce makchang	55 000
43	Spicy squid	55 000
44	Venison	55 000
45	Wine pork belly	55 000
	Vegetable/Salad	
46	Chicken salad	60 000
47	Coconut salad	60 000
48	Kim chi	60 000
49	Lotus salad	60 000
50	Sauted water spinach	60 000

51	Okra	25 000
52	Egg plant	25 000
53	Corn	25 000
54	Mushroom	25 000
55	Bell pepper	25 000
	Noodle/Rice	
56	Bibimbap	80 000
57	Spaghetti	90 000
58	Spicy Buckwheat noodles	99 000
59	Vermicelli noodle with beef	99 000
	Hotpot	
60	Bulgogi hotpot	239 000
61	Kimchi hotpot	239 000
62	Seafood hotpot	259 000
63	Spicy sour hotpot	259 000
64	Noodle	30 000
65	Vegetable	30 000
	Dessert	
66	Tiramisu	79 000
67	Strawberry Panna Cotta	19 000
68	Kiwi Panna Cotta	19 000
69	Raspberry Panna Cotta	19 000
70	Mixed fruit	49 000
	Drinks	
	<i>Soft drink</i>	
71	Cocacola	23 000
72	Fanta	23 000

73	Sprite	23 000
74	Soda	23 000
	<i>Juice</i>	
75	Orange juice	27 000
76	Passion fruit juice	27 000
77	Watermelon juice	27 000
78	Lime juice	22 000
79	Carror juice	31 000
	<i>Spirit</i>	
80	So-ju	95 000
81	Vodka Alligator	85 000
82	Vodka Standard	399 000
83	Champagne	228 000
	<i>Beer</i>	
84	Heineken	35 000
85	Tiger	32 000
86	333	30 000
	TOTAL	

Appendix 2: Interview questions for Restaurant X's manager

- Why does the restaurant want to have a budgeting tool?
 - What kinds of activities do you use budgets for?
 - How do you evaluate the importance of budgets in your restaurant?
 - What are your requirements and needs for the budgeting tools?
 - What are your expectations for the beneficial budgeting tools?
 - What elements or characteristics do you evaluate most when using a tool?
 - Do you have any historical budgets or profit evaluation?
 - Do you record sales in daily basis or monthly basis? What tool do you use to record?
 - How do you want the sales budget to be built in the tool?
 - What kind of information do you want to get from the sales budget?
 - What is the key element you want to get from the sales budget?
 - What is your estimation for the Quarter I sale? Why do you expect future sale like that? Does the restaurant have peak season and off season and the reason for it?
 - How do you want the direct material budget to be built in the tool?
 - Do you have menu card?
 - What is your estimation for each ingredient in each dish?
 - What kinds of information do you want to get from direct material budget?
 - What is the key element do you want know from direct material budget?
 - How do you want the direct material budget to be organized?
 - How do you want the labour cost budget to be built in the tool?
 - What kinds of information do you want to get from labour cost budget?
 - How do you want the overhead budget to be built in the tool?
 - What are the fixed cost in the overhead cost?
 - Why gas is not fixed cost? Why gas is considered as semi-fixed cost?
 - How do you want the overhead budget to be organized?
 - How do you want the budgeted income statement to be built in the tool?
 - What elements do you want to flexibly change in the budgeted income statement?
- Why?
- What are your expectations for performance report in the tool?
 - What kinds of information do you want to get from the performance report?
 - What is the key information you want from the performance report?
 - How do you use information from performance report into business?

- Do you want to benchmark in quarterly basis or monthly basis?
- Do you want to benchmark the actual volume with the budgets?
- What actions do you take after building budgets through the budgeting tool?

Appendix 3: User guide for budgeting tool

The budgeting tool is created to facilitate the restaurant's management in preparing master budget which includes only the operating budgets. With the tool, the management is able to prepare budgets efficiently in a less time consuming way. The tool can be used for multiple times in multiple following years. The key of the budgeting tool is a number of unit sales. The management is able to input different numbers of unit sales in each month in the sales budget so as to compare various results. The management will acknowledge the impact of alternating sales budget to other budgets, such as direct material budgets and budgeted income statement.

The tool is designated for the whole year and divided into monthly basis. The management is able to use the tool to estimate the revenues and expenses in every month for the whole year. The tool is built on Microsoft Excel and consists six different sheets. The first five sheets are the operating budgets and the final sheet is the performance report. In this chapter, one important thing to be cautious is that every figure inside every below table is hypothetical.

The Excel is protected so that the data and formulas are shielded and unable to be edited or deleted. A user can input, edit and format only some chosen cells. Those chosen cells are marked with a different colour from the rest. The **Table 1** illustrates what are the chosen cells and what are the protected cells. The chosen cells which can be inputted, edited and deleted are yellow cells, while the rest are the protected cells. In this thesis, the chosen cells will be called as Yellow cells.

Table 1. Illustration of Yellow cells

	Cost	Price/Unit		Units
American beef belly	25 574		/kg	0
American beef brisket	10 633		/kg	0
American beef plate	10 255		/kg	0
American beef rib eye	10 409		/kg	0
American beef rib eye steak Premium	13 509		/kg	0
American beef rib finger	17 966		/kg	0

This next part of the chapter will give instructions on how to utilize the Excel file as a tool to budget for the upcoming years. All the figures and formulas are linked to each other, so as a change in any Yellow cell will result in changes in other relevant figures.

Sales budget

Table 2 is one part of the sales budget conducted in Excel. The sales budget is designated based on the restaurant's menu. All the dishes and items in the menu are listed in sales budget. Each item has its own unit price, contribution margin and contribution margin %. In every month from January to December, the user can input the expected number of unit sales in the column "Unit". After that, the tool will automatically calculate "Total price" and "Total CM" for each item.

Table 2. Sale budget

	<i>Unit price</i>	<i>Contribution margin (CM)</i>	<i>Contribution margin %</i>	January			February		
				<i>Unit</i>	<i>Total price</i>	<i>Total CM</i>	<i>Unit</i>	<i>Total price</i>	<i>Total CM</i>
Shrimp	20	12	60%						
Crab	16	10	62.5%						
Beef	15	7	46.7%						
Kimchi hotpot	24	11	45.8%						
Oyster	36	17	47.2%						
Breast goat	27	13	48.1%						

Direct material budget

The restaurant does not have menu card which indicates every ingredient used for each dish. Therefore, the direct material budget is built on the estimation of the restaurant manager. For example, the manager estimates that Kimchi hotpot cost has 20% squid, 10% kimchi, 20% beef, 20% pork shoulder, 10% noodle, 10% vegetable and 10% miscellaneous. In the sales budget, after the manager inputs the expected number of Kimchi hotpot sales, cost of Kimchi hotpot is equal to the difference between “Total price” and “Total CM”, because cost of direct material is the only variable cost. Then, in the direct material budget, 20% of that cost is squid, 10% of that cost is kimchi, 20% of that cost is beef, 20% of that cost is pork shoulder, 10% of that cost is noodle, 10% of that cost is vegetable and 10% of that cost is miscellaneous. Manager’s estimation for other dishes is in **Appendix 4**. This kind of calculation is applied continually to every other dish. Therefore, the cost of each ingredient is the sum of cost of it in each dish. For example, in the budgeting tool, “Pork shoulder” cost is calculated by the sum cost of pork shoulder in three dishes: Pork shoulder with bulgogi sauce, Set pork and Kimchi hotpot.

As **Table 3** illustrates, for each month, the user inputs the price per unit into Yellow cells. Then, the expected number of unit purchases is automatically calculated by dividing cost by price per unit.

Table 3. Direct material budget

	January			February		
	Cost	Price/Unit	Units	Cost	Price/Unit	Units
Beef	350		/kg 0			/kg 0
Kim chi	850		/kg 0			/kg 0
Pork shoulder	256		/kg 0			/kg 0
Vegetable	485		/kg 0			/kg 0
Noodle	123		/kg 0			/kg 0
Squid	154		/kg 0			/kg 0
Honey	265		/jar 0			/jar 0
Miscellaneous	156					

Labour budget

The restaurant has three different employee positions: kitchen workers (cook, cleaner), waiters, and manager. As **Table 4** illustrates, for each month, the user can input and edit the estimated numbers workers and expected salary per month.

Table 4. Labour budget

	January			February		
	Number of workers	Salary /month	Total	Number of workers	Salary /month	Total
Kitchen worker	8	7 000	56 000	8	7 000	56 000
Waiter	7	5 000	35 000	7	5 000	35 000
Manager	1	10 000	10 000	1	10 000	10 000
TOTAL	16		101 000	16		101 000

Overhead budget

Most of overhead is fixed cost. However, gas is a semi-fixed cost. The restaurant has a fixed cost for gas in the relevance range. Nonetheless, gas consumption is over the maximum spot in peak season and gas consumption is below the minimum spot in off-season. At that time, gas cost is variable.

The user can input and edit in the **Table 5** Monthly costs. Then, those figures will be automatically updated in the overhead budget for every month in a year.

Table 5. Monthly costs

Monthly rate	
Electric	27 670
Telephone	520
Internet	1 130
Garbage	440
Insurance	7 950
Rent	77 000
Miscellounous	19 700
Repair/Maintenance	9 700

As **Table 6** illustrates, for the gas consumption, the user can input and edit directly inside the overhead budget for every month.

Table 6. Overhead budget

	January	February	March	April
Gas	58 351	33 740	45 000	45 000
Electric	27 670	27 670	27 670	27 670
Telephone	520	520	520	520
Internet	1 130	1 130	1 130	1 130
Garbage	440	440	440	440
Insurance	7 950	7 950	7 950	7 950
Rent	77 000	77 000	77 000	77 000
Miscellounous	19 700	19 700	19 700	19 700
Repair/Maintenance	9 700	9 700	9 700	9 700
TOTAL	202 461	177 850	190 073	144 110

Budgeted income statement

The budgeted income statement is made based on the result of previous budgets: sales budget, direct material budget, labour cost budget, and overhead budget. The contribution margin, operating income, and net income are automatically calculated. To make the budgeted income statement more flexible when there are some changes in government policy or company situation, a small table called Flexible terms is created below the income statement budget (**Table 7**). The user can input and edit merely that table. That table has the information, figures about the social cost rate, tax rate, and depreciation per month and interest per month.

Table 7. Flexible terms

Social cost rate	22.0%
Social security	16.0%
Social healthcare	3.0%
Labour union	2.0%
Unemployment allowance	1.0%
Tax rate	21.0%
Depreciation per month (in VND)	450
Interest per month (in VND)	450

Performance report

The Performance report is linked to the result of budgeted income statement. This helps the manager to evaluate performance. The budgets are the targets that the management attempt to achieve. At the end of period, the management benchmarks the actual revenues and expenses against budgeted revenues and expenses. The variance indicates how well the manager run the operation and whether plans require to be revised.

As **Table 8** illustrates, performance report is designated for four quarters of a whole year, not for twelve months. At the end of the period, the manager can input the actual result into Yellow cells so that the tool will automatically benchmark against budgeted figures and report the variances is favourable (F) or unfavourable (U).

Table 8. Performance report

	Quarter I				
	Actual (in VND)	Budgeted (in VND)	Variance (in VND)	Variance %	
Sales revenue		4 367	4367	100%	U
Direct material		1 944	1944	100%	F
Contribution margin	0	2 423	2422	100%	U
<i>Contribution margin %</i>	0%	55.5%			
Less: operating expenses					
Labor costs		306	306	100%	F
Social costs		70	70	100%	F
Overheads		569	569	100%	F
Depreciation		135	135	100%	F
Operating income	0	1 343	1343	100%	U
<i>Operating income %</i>	0%	30.8%			
Interest		130	130	100%	F
Earning before tax		1 213	1213	100%	U
Tax expenses		266	216	100%	F
Net income	0	947	947	100%	U
<i>Net income %</i>	0%	21.7%			

Appendix 4: Components of dishes

- American lean beef bulgogi sauce: 90% American lean beef + 10% bulgogi sauce
- Beef bulgogi: 90% normal beef + 10% bulgogi sauce
- Beef roll cheese: 90% normal beef + 10% cheese
- Beef roll egg: 90% normal beef + 10% egg
- Beef roll needle mushroom: 90% normal beef + 10% needle mushroom
- Breast beef with sour tofu: 90% breast beef + 10% sour tofu
- Gochujang pork belly: 90% pork belly + 10% miscellaneous
- Nem nuong: 90% pork shoulder + 10% miscellaneous
- Pork barbecue: 90% pork belly + 10% miscellaneous
- Pork belly with bulgogi sauce: 90% pork belly + 10% bulgogi sauce
- Pork ribs with honey: 90% pork ribs + 10% honey
- Pork shoulder with bulgogi sauce: 90% pork shoulder + 10% bulgogi sauce
- Roast-prim ribs: 90% pork ribs + 10% miscellaneous
- Set beef: 90% normal beef + 10% miscellaneous
- Set pork: 40% pork ribs + 30% pork shoulder + 30% pork belly
- Set seafood: 30% oyster + 30% shrimp + 20% octopus + 20% squid
- Spicy sauce makchang: 90% pork cheek meat + 10% miscellaneous
- Spicy squid: 90% squid + 10% miscellaneous
- Chicken salad: 50% chicken + 40% vegetable + 10% miscellaneous
- Coconut salad: 30% coconut + 30% vegetable + 30% shrimp + 10 miscellaneous
- Lotus salad: 50% lotus + 30% shrimp + 20% miscellaneous
- Sauted water spinach: 90% water spinach + 10% miscellaneous
- Bibimbap: 15% egg + 30% beef + 15% rice + 20% vegetable + 20% miscellaneous
- Spaghetti: 60% normal beef + 15% tomato +15% noodle + 10% miscellaneous
- Spicy buckwheat noodle: 15% egg + 20% buckwheat noodle + 30% vegetable + 30% normal beef
- Vermicelli noodle with beef: 40% beef + 20% noodle + 20% vegetable + 15% egg
- Bulgogi hotpot: 5% bulgogi sauce + 25% normal beef + 25% pork belly + 20% shrimp + 10% noodle + 10% vegetable + 5% miscellaneous

- Kimchi hotpot: 20% squid + 10% kimchi + 20% beef + 20% pork shoulder + 10% noodle + 10% vegetable + 10% miscellaneous
- Seafood hotpot: 15% crab + 25% shrimp + 15% octopus + 15% squid + 10% noodle + 10% vegetable + 10% miscellaneous
- Sweet sour hotpot: 25% normal beef + 25% pork belly + 20% shrimp + 10% noodle + 10% vegetable + 10% miscellaneous

Some items, dishes and drinks, have many ingredients but the main ingredient is over 97% of item. Thus, the main ingredient is considered as 100% of that item, such as orange juice. Deserts are bought fully from suppliers.

Appendix 5: Sales budget in Quarter I/2014 (VAT excluded)

	<i>Unit price</i>	<i>Contribution margin (CM)</i>	<i>Contribution margin %</i>	January			February			March		
				<i>Unit</i>	<i>Total price</i>	<i>Total CM</i>	<i>Unit</i>	<i>Total price</i>	<i>Total CM</i>	<i>Unit</i>	<i>Total price</i>	<i>Total CM</i>
Grill/Barbecue												
American beef belly	189 000	97 335	51.50%	142	26 838 000	13 821 570	29	5 481 000	2 822 715	63	11 907 000	6 132 105
American beef belly roll	189 000	97 335	51.50%	137	25 893 000	13 334 895	0	0	0	69	13 041 000	6 716 115
American beef brisket	189 000	97 335	51.50%	116	21 924 000	11 290 860	32	6 048 000	3 114 720	78	14 742 000	7 592 130
American beef plate	109 000	56 135	51.50%	194	21 146 000	10 890 190	58	6 322 000	3 255 830	119	12 971 000	6 680 065
American beef rib eye	219 000	112 785	51.50%	98	21 462 000	11 052 930	0	0	0	83	18 177 000	9 361 155
American beef rib eye steak Premium	239 000	125 475	52.50%	119	28 441 000	14 931 525	0	0	0	94	22 466 000	11 794 650
American beef rib finger	189 000	97 335	51.50%	196	37 044 000	19 077 660	71	13 419 000	6 910 785	175	33 075 000	17 033 625

American beef shoulder tenderloin	189 000	97 335	51.50%	174	32 886 000	16 936 290	0	0	0	195	36 855 000	18 980 325
American lean beef bulgogi sauce	229 000	117 935	51.50%	93	21 297 000	10 967 955	0	0	0	84	19 236 000	9 906 540
Arkshell	55 000	29 975	54.50%	276	15 180 000	8 273 100	298	16 390 000	8 932 550	229	12 595 000	6 864 275
Beef bulgogi	55 000	29 975	54.50%	198	10 890 000	5 935 050	50	2 750 000	1 498 750	145	7 975 000	4 346 375
Beef roll cheese	55 000	29 975	54.50%	342	18 810 000	10 251 450	129	7 095 000	3 866 775	289	15 895 000	8 662 775
Beef roll egg	55 000	29 975	54.50%	389	21 395 000	11 660 275	196	10 780 000	5 875 100	334	18 370 000	10 011 650
Beef roll needle mushroom	55 000	29 975	54.50%	386	21 230 000	11 570 350	214	11 770 000	6 414 650	329	18 095 000	9 861 775
Breast beef	55 000	29 975	54.50%	325	17 875 000	9 741 875	196	10 780 000	5 875 100	271	14 905 000	8 123 225
Breast beef with sour tofu	55 000	29 975	54.50%	223	12 265 000	6 684 425	115	6 325 000	3 447 125	184	10 120 000	5 515 400
Breast goat	55 000	29 975	54.50%	589	32 395 000	17 655 275	196	10 780 000	5 875 100	453	24 915 000	13 578 675
Chicken leg	55 000	29 975	54.50%	287	15 785 000	8 602 825	212	11 660 000	6 354 700	287	15 785 000	8 602 825

Crab	55 000	29 975	54.50%	311	17 105 000	9 322 225	411	22 605 000	12 319 725	245	13 475 000	7 343 875
Goat meat	55 000	29 975	54.50%	492	27 060 000	14 747 700	279	15 345 000	8 363 025	409	22 495 000	12 259 775
Gochujang pork belly	55 000	29 975	54.50%	345	18 975 000	10 341 375	0	0	0	321	17 655 000	9 621 975
Nem nuong	55 000	29 975	54.50%	183	10 065 000	5 485 425	0	0	0	198	10 890 000	5 935 050
Octopus	55 000	29 975	54.50%	296	16 280 000	8 872 600	591	32 505 000	17 715 225	251	13 805 000	7 523 725
Oyster	55 000	29 975	54.50%	353	19 415 000	10 581 175	583	32 065 000	17 475 425	285	15 675 000	8 542 875
Pork barbecue	55 000	29 975	54.50%	386	21 230 000	11 570 350	212	11 660 000	6 354 700	375	20 625 000	11 240 625
Pork belly	55 000	29 975	54.50%	412	22 660 000	12 349 700	196	10 780 000	5 875 100	392	21 560 000	11 750 200
Pork belly with bulgogi sauce	55 000	29 975	54.50%	263	14 465 000	7 883 425	167	9 185 000	5 005 825	230	12 650 000	6 894 250
Pork cheek meat	55 000	29 975	54.50%	234	12 870 000	7 014 150	106	5 830 000	3 177 350	189	10 395 000	5 665 275
Pork ribs	55 000	29 975	54.50%	384	21 120 000	11 510 400	149	8 195 000	4 466 275	355	19 525 000	10 641 125
Pork ribs with honey	55 000	29 975	54.50%	296	16 280 000	8 872 600	112	6 160 000	3 357 200	263	14 465 000	7 883 425

Pork shoulder with bulgogi sauce	55 000	29 975	54.50%	308	16 940 000	9 232 300	164	9 020 000	4 915 900	277	15 235 000	8 303 075
Roast chicken	55 000	29 975	54.50%	205	11 275 000	6 144 875	0	0	0	149	8 195 000	4 466 275
Roast duck	55 000	29 975	54.50%	128	7 040 000	3 836 800	0	0	0	105	5 775 000	3 147 375
roast rack	55 000	29 975	54.50%	154	8 470 000	4 616 150	0	0	0	136	7 480 000	4 076 600
roast suckling pig	55 000	29 975	54.50%	137	7 535 000	4 106 575	0	0	0	111	6 105 000	3 327 225
Roast-prim ribs	55 000	29 975	54.50%	219	12 045 000	6 564 525	0	0	0	220	12 100 000	6 594 500
Set: beef	219 000	108 405	49.50%	125	27 375 000	13 550 625	24	5 256 000	2 601 720	69	15 111 000	7 479 945
Set: pork	219 000	108 405	49.50%	109	23 871 000	11 816 145	37	8 103 000	4 010 985	73	15 987 000	7 913 565
Set: seafood	229 000	113 355	49.50%	98	22 442 000	11 108 790	293	67 097 000	33 213 015	68	15 572 000	7 708 140
Shrimp	55 000	29 975	54.50%	468	25 740 000	14 028 300	745	40 975 000	22 331 375	383	21 065 000	11 480 425
Skirt meat	55 000	29 975	54.50%	209	11 495 000	6 264 775	132	7 260 000	3 956 700	109	5 995 000	3 267 275
Spicy sauce makchang	55 000	29 975	54.50%	106	5 830 000	3 177 350	0	0	0	94	5 170 000	2 817 650
Spicy squid	55 000	29 975	54.50%	461	25 355 000	13 818 475	689	37 895 000	20 652 775	459	25 245 000	13 758 525

Venison	55 000	29 975	54.50%	527	28 985 000	15 796 825	253	13 915 000	7 583 675	487	26 785 000	14 597 825
Wine pork belly	55 000	29 975	54.50%	193	10 615 000	5 785 175	71	3 905 000	2 128 225	199	10 945 000	5 965 025
Vegetable/Salad												
Chicken salad	60 000	40 200	67.00%	125	7 500 000	5 025 000	0	0	0	74	4 440 000	2 974 800
Coconut salad	60 000	40 200	67.00%	237	14 220 000	9 527 400	214	12 840 000	8 602 800	189	11 340 000	7 597 800
Kim chi	60 000	45 000	75.00%	269	16 140 000	12 105 000	294	17 640 000	13 230 000	223	13 380 000	10 035 000
Lotus salad	60 000	40 200	67.00%	227	13 620 000	9 125 400	232	13 920 000	9 326 400	197	11 820 000	7 919 400
Sauted water spinach	60 000	44 100	73.50%	579	34 740 000	25 533 900	412	24 720 000	18 169 200	473	28 380 000	20 859 300
Okra	25 000	17 250	69.00%	1 535	38 375 000	26 478 750	827	20 675 000	14 265 750	1 289	32 225 000	22 235 250
Egg plant	25 000	17 250	69.00%	618	15 450 000	10 660 500	410	10 250 000	7 072 500	573	14 325 000	9 884 250
Corn	25 000	17 250	69.00%	697	17 425 000	12 023 250	395	9 875 000	6 813 750	596	14 900 000	10 281 000
Mushroom	25 000	17 250	69.00%	784	19 600 000	13 524 000	459	11 475 000	7 917 750	592	14 800 000	10 212 000

Bell pepper	25 000	17 250	69.00%	527	13 175 000	9 090 750	284	7 100 000	4 899 000	323	8 075 000	5 571 750
Noodle/Rice												
Bibimbap	80 000	55 600	69.50%	287	22 960 000	15 957 200	127	10 160 000	7 061 200	206	16 480 000	11 453 600
Spaghetti	90 000	60 300	67.00%	113	10 170 000	6 813 900	91	8 190 000	5 487 300	96	8 640 000	5 788 800
Spicy Buckwheat noodles	99 000	62 865	63.50%	385	38 115 000	24 203 025	143	14 157 000	8 989 695	297	29 403 000	18 670 905
Vermicelli noodle with beef	99 000	62 865	63.50%	341	33 759 000	21 436 965	184	18 216 000	11 567 160	301	29 799 000	18 922 365
Hotpot												
Bulgogi hotpot	239 000	119 500	50.00%	236	56 404 000	28 202 000	51	12 189 000	6 094 500	196	46 844 000	23 422 000
Kimchi hotpot	239 000	119 500	50.00%	246	58 794 000	29 397 000	63	15 057 000	7 528 500	183	43 737 000	21 868 500

Seafood hotpot	259 000	129 500	50.00%	385	99 715 000	49 857 500	481	124 579 000	62 289 500	397	102 823 000	51 411 500
Spicy sour hotpot	259 000	129 500	50.00%	327	84 693 000	42 346 500	509	131 831 000	65 915 500	319	82 621 000	41 310 500
Noodle	30 000	15 000	50.00%	257	7 710 000	3 855 000	142	4 260 000	2 130 000	204	6 120 000	3 060 000
Vegetable	30 000	15 000	50.00%	243	7 290 000	3 645 000	193	5 790 000	2 895 000	189	5 670 000	2 835 000
Dessert												
Tiramisu	79 000	38 710	49.00%	309	24 411 000	11 961 390	221	17 459 000	8 554 910	226	17 854 000	8 748 460
Strawberry Panna Cotta	19 000	9 310	49.00%	326	6 194 000	3 035 060	216	4 104 000	2 010 960	304	5 776 000	2 830 240
Kiwi Panna Cotta	19 000	9 310	49.00%	395	7 505 000	3 677 450	207	3 933 000	1 927 170	384	7 296 000	3 575 040
Raspberry Panna Cotta	19 000	9 310	49.00%	364	6 916 000	3 388 840	234	4 446 000	2 178 540	361	6 859 000	3 360 910
Mixed fruit	49 000	24 990	51.00%	483	23 667 000	12 070 170	486	23 814 000	12 145 140	467	22 883 000	11 670 330
Drinks												

<i>Soft drink</i>												
Cocacola	23 000	16 560	72.00%	278	6 394 000	4 603 680	128	2 944 000	2 119 680	296	6 808 000	4 901 760
Fanta	23 000	16 560	72.00%	184	4 232 000	3 047 040	70	1 610 000	1 159 200	192	4 416 000	3 179 520
Sprite	23 000	16 560	72.00%	145	3 335 000	2 401 200	39	897 000	645 840	129	2 967 000	2 136 240
Soda	23 000	16 560	72.00%	110	2 530 000	1 821 600	12	276 000	198 720	81	1 863 000	1 341 360
<i>Juice</i>												
Orange juice	27 000	18 765	69.50%	272	7 344 000	5 104 080	340	9 180 000	6 380 100	243	6 561 000	4 559 895
Passion fruit juice	27 000	18 360	68.00%	294	7 938 000	5 397 840	308	8 316 000	5 654 880	261	7 047 000	4 791 960
Watermelon juice	27 000	18 225	67.50%	186	5 022 000	3 389 850	204	5 508 000	3 717 900	179	4 833 000	3 262 275
Lime juice	22 000	17 820	81.00%	284	6 248 000	5 060 880	296	6 512 000	5 274 720	219	4 818 000	3 902 580
Carror juice	31 000	23 560	76.00%	194	6 014 000	4 570 640	194	6 014 000	4 570 640	137	4 247 000	3 227 720

<i>Spirit</i>												
So-ju	95 000	46 550	49.00%	384	36 480 000	17 875 200	198	18 810 000	9 216 900	285	27 075 000	13 266 750
Vodka Alligator	85 000	41 650	49.00%	123	10 455 000	5 122 950	49	4 165 000	2 040 850	113	9 605 000	4 706 450
Vodka Standard	399 000	195 510	49.00%	187	74 613 000	36 560 370	53	21 147 000	10 362 030	147	58 653 000	28 739 970
Champagne	228 000	111 720	49.00%	129	29 412 000	14 411 880	0	0	0	96	21 888 000	10 725 120
<i>Beer</i>												
Heineken	35 000	22 750	65.00%	446	15 610 000	10 146 500	216	7 560 000	4 914 000	289	10 115 000	6 574 750
Tiger	32 000	20 800	65.00%	482	15 424 000	10 025 600	207	6 624 000	4 305 600	374	11 968 000	7 779 200
333	30 000	19 500	65.00%	286	8 580 000	5 577 000	134	4 020 000	2 613 000	195	5 850 000	3 802 500
TOTAL				25 965	1 783 473 000	989 134 570	16 333	1 097 619 000	609 994 405	21 828	1 486 309 000	823 366 035