EVALUATION GUIDELINES - Written examination

EXC 21221
Strategic Management Accounting

Department of Accounting, Auditing and Law

Start date:	04.06.2015	Time 09:00
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For more information about formalities, see examination paper.

Case 1 Creative Accounting AS - part one (40%)

In the spring of 2015, two BI students decided to start their own company, after having attended the bachelor's program in Accounting and Auditing as well as gaining the necessary practice working part-time in an accounting firm, while studying. With these acquired pre-requisites, The Financial Supervisory Authorities of Norway ("Finanstilsynet") gave the two entrepreneurs the necessary approvals to start an accounting firm in Oslo.
The company, named Creative Accounting AS, was established in June 2015 with a share capital of kr 100 000 and was set up to be ready to commence its operations from July 1st, 2015. The services and technological solutions of the new company were already marketed some months before the company was formally founded, and offers were sent to 14 small and medium sized companies. By the time the company had obtained the authorization as an accounting firm, 10 of these companies had accepted the offers, securing a certain future incoming cash flow.

According to the contracts, Creative Accounting AS charge their fees based on actual time consumption and an hourly rate of kr 800 per hour (excluding 25% VAT). In the beginning, the two owners will manage without employees and expect to spend much of their time with marketing and administrative tasks, which means that the available capacity is limited to approximately a total of 200 hours per month, which entails a monthly revenue of maximum 160 000.
There will though be some excess capacity in the first few months, and the budgeted number of hours from the 10 contracts are:

July:	120 hours
August:	140 hours
September:	160 hours
October:	180 hours
November:	180 hours
December:	160 hours

The company plans to invoice their customers monthly, based on actual time consumption. Invoices will be sent to the clients one of the first days of the month on the basis of time recorded the previous month. According to Norwegian GAAP, this is recognized as accrued income in the same period as the work is done. The credit period is 20 days, which means that we can expect that work carried out in one month is paid for by the end of the following month.

The two owners have decided to pay themselves 55% of the net monthly revenues in salaries. These will be taken to cost the same month as the corresponding revenues are recorded (the matching principle), but the salaries are paid to the owners early the following month, and will therefore first be regarded as accrued salaries, which are reversed and *replaced by actual salary cost* the month thereafter.
According to this accounting principle, 55% of the accounting fees in October are recorded as accrued salaries in October, while they are treated and reported as actual salary costs in November.
On top of the salaries, similar accruals are made for 12.0% holiday pay (to be paid out in June 2016) and the employer's contribution to the social security system, which is 14.1% of salaries and accrued holiday pay.
The social security costs for salaries *reported* in July and August are paid 15th September, while 15th November is the due date for salaries reported in September and October.
According to this accounting principle, 12.0% of the accrued salaries for October are also accrued as accrued holiday pay same month, and in addition an accrual of 14.1% social security both on the salaries as well as the accrued holiday pay are made.

In addition to the personnel costs, some other costs will occur the first six months of the operation:
IT hardware Cost kr 70 000 ex 25% VAT, to be paid in July and depreciated over 36 months

IT software	Cost kr 25 000 ex 25% VAT, to be paid and expensed in July
Equipment/furniture	Cost kr 25 000 ex 25% VAT, to be paid and expensed in July
Office rent	Monthly cost of kr 7 000 ex 25% VAT, to be paid in the beginning of each quarter, three months advance, first time 1st July 2015.
Telephones	Monthly cost of kr 2 500 ex 25% VAT, invoiced from July 2015 onwards, 30 days credit
Travel costs	Car compensation costs of kr 1 500 per month (VAT exempt) to be paid the month the cost occur, from July 2015 onwards
Supplies and misc.	Monthly cost of kr 2 500 ex 25% VAT, invoiced from July 2015 onwards, 30 days credit

The company will be VAT-registered from July 2015 and the first payable VAT term is 10th October 2015 for July and August. Payable VAT for September and October is due 10th December 2015.

Question a (20%)

Present a projected monthly income statement, based on the assumptions from the above financial planning.

We calculate the total personnel costs using the following formula: (Sales income * 0.55)*1.12*1.141
If sales income is 940 hours * 800 = 752 000, the total personnel costs must be 528 548.
In order to simplify the cash flow calculations we should split the various cost items as follows:

	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015	Total
Sales income	96 000	112 000	128 000	144 000	144 000	128 000	**752 000**
Accrued salaries	52 800	61 600	70 400	79 200	79 200	70 400	**413 600**
Reversed accrued salaries	0	-52 800	-61 600	-70 400	-79 200	-79 200	**-343 200**
Booked/reported salaries	0	52 800	61 600	70 400	79 200	79 200	**343 200**
Accrued holiday pay	6 336	7 392	8 448	9 504	9 504	8 448	**49 632**
Accrued social sec holiday pay	893	1 042	1 191	1 340	1 340	1 191	**6 998**
Accrued social security costs	7 445	8 686	9 926	11 167	11 167	9 926	**58 318**
Reversed accr. soc. security	0	-7 445	-8 686	-9 926	-11 167	-11 167	**-48 391**
Booked social security	0	7 445	8 686	9 926	11 167	11 167	**48 391**
Depreciation IT hardware	1 944	1 944	1 944	1 944	1 944	1 944	**11 667**
IT software	25 000	0	0	0	0	0	**25 000**
Equipment and furniture	25 000	0	0	0	0	0	**25 000**
Other operating costs	13 500	13 500	13 500	13 500	13 500	13 500	**81 000**
Monthly profit/loss	**-36 919**	**17 836**	**22 590**	**27 344**	**27 344**	**22 590**	**80 786**

To reduce the financial risk, the two entrepreneurs defined in their company plan two targets for the monthly balance of the company's checking account:

- The balance at the end of the month shall never be less than kr 100 000
- The balance at the end of December should not be less than kr 400 000

The owners can borrow money from a family member of one of the founders, but this person needs to know already in June:

- How much money she needs to set aside for this
- And if it is possible to split this funding into two or more loans paid over the six-month period

Question b (20%)

Present a monthly cash flow projection and use this as a basis to calculate the need for external funding, both the total amount and when funds must be transferred to the company.

Calculation of VAT terms

	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015
Sales income	96 000	112 000	128 000	144 000	144 000	128 000
25% output VAT	24 000	28 000	32 000	36 000	36 000	32 000
Costs with deductible VAT	132 000	12 000	12 000	12 000	12 000	12 000
25% input VAT	33 000	3 000	3 000	3 000	3 000	3 000
Payable VAT	-9 000	25 000	29 000	33 000	33 000	29 000
VAT terms		16 000		62 000		62 000

Cash flow forecasting without external funding

	July	August	September	October	November	December
Opening balance	100 000	-77 750	-18 300	+44 905	84 505	158 953
Payments from customers	0	120 000	140 000	160 000	180 000	180 000
Paid salaries	0	52 800	61 600	70 400	79 200	79 200
Paid social security costs	0	0	7 445	0	18 612	0
Paid for various investments	150 000	0	0	0	0	0
Paid rent	26 250	0	0	26 250	0	0
Paid VAT	0	0	0	16 000	0	62 000
Paid phones, supplies and misc.	0	6 250	6 250	6 250	6 250	6 250
Paid travel costs	1 500	1 500	1 500	1 500	1 500	1 500
This period's cash flow	-177 750	+59 450	+63 205	+39 600	+74 438	+31 050
Closing balance before loan	**-77 750**	**-18 300**	**+44 905**	**84 505**	**+158 953**	**189 993**

If the target is to have kr 400 000 at the bank account at the end of the period, we would need an external funding of 400 000 – 189 993 = 210 007, but in order to fully answer the questions asked we also need to find out *when* the transfers shall take place.

Cash flow forecasting with external funding

	July	August	September	October	November	December
Opening balance	100 000	100 000	159 450	222 655	262 255	336 693
Cash flow before loan	-177 750	+59 450	+63 205	+39 600	+74 438	+31 050
Private loans	177 750	0	0	0	0	32 257
Closing balance	**100 000**	**159 450**	**222 655**	**262 255**	**336 693**	**400 000**

Conclusion
To ensure that the balance of the checking account never shall be less than kr 100 000, the company will right after start-up need kr 177 750. After that the balance of the bank account will gradually pick up, but an additional loan of kr 32 257 is required in December 2015.

Comment
This case covers topics covered in the textbook chapter 10, the lecturing sessions nos. four and five and shares much of its structure with case Diginova, which was the main topic of lecturing session no. 14

Case 2 Creative Accounting AS – part two (30%)

The two owners of Creative Accounting AS contacted a consulting firm in the spring of 2015, before the company was formally established, to discuss business strategy and to design a strategy plan for the period from 2015 to 2018. Below you will find *the summary* of the strategy document.

1.0 Strategy for 2015-2018, a summary

We have seen an annual average growth in the market for accounting services the last years of approximately 5%. The growth is not due to an increase of the volume of hours to be billed to the around 250 000 companies that choose to use a chartered accounting company, but is actually an increase in prices per worked hour. This is interesting, because it shows that the accountants have been able gradually to charge more for their work. We may also assume that good accountants can charge more than average industry rate per hour and Creative Accounting AS shall therefore be positioned in segments of the market where price is not the only competition factor. High standards of accounting quality and good technological solutions are the most important things to strive for, because this will have a strong long-term positive impact on financial performance.
Equally important as high hourly rates is a high ratio of hours to be billed to the customers. Best practice suggests 90% invoice ratio, leaving only 10% for administrative tasks and training.

The best way to get clients that are willing to pay more than average is to utilize and further develop competitive cutting-edge technology. With the ERP system *Cloud Accounting* we are able to design a fully digitalized handling of all accounting transactions, as well as adapting the communication platform to our clients' organization in a way that it allows the users to share accounting information in an efficient way. We will though not be successful in implementing this technology before all our clients are using the function called *SmartTable*, where all users (management and employees) can hook up to the accounting database using iPads or other touch sensitive screens.

An interesting market segment is subsidiaries or branches of international companies in Norway, because these entities are often a part of big group of companies with much experience and competence to share with us. We will learn from having the most professional clients!

By the end of 2018, Creative Accounting AS should have 10 full-time employees and an annual sales income of 15 mill kroner. 40% of our clients should have international owners. Such growth will require lot of marketing, sales and administrative resources and we should not expect that the company would be particularly profitable in this first growing phase. Because we have limited funding, the costs for growing must be funded along the way from our daily business activities. We should though make sure that we have a least a 5% bottom line profit each year and adjust our strategic ambitions and corresponding activity plans accordingly. This will probably not be possible if we spend more than 60% of our costs in salaries and other personnel costs.

We will not be able to keep our clients and build up a good reputation without recruiting accountants that are willing to develop their own competence and skills along with the clients. We think that documented previous learning is the best way to predict future learning capacity and motivation, and good business school grades are therefore crucial. On the other side, Creative Accounting AS should try to make the company a good place to work and build careers, regardless of age and experience. We need to recruit accountants with good language skills in other languages than Norwegian and English and all accountants must from their second year in the company, be able to take sole responsibilities for all year-ending procedures for their clients, including their tax returns.
It will take a long time, probably 10-15 years, before Creative Accounting AS plays in the big league, and we will have to redesign our strategies many times before we get there and can see the fruits of our ambitions, paired with our joint competence. This strategy will give us guidelines for our start-up phase and take us one our first journey together.

Question a (10%)

Based on the information in this strategy summary, what are the factors that are critical for achieving the company's overall financial goals? Place these factors in relevant strategic perspectives.

We can extract the following critical success factors from the strategy summary:

The financial perspective:	Higher hourly fees than market average Control over total costs (< 95% of revenues) Control over personnel costs (< 60% of costs)
The customer/market perspective:	Securing a high sales growth rate (from 0 to 15 mill in 42 months) Finding new international clients (40% should belong to an international group of companies)
The internal processes perspective:	A high ratio of hours billed to customers (< 90%) Procedures for high quality accounting standards Develop technology together with clients Getting all customers to use SmartTable
The infrastructural perspective:	Recruiting motivated accountants Recruiting accountants with proficiency in two foreign languages Recruiting accountants with high academic scores Recruiting accountants with competence or learning potentials in year-ending/tax issues

Question b (10%)

What is a Key Performance Indicator and what are the characteristics of a well-defined KPI? Which of the critical success factors in Creative Accounting AS' strategy plan do you think could be most difficult to measure in a Balance Scorecard model?

A Key Performance Indicator is a parameter that measures the degree of success in one particular area that is considered critical for our ability to succeed. The KPIs must therefore have a strong link to the factors we need to gain control over in order to reach our overall goals. A well-functioning KPI is valid, because it measures what we want to achieve, and reliable, because we can use consistent data over time.

In general, financial KPIs are often easier to measure than non-financial ones, because the KPI is identical or similar to the success factor itself. This is also the case with some of the KPIs with the customer/market perspective and internal process perspective.
Measuring quality, technological development, motivation and competence are generally more difficult, because we face a problem already when we need to set specific goals, what is for instance good quality? How can we measure competence and motivation among the workforce?

Question c (10%)

Explain why cost driver and value chain analyses may be useful tools to aid the company in its future planning for increased value creation. Present examples of what such analyses may reveal.

Traditional costing models are not suited to be explain how and why resources are spent and how values are created, and they are often one-periodical and do not focus on how some areas require attention over a long period.
A cost driver is a factor that determines the level of cost and a cost driver analysis can be carried out both on an overall level, where we look at the company as one joint cost object, or on an activity and/or process level, where the goal is to find the link between what we do and what it costs us.
A cost driver analysis may for instance reveal:

- That we have more economies of scale potential
- The costs of excess capacity
- How well-functioning the production systems and routines are
- That there is a degree of variability between activity level and costs, because not all cost drivers can explain volume-based relationships
- That a high diversity of products and services offered in the market may create costs that are difficult to cover

Value creation, in a business setting, happens when one or more activities add value to a product or service in a way that customers are willing and able to pay more. Value creating activities are there activities that add to the value of what we offer to the market.
In general, we can group activities in a value chain in two; primary and supporting activities. The primary activities add value from suppliers through production to customers, while supporting activities are within functions that do not add value as such to the end product, but are necessary for the primary activities to function well (such as administration, procurement, ICT and research and development). These supporting activities are therefore more value bearing as value creating.
A value chain analysis may for instance reveal:

- That one or more activities that are carried out are neither asked for by the customers nor are necessary for internal purposes. The activities are in the lean-philosophy often referred to as "muda type 2" (the avoidable waste).
- That standardized processes are inefficiently laid out, for instance because too much of the process cycle time is spent on activities that are not value creating or value-bearing, but could be considered as waste.
- That the primary activities are not efficient enough, they add to value, but with a low operational efficiency.

Comment

The solutions to questions a, b and c must be regarded as *indicative*, and do not contain all relevant aspects to consider in these areas. Because the case counts for 30%, we expect the students to spend around 90 minutes with these problems, and a good solution will therefore normally be more comprehensive than the above suggestions.

This part of the Creative Accounting case covers topics covered in the textbook chapter two, as well as the chapter from Garrison, Noreen and Brewer. In addition, Shank and Govindarajan's article is relevant, and topics covered in lecturing sessions nos. one, two, three and seven. The case also shares much of its structure with case La Brasserie France (questions a and b), which was covered in lecturing session no. three. Question c is almost identical to exercise no. 19.

Case 3 Alpenmilch Schokoladefabrik AG (30%)

In the little Swiss village Waldteufel, you will find the small family-owned chocolate factory Alpenmilch, established in 1913. After a downsizing process, the company has decided to produce only three products from January 2016 onwards:

- The 100 gram milk chocolate bar, called *Schneewittchen*
- The 100 gram 50% cocoa dark chocolate with hazelnut bar, called *Edelweiss*
- The 100 gram 70% cocoa dark chocolate with roasted fruits and chili, called *Matador*

These products are not produced simultaneously, but one product at a time in a given production series. A standard production series for all three products is 1 000 kilos of finished product (10 000 units of 100 gram chocolate). The cost objects in the further analysis are one series of each of the three products. The company has so far used a traditional costing model, where the indirect production costs are allocated to the three products using expected production time as cost driver for the allocation rate used.

We have the following data from the 2016 budgets:

	10 000 units of 100 gram Schneewittchen	10 000 units of 100 gram Edelweiss	10 000 units of 100 gram Matador
Planned production 2016	800 production series	500 production series	200 production series
Direct labor rate per hour	CHF 25.00	CHF 25.00	CHF 25.00
Standard production time	80 hours	120 hours	140 hours
Direct material costs	CHF 2 400	CHF 2 600	CHF 3 200
Packaging costs	CHF 600	CHF 600	CHF 600

The total planned production in 2016 is therefore (800 * 10 000) + (500 * 10 000) + (200 * 10 000) = 15 million 100 gram chocolates.

The budgeted indirect costs for 2016 in cost center Production are CHF 1 216 000, excluding facility costs, which are treated as non-assignable costs.

The company has negotiated sales prices for 2016 with the two Swiss distributors Migros and COOP as follows:

Schneewittchen	CHF 0.80 per unit
Edelweiss	CHF 1.00 per unit
Matador	CHF 1.00 per unit

The total budgeted sales income in 2016 is therefore (800 * 10 000 * 0.80) + (500 * 10 000 * 1.00) + (200 * 10 000 * 1.00) = CHF 13.4 mill.

Question a (10%)

Present a costing model for each of the two products showing budgeted production costs for each standard production series as well as production costs for each unit of 100-gram chocolate.
You should also show how much is left in the 2016 budgets to cover facility costs, sales and administration costs as well as profits.

The traditional costing model bases on indirect production costs allocated to the three cost objects according to production time:

Budgeted production time in 2016:	(800 * 80) + (500 * 120) + (200 * 140) = 152 000 hours
Budgeted indirect production costs:	CHF 1 216 000
Allocation rate, indirect costs:	1 216 000/152 000 = CHF 8.00 per hour

The costing model will then look as follows:

	10 000 units of 100 gram Schneewittchen	10 000 units of 100 gram Edelweiss	10 000 units of 100 gram Matador
Direct labor costs	25 * 80 = CHF 2 000	25 * 120 = CHF 3 000	25 * 140 = CHF 3 500
Direct material costs	CHF 2 400	CHF 2 600	CHF 3 200
Packaging costs	CHF 600	CHF 600	CHF 600
Indirect prod. costs	8 * 80 = CHF 640	8 * 120 = CHF 960	8 * 140 = CHF 1 120
Total production costs	CHF 5 640	CHF 7 160	CHF 8 420

Production costs for each unit of 100-gram chocolate:

Schneewittchen:	CHF 5 640/10 000 = CHF 0,564
Edelweiss:	CHF 7 160/10 000 = CHF 0,716
Matador:	CHF 8 420/10 000 = CHF 0,842

To cover costs for facilities, sales and administration as well as profits:

Schneewittchen:	Per unit: 0.800 - 0.564 = 0.236	Total 0.236 * (800*10 000) = CHF 1 888 000
Edelweiss:	Per unit: 1.000 - 0.716 = 0.284	Total 0.284 * (500*10 000) = CHF 1 420 000
Matador:	Per unit: 1.000 - 0.842 = 0.158	Total 0.158 * (200*10 000) = CHF 316 000
Total contribution:	CHF 3 624 000	

The company wants to replace the current calculation model with a more sophisticated one and has started to analyze the how the different production activities consume resources that together makes up the total assignable indirect production costs of CHF 1 216 000. An external consulting firm was brought in to analyze activities and processes and their report concludes with the following picture of the activity costs:

Activities	Activity costs	Activity frequency Schneewittchen	Activity frequency Edelweiss	Activity frequency Matador
Machine calibration	CHF 420 000	220 adjustments	180 adjustments	300 adjustments
Procurement	CHF 240 000	120 purchases	120 purchases	160 purchases
Production	CHF 256 000	2 800 machine hours	4 000 machine hours	6 000 machine hours
Maintenance	CHF 300 000	120 service jobs	160 service jobs	220 service jobs

The activity frequency above refers to how many times it is expected that the activities are carried out for the whole planned production in 2016.
We may assume that all of the indirect production costs are fixed in this one-periodic cost analysis.

Question b (10%)

Revise your costing models with the new information from the activity studies. Comment on the differences and explain why Activity Based Costing may contribute to giving managers better support for their decisions.

Calculation of activity rates:

Machine calibration	CHF 420 000/(220 + 180 + 300) = CHF 600 per adjustment job
Procurement	CHF 240 000/(120 + 120 + 160) = CHF 600 per purchase order
Production	CHF 256 000/(2 800 + 4 000 + 6 000) = CHF 20 per machine hour
Maintenance	CHF 300 000/(120 + 160 + 220) = CHF 600 per maintenance job

The revised costing model will then look as follows:

	10 000 units of 100 gram Schneewittchen	10 000 units of 100 gram Edelweiss	10 000 units of 100 gram Matador
Direct labor	25 * 80 = CHF 2 000	25 * 120 = CHF 3 000	25 * 140 = CHF 3 500
Direct material	CHF 2 400	CHF 2 600	CHF 3 200
Packaging	CHF 600	CHF 600	CHF 600
Machine calibr.	(220 * 600)/800 = CHF 165	(180 * 600)/500 = CHF 216	(300 * 600)/200 = CHF 900
Procurement	(120 * 600)/800 = CHF 90	(120 * 600)/500 = CHF 144	(160 * 600)/200 = CHF 480
Production	(2 800 * 20)/800 = CHF 70	(4 000 * 20)/500 = CHF 160	(6 000 * 20)/200 = CHF 600
Maintenance	(120 * 600)/800 = CHF 90	(160 * 600)/500 = CHF 192	(220 * 600)/200 = CHF 660
Total prod. costs	CHF 5 415	CHF 6 912	CHF 9 940

Cost analysis

Let us first check that we have allocated all the assignable costs:

Schneewittchen	(165 + 90 + 70 + 90) * 800 = CHF 332 000
Edelweiss	(216 + 144 + 160 + 192) * 500 = CHF 356 000
Matador	(900 + 480 + 600 + 660) * 200 = CHF 528 000
Total	392 000 + 356 000 + 528 000 = 1 276 000

We can then compare how costs are allocated differently in the two models:

Product	Traditional costing model	ABC costing model	Difference
Schneewittchen	640 * 800 = 512 000	332 000	-180 000
Edelweiss	360 * 500 = 480 000	356 000	-124 000
Matador	1 120 * 200 = 224 000	528 000	+304 000
Total	CHF 1 216 000	CHF 1 216 000	CHF 0

With the ABC-model we have introduced a costing system that bases on four cost-drivers instead of one volume-based. Consequently, we are able to allocate costs that occur because of activities actually carried out. The activities machine calibration and procurement are not volume based, but series based cost drivers, where the costs are the same regardless of how much we produce in each series.
Because Matador is a complex low volume product, we see that we carry out more costly activities per production series than with the two other chocolates. As a consequence, the costs per unit turns out to be CHF 9 940/10 000 = CHF 0,994, and considering the fact that the company gets CHF 1,00 per unit from their two distributors there is not much left to cover facility costs, sales and administration and profits.
ABC models will give better support to decision makers, because the model better emulates the real situation. The disadvantages are that we need to log all the activities that carried out by the production team and analyze their time consumption.

Question c (10%)

Assume that there for each of the four activities in the Production Department that make up the total assignable indirect costs of CHF 1 216 000 are excess capacity, and that the budgeted activity frequencies above only represent 80% of *available capacity*.
Calculate the cost of excess capacity under these new assumptions (total indirect costs remaining unchanged) and describe strategies the company can make to reduce such costs in the future.

Under these new assumptions the situation will be as follows:

Activities	Activity costs	Budgeted activity level	Available activity level	Excess capacity
Machine calibration	CHF 420 000	700 adjustments	875 adjustments	175 adjustments
Procurement	CHF 240 000	400 purchases	500 purchases	100 purchases
Production	CHF 256 000	12 800 machine hrs	16 000 machine hrs	3 200 machine hrs
Maintenance	CHF 300 000	500 service jobs	625 service jobs	125 service jobs

<u>Calculation of new activity rates:</u>
Machine calibration CHF 420 000/875 = CHF 480 per adjustment job
Procurement CHF 240 000/500 = CHF 480 per purchase order
Production CHF 256 000/16 000 = CHF 16 per machine hour
Maintenance CHF 300 000/625 = CHF 480 per maintenance job

<u>Calculation of costs of excess capacity:</u>
Machine calibration CHF 480 * 175 = CHF 84 000
Procurement CHF 480 * 100 = CHF 48 000
Production CHF 16 * 3 200 = CHF 51 200
Maintenance CHF 480 * 125 = CHF 60 000

Total CHF 243 200 (20.00%)

To reduce costs for excess capacity, the company may consider one or more of the following strategies:

- To plan for future growth (within the limits of the available capacity)
- To try to make parts of the activity costs variable, by for instance outsourcing activities to an supplier
- To find alternative uses within the company for the resources that are in excess
- To find alternative uses outside of the company for the resources that are in excess, such as producing for other companies (competitors)

Comment

This case covers topics covered in the textbook chapter five, the lecturing sessions nos. nine and ten and shares much of its structure with exercises nos. 22, 24 and 25, which were covered in lecturing sessions nos. nine and ten.