

Exam assignment The Academy Profession Degree Programme in Marketing Management,
2nd semester, exam in topics 4 and 5

AP in Marketing Management

1st external case exam – Written cross-disciplinary exam

Written exam 11 January 2017, from 8.30 to 14.30

Contacting the case company is not allowed

The test consists of four different assignments. In the overall assessment of the answer, the four assignments are weighted as follows:

Assignment 1: 20%

Assignment 2: 50%

Assignment 3: 10%

Assignment 4: 20%

Total: 100%

The assignment totals 8 pages, including cover page and appendices

6-hour exam



Assignment 1: Law (20%)

In 2004, a customer bought an ABC wood stove manufactured by HWAM at the wood stove specialist store Kronjyllands Pejsecenter and installed it in his summer cottage. At Christmas 2015 his wife died of malignant lung cancer and shortly after he was diagnosed with the lung disease COPD (chronic obstructive pulmonary disease). Working with statistics the customer knew that wood stoves cause hundreds of Danes to die every year.

Question 1.1: List the different types of product liability; which of these could be relevant in this case?

Question 1.2: Which circumstances could make Kronjyllands Pejsecenter liable to pay damages?

Assignment 2: Marketing (50%)

HWAM recently brought the wood stove into the digital age. Using a smart phone or a tablet the owner is now able to control his wood stove so that it keeps up a constant temperature. Thanks to the new technology the wood stove also consumes less firewood and discharges less particles. In other words, this solution is cost-saving for the owner and less hazardous for the environment. With the new technology, HWAM has demonstrated that there are practically no limits to what can be digitalised.

The new technology has relieved the wood stove owner of the cumbersome task of constantly having to adjust the stove in order to obtain a pleasant room temperature. All he has to do is to stoke more firewood when the Autopilot tells him to.

In order to maximise the benefits of the new app, HWAM recommends that it is used together with one of their wood stoves featuring the new Autopilot IHS™.

HWAM wants to run a campaign that will enable the distributors to increase the sale of HWAM Autopilot IHS2™ boxes that are sold as an optional accessory for the new wood stove. As marketing account manager with HWAM you have been asked to plan a campaign of this nature:

Using the distributor level as your point of departure, select a specific B2B target group for the HWAM Autopilot IHS2™ box and then develop a relevant parameter mix, offering detailed arguments, and propose a marketing plan for 2017, listing the activities you would recommend for Denmark.

Prerequisites:

- The IHS2™ box is an option which can be used as an accessory with 80% of HWAM's product range.
- It is assumed that the contribution ratio is 50% of HWAM's sales price.

Facts about the HWAM IHS box and app control

HWAM Autopilot IHS2™ (Intelligent Heat System) is a brand new solution that you can use to control the temperature of your wood stove using an app on your smartphone. Select the desired temperature level for the room using your smartphone. Your mobile then transmits a signal to an airbox which controls the air volume at the bottom of the stove.

The app automatically sends a message to your smartphone when it is time re-stoke. This way the fire will not go out for you with the result that you will have to kindle the fire all over again. Kindling a fire in an IHS wood stove is no different from a standard wood stove.

Advantages:

- Easy and simple temperature control
- Automatic notification to re-stoke
- Up to 50% savings on wood consumption (tested by Technological Institute)
- Combustion history
- To be used on all smartphones or tablets with Bluetooth

All HWAM stoves already now come with Autopilot which ensures a steady temperature but IHS gives you the optimum electronic solution.

The IHS2™ box sits in the lowest part of the stove and controls the air feed by means of three air inlets (primary, secondary and tertiary). As an example of its acknowledgement, this automatic solution was appointed winner of the 2016 technology award presented by the Confederation of Danish Industry (DI) following detailed testing by Technological Institute. They found that the IHS box results in overall firewood savings of up to 50 per cent compared with a similar wood stove.

Since the IHS2™ box is ordered along with a new wood stove, and it is thus factory mounted. The box cannot be bought as an option for older HWAM models. Earlier IHS wood stoves cannot be updated to the new IHS2 app control.

Distributors charge about DKK 5,000, including VAT, for a HWAM IHS2™ box.

Appendices to assignment 2:

Article: Intelligent and environmental friendly wood stove to win DI Award

Article: Member of the Month for November

Assignment 3: Supply Chain Management (10%)

HWAM wants to trim its supply chain and rely on small stocks and make-to-order.

How can HWAM combine make-to-order and a minimum of money tied up in stocks (raw materials, intermediate products and finished products) while at the same having to deliver within the delivery time expected by the customer (D time) when this is significantly shorter than the total production time (P time).

Assignment 4: Economy (20%)

Besides your position with HWAM you run a small consultancy firm where you have been asked to handle a job by a Danish company. The job is to set up a cash flow budget.

The company has already constructed its 2017 profit budget, and now you are to prepare a cash flow budget according to the indirect method (reconciliation method) based on the 2017 profit budget and the following prerequisites:

- The company expects to invest DKK 12,000,000 in new warehouse equipment.
- In connection with this investment, the company expects to take up a new loan for DKK 6,000,000.
- They expect to reduce long-term debt by DKK 2,000,000.
- Shelf life is on average 45 days.
- The turnover rate of accounts receivable is expected to be ten times.
- Trade creditors are expected to have a 60-day credit on average.
- Other creditors are expected to remain as they are.
- All sales are expected to be sale of goods on credit.
- A financial year is 360 days.

Profit budget 2017 (1,000 DKK)	2017 budget
Sales	450,000
Cost of sales	202,500
Gross profit	247,500
Staff costs	75,000
Other external expenses	82,000
Earnings contribution	90,500
Depreciation/amortisation	18,000
Operating profit/loss (operating income or loss)	72,500
Interest expenses	5,500
Net profit/loss before tax	67,000
Tax on net profit/loss for the year	15,410
Net profit/loss for the year (net income for the year)	51,590

Expected balance sheet end of 2016 (DKK 1,000)

Assets	
<i>Fixed assets</i>	52,480
Inventory	19,630
Trade receivables	32,600
Cash at bank and in hand	1,000
<i>Total current assets</i>	53,230
Total assets	105,710
Liabilities	
Equity capital	10,000
Retained earnings	21,373
Dividend payable	1,200
<i>Total equity</i>	32,573
Long-term liabilities	27,330
Trade payables	27,229
Bank overdraft (max. 14,000)	10,711
Other creditors	7,867
<i>Total debts</i>	73,137
Total liabilities and equity	105,710

Question 4.1: Prepare a cash flow budget for 2017.

Question 4.2: Provide comments on the budget.

Question 4.3: Cash flow effect.

The company is considering whether to invest in a more efficient procurement strategy which should reduce product shelf life from 45 days to 36 days. Before making any investments in this direction they would like you to calculate the effect on cash flow of tying up capital in stock.

a) What would the cash flow effect total in Danish kroner?

b) How can the company use the information about the cash flow effect?