

## BM.14

# Generate ideas for the cost structure block

*Requires dialogue*

This activity aims to generate ideas for how to address hotspots or strategic changes related to the cost structure block.



### INPUTS

- Hotspots or strategic changes related to the key resources block from the activities *ST.7 Do a SWOT analysis*, *BM.2 Gather additional data on the business model*, and *BM.3 Gather additional data on operational performance*.

### OUTPUTS

- Specific ideas for how to change the key resources block to address the hotspots or strategic changes, used in the activities *BM.4 Generate business model concepts at the big picture level* - if taking a 'Bottom-up' approach, *BM.15 Evaluate the benefits*, and *BM.16 Evaluate the costs* and *BM.17 Evaluate the risks*.

# BM.14 Generate ideas for the cost structure block

All companies want to reduce costs, but the need to understand and reduce the costs associated with operating a business model is more important for some models than others. 'Value-driven' companies focus on providing a high quality value proposition in return for a premium price and can therefore afford to spend more in order to generate higher revenues. Luxury hotels are a good example of a value-driven business model. At the other end of the spectrum are 'cost-driven' business models, such as 'low cost airlines'. Most companies will fall somewhere between these two extremes.

## HOW TO GO ABOUT IT

For cost-driven companies, you should explore ways to reduce operating costs. Resource efficiency projects can be a good starting point for this.

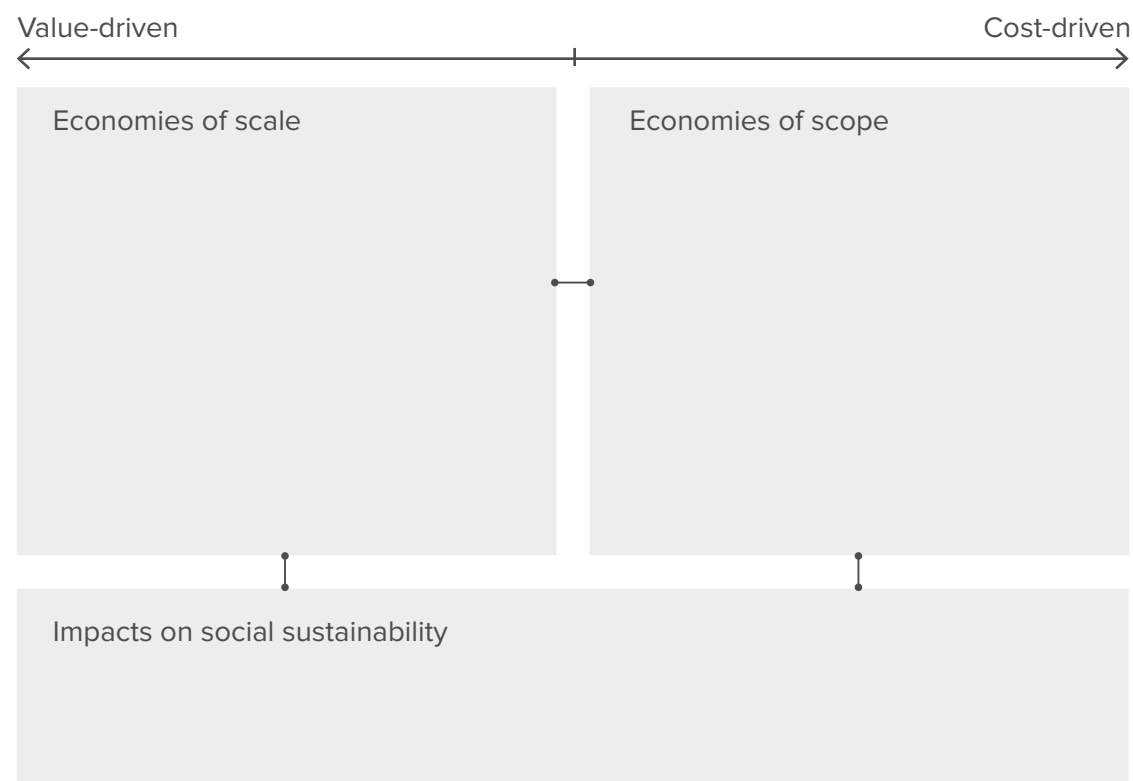
It is also important to look for new 'economies of scale' or 'economies of scope' benefits that could be developed. Economies of scale benefits are reductions in the cost per unit of production that occur as the number of products produced increases for a single type of product i.e. through 'bulk purchase' discounts from suppliers. Economies of scope benefits relate to reductions in the cost per unit of production that occur as the number of products produced increases across two or more product lines i.e. one marketing team can support multiple product lines without a significant increase in cost.

Care must be taken when discussing the potential economies of scale or scope benefits to also consider the potential negative social sustainability impacts. For instance, increasing and intensifying production by adding a 'night shift' to the production schedule could have negative consequences for employees who may be required

to work unsociable hours and for local residents if it means noisy delivery lorries arriving and departing during the night.

→ Further information in the Agri-food, Chemicals and Metals Supplements

### Template of Cost Structure Ideas



# Cost structure ideas

Project \_\_\_\_\_

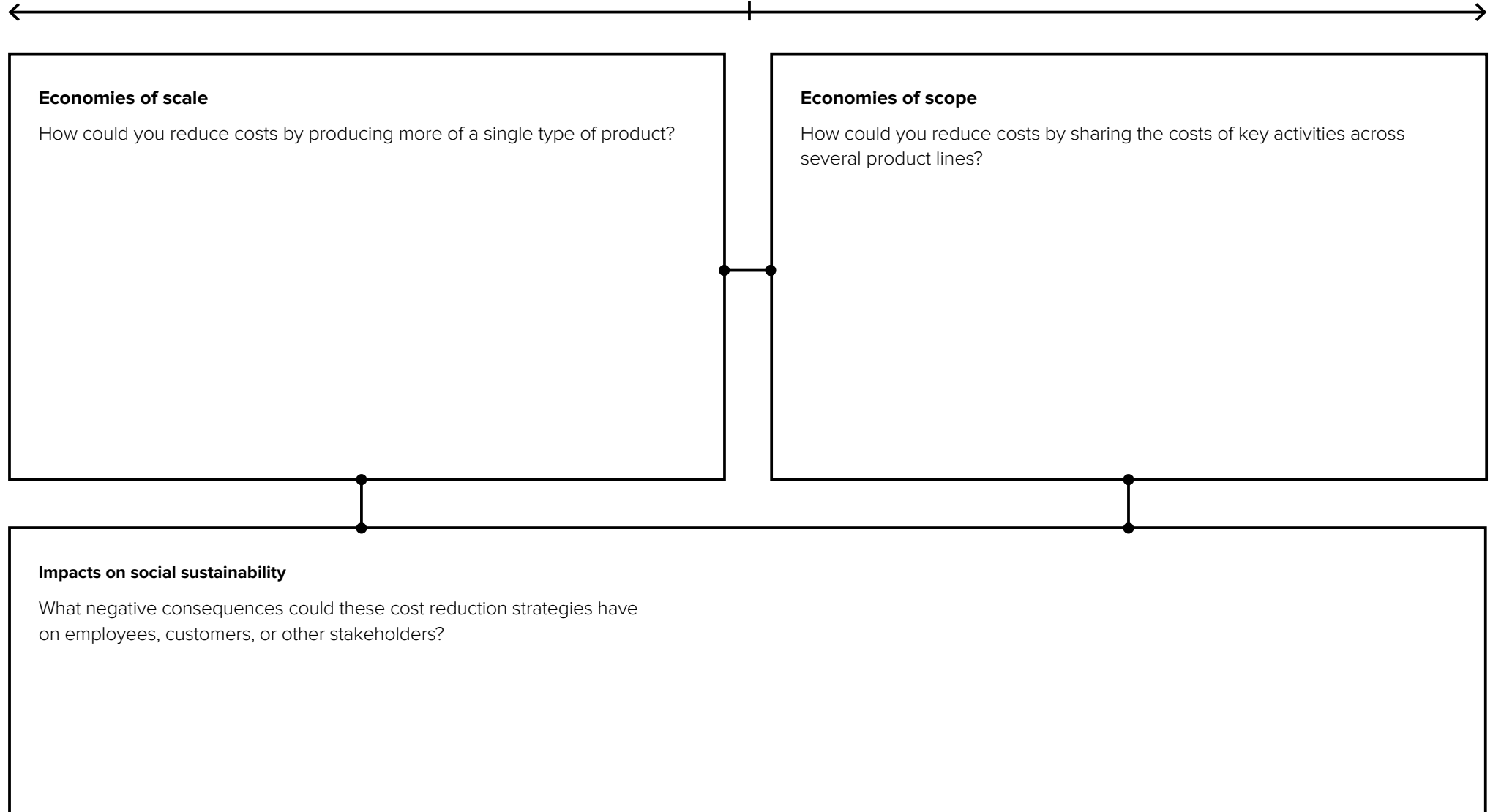
Date \_\_\_\_\_

Version \_\_\_\_\_

Value-driven

Cost-driven

Where does the company sits in this continuum?

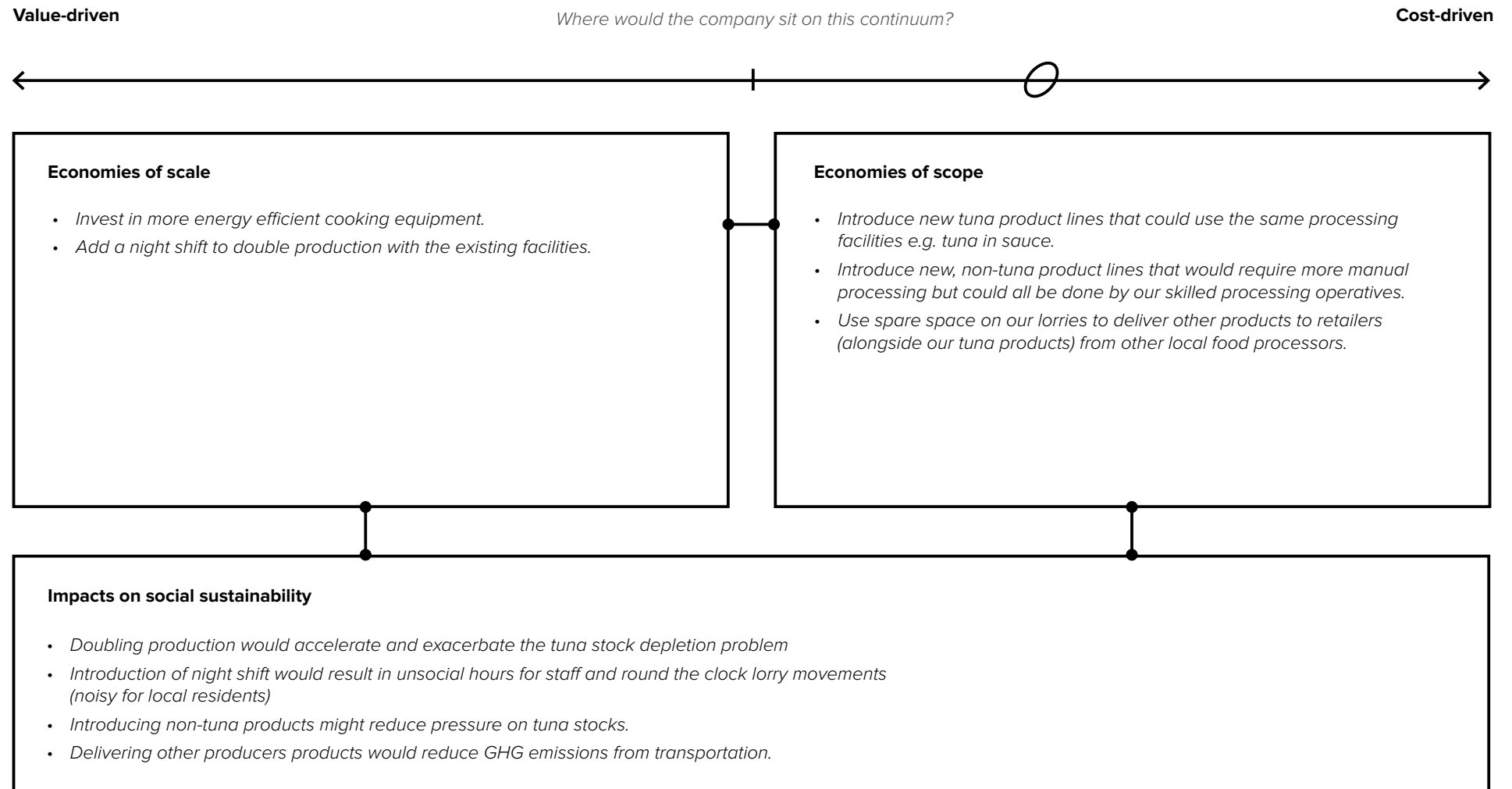


Used during activities

**BM.14**

# BM.14 Generate ideas for the cost structure block

## LEARNING CASE STUDY OF COST STRUCTURE IDEAS



# BM.14 Generate ideas for the cost structure block

## TIPS & TRICKS

### USE AVAILABLE ONLINE RESOURCES TO FIND COST SAVING SOLUTIONS

Finding the best solution to save costs can be a challenging task. There is often a need for both innovative managerial solutions as well as technology to effectively reduce costs. To help with this challenge, you can use online resource efficiency tools and resources, such as those provided by RECPnet (<http://www.recpnet.org/>, membership required) and WRAP (<http://www.wrap.org.uk/content/online-resource-efficiency-tools>). The WRAP resources include tools for improving raw material, water, packaging and energy efficiency. Among the tools is also the Resource Efficient Innovations Database (<http://reid.wrap.org.uk/>), which provides numerous cost saving solutions for the food and drink processing industry.

### FOOD SAFETY COMES FIRST

Reducing costs should not compromise product quality, as aspects such as microbiological safety, colour, taste and texture of a product are key attributes for food safety and consumer satisfaction. However, the strategy to reduce costs is different if you have a “value-driven company” or a “cost-driven company”. A cost-driven company will focus on minimizing cost wherever possible by, for instance, increasing automation, energy efficiency or reducing wastes. A value-driven company is more

focused on creating and delivering value for the consumers and is generally less concerned about costs (Osterwalder & Pigneur, 2010). Given that most food stuffs are commodity products, it is not surprising that cost-driven companies are more common in the agri-food value chain than value-driven ones. In both cases, there are good opportunities for eco-innovation by increasing profitability along the value chain using a holistic approach for the reduction, reuse and recycling of input materials, water and energy, or better planning of production to meet the demand in cooperation with value chain partners.

## BACKGROUND INFORMATION

The bulk of the cost in an agri-food business comes from procurement of raw materials (including packaging), labour costs, and usage of utilities such as water, electricity, gas etc. Therefore, being resource efficient and eliminating waste where possible is key to saving cost in the food and drink processing industry. The largest waste streams can be divided into manufacturing material waste, waste packaging, water (water used in products, leakages etc.), effluents, cleaning agents, energy/heat losses, rejected products and wasted labour. When trying to improve resource efficiency, you should apply the waste hierarchy which ranks the waste management options according to sustainability impacts. Most preferable is waste prevention, followed by re-use, recycle, recover and the least preferable, disposal.

### References

Osterwalder, A., Pigneur Y. (2010) Business Model Generation: A handbook for visionaries, game changers and challengers

# BM.14 Generate ideas for the cost structure block

## TIPS & TRICKS

### BETTER RAW MATERIAL RISK MANAGEMENT CAN IMPROVE PROFITABILITY

Measures to improve the risk management of raw material could include:

- Using a cost-plus pricing mechanism which passes increasing costs of feed-stocks on to the customer;
- Having a balanced portfolio of suppliers, thereby allowing flexibility and providing the option shift volumes from one supplier to another
- Avoiding risk by backward integration and taking ownership of supply sources
- Using non-depleting resources such as using secondary raw materials or bio-based materials as raw materials (e.g. polylactic acid derived from renewable resources)

## BACKGROUND INFORMATION

It is common practice to calculate KPI's representing the total manufacturing cost (total \$/kg product) and identify areas for improvement, where the total cost includes the costs of raw materials, labour, equipment, waste disposal, etc. Raw materials are typically the most cost significant elements for chemical companies. Therefore, raw material procurement and material efficiency are important strategies to increase profit margins. Table 13 provides indicative values of the cost structure for a fine chemicals company.

The cost structure of chemical companies depend to certain degree on the type of production and operating schedule, both of which are linked: e.g. a continuous production process which is typical for commodity chemicals or a (semi-)batch process typical for fine and specialty chemicals as well as for formulated chemicals. One way to maximize material productivity and overall equipment efficiency is to use KPI's that are common across different functional departments such as sales, purchasing and production as well as to manage customer delivery dates and production schedules.

### References

Pollak, P (2011). Fine Chemicals: The Industry and the Business, 2nd Edition. John Wiley & Sons Inc., Hoboken, New Jersey.

Table 13: Cost structure for a fine chemicals company (Pollak, 2011).

Cost Elements			Details	Share
Raw Material			Including solvents	30%
Conversion cost	Plant Specific	Utilities and Energy	Electric power, steam, brine	4-5%
		Plant labour	Shift and daytime work	10-15%
		Capital Cost	Depreciation and interest on capital	15%
		Plant Overhead	Research and Development	10%
	Marketing and Sales		QC, maintenance, waste disposal, etc.	8%
			Inclusive pilot plant	5%
			Inclusive Promotion	15%
General Overhead			Administrative services	
Total			(Exclusive taxes)	100%

## BM.14 Generate ideas for the cost structure block

### BACKGROUND INFORMATION

Raw materials traditionally constitute the highest cost position in a metals sector company (typically 30% of total costs); metals with volatile prices can have a significant negative impact on a company's profitability. Therefore, business models that minimize the amount of material used or have take-back / remanufacturing schemes not only offer potential for significant lifecycle savings but also reduce the variable operating costs of the company (see the Adelca and CAT Reman case studies in PR.5 and BM.4 respectively).

