Case Study: Experience China in a different way

The Company - Vienna's Delicate³



It all began in 1890 in a small shop in downtown Vienna. Mr Delicate, the forefather of Vienna's Delicate, was already concentrating on the production of high-quality food at that time. After the Second World War demand for Vienna's Delicate quality products in gastronomy rose with increasing tourism.

In 1980 Wilfried Delicate took over the company, relaunched the brand and transformed it into a public limited company. To this day, he has consistently continued the high quality of his products in line with the company's strategy. Within twelve years Wilfried Delicate doubled the business relations of the company with Austrian gastronomy and was the first Austrian jam producer to focus on the development of the food trade. After a few years, Vienna's Delicate became the most popular jam producer in Austria. But for Wilfried Delicate this was not enough. The market leader position was successively expanded, innovative strength enhanced, and new markets opened up in Europe. Tradition, quality, taste and love. These have always been the values of Vienna's Delicate, not to be compromised by the handover of the chairmanship to his daughter, Gisella Delicate, in 2008. Thanks to its high-quality standards and the ongoing search for new ideas, Vienna's Delicate is a leading Austrian food company today with an annual turnover of around 120 million euros and an export share of 50% of the total turnover as well as one of the best-known brands in the Austrian trade.

Vienna's Delicate - more than a stock corporation

The partners of Vienna's Delicate are the most important guarantors for the success and the long tradition of the company. Therefore, despite of high-quality standards, we maintain a friendly relationship with both suppliers and customers, which aims at creating mutual advantages.

Vienna's Delicate - more than just a brand

The reaction to nutritional trends and the preservation of tradition play just as important a role for Vienna's Delicate as the claim to guarantee high quality. The company reliably pays attention to the production of high-quality products from ingredients that are as natural as possible. Vienna's Delicate also aims to surprise and amaze its customers with new product ideas, extraordinary taste experiences and innovative product presentations.

Vienna's Delicate - a product variety rich in tradition

Vienna's Delicate products are made from an old family recipe. High-quality fruits are gently heated and stirred, thus preserving the natural fruit aroma. The high fruit content ensures a unique taste experience. In addition to the fruits, sugar, lemon juice concentrate and the gelling agent pectin are processed for the jam. All products are free from artificial colours and preservatives. In addition to the existing production and wholesale of premium jam in typical Austrian quality and variety (around 30 different varieties are offered in the Premium 260g jar; Viennese apricot, black raspberry and apple dream are very popular), honey and diabetic products, Vienna's Delicate also offers a slim product line with calorie-reduced jam creations from the coming season. Vienna's Delicate currently has a market share in Austria of around 60% for jam and around 40% for honey.

³ Vienna's Delicate" is a fictitious company. The description of the company was largely based on Darbo AG.



© Google Maps

Excerpt from the Sustainability Report of Vienna's Delicate

"We want to set impulses and make contributions in environmental protection, quality of life, healthy nutrition and product safety, work quality and job satisfaction. We are aware of our role to actively influence and help shape our environment."⁴

The issue

Gisella Delicate, Chairwoman of the Board of Directors, recently read a research report dealing with the cultural inclinations of Austrians. Among other things, it highlighted the growing interest of Austrians in Chinese traditions and eating and drinking cultures. In her search for new development opportunities, Ms. Delicate does not want to ignore this change and is the first company to marry Chinese and Austrian culture in one product. She has this idea in mind: The existing jam range should be expanded by a new variety, the Nashi pear as a healthy, vitamin-rich Chinese natural product.

To estimate viability and costs, Ms Delicate asks the responsible departments to prepare a preliminary analysis until the next board meeting.

Your role / your tasks

You are an intern in the Supply Chain Management department of Vienna's Delicate. When you come to work today, you will find the following mail from your supervisor, Martina Mayer, in your mailbox:

⁴ Triacon Consulting & Management GmbH (2013) online.

Re: Outstanding issues regarding preliminary analysis

Good morning,

As I discussed with you the other day, Mrs Delicate wants to marry Chinese and Austrian culture in one product. Like for every department, appropriate preliminary analysis is essential. Since I will be visiting a transport service provider abroad until the next board meeting – which will be in 3 days - I would like you to deal with the open points listed below.

TO DO No.1

Information about pears: Kurt Bauer, our quality manager, has sent me interesting info about the transport requirements for pears. Please address the following questions: - Is water transport even advisable?

- What aspects would we have to discuss with the transport service provider (no matter if water or rail)? Note the most important aspects.

- What information do we have to provide to our warehouse manager for the storage of the new raw material? Could we even store the pears together with the other fruit?

TO DO No.2

<u>Risk analysis</u>: I recently came across an article on experiences and problems with activities in emerging markets, which provides an interesting basis for our plans. I have already copied out the most relevant passages for your information. This is of interest: How could we protect ourselves against the described problems? The more suggestions we can collect, the better, which would provide the board with more options. Please remember to describe each suggestion briefly.

TO DO No.3

<u>Cost calculation</u>: As the production manager is currently fully occupied with the calorie-reduced jam creation, we are to complete the rough cost calculation for the new product. Furthermore, we still need to determine the transport costs, too – see the enclosed data. Please calculate the cost per glass jar. A simple calculation without large surcharges will suffice for the board.

TO DO No. 4

Sustainability: Sustainability plays an important role for our company. However, I already know from previous projects that Mr. Sinnhuber (board member) is a private pilot and will certainly ask why we are not using air cargo. So please do the following:

Calculate for Mr. Sinnhuber the best transport options - measured by CO² tonnes emissions:

Option 1: transport as planned, according to outline

Option 2: pears are transported as follows:

- Truckload (one truck) from supplier to Qingdao Airport (TAO)
- Air transport from Quingdao to Vienna (Vienna Airport, VIE)
- Transport to our premises in our own trucks from Vienna Airport

What arguments could we put forward in addition to the emissions calculation?

Please get the documents ready for the Management Board meeting so that I can use them without making major changes. Many thanks! Regards

Martina Mayer

Enclosures



1. Sketched map including brief description of the strategic transport design



"Hub, connecting more than 700 ports in 180 countries or regions." Volume: 16.62 million

Source: Qingdao Port International Limited by Share Ltd (2014) online; World Shipping Council (2016) online.

TEU (2014)

Connection between port of Qingdao and port of Hamburg

Duration: about 29

days

Source: Cargo Router (2016) online.

(Germany) "a port with state-ofthe-art technology, infrastructure and

excellent connections." Volume: 9.73 million TEU (2014)

Source: Port of Hamburg (2016) online; World Shipping Council (2016) online.

rail Connection between the port of Hamburg and the container

Vienna

Last mile delivery by terminal at the port of

AG

our own trucks. Branch: 11th district

2. Information about planned sourcing

From: procurement@vdelicate.at

- To: martina.mayer@vdelicate.at
- Re: Preliminary analysis procurement sourcing selection

Dear Martina!

I would like to briefly inform you of the status of our preliminary analysis. After lengthy discussion we suggest **Qingdao Huon Import & Export Ltd** as a potential sourcing partner to the Executive Board. Here is some useful company information:

Extract from their company homepage:

"Quingado Huon Import & Export Ltd is specialized in the production and export of all typical Chinese fruits and vegetables (e.g. nashi pears, ginger, Fuji apples). Our company is located in Shandong province (the largest area for agricultural products in China). We have our own pear orchards, processing factories as well as our own packing houses. We process and export more than forty thousand metric tons of goods every year. Our business philosophy is: "honesty and efficiency". By offering high quality products and superior service, we want to become your reliable and long-time business partner in China. We are sure that this will be to our mutual benefit."

This info from their homepage could be of interest to you, too.

- export: 80% of sales
- year established: 2011
- trading areas: local, regional, national, European, international
- incoterms: FOB, CER, CIF
- payment methods: credit card, cash, bill of exchange, documents against payment, documentary letter of credit

I hope this is useful for your preparations. See you soon!

Regards

Sabine

Company information: See Europages (2016) online.

3. Pears – goods information

Page 1:

http://www.tis-gdv.de/tis/ware/obst/birnen/birnen.htm

Pears

Table of contents

General:

- information about the goods
- packing
- transport
 - fitness for container transport
 - cargo securing

Risk factors and loss prevention:

- temperature
- humidity
- ventilation
- biotic activity
- gases
- self-heating / self-ignition
- odour
- contamination
- mechanical influences
- toxicity / health hazard
- shrinkage / loss
- pest infestation / diseases

Information about the goods

Product name

German	Birnen	
English	pears	
French	poires	
Spanish	peras	
Botanical	pyrus communis	
CN/HS number*	0808 20 ff.	
(*Combined Nomenclature / EU Harmonised System)		

Association of the German Insurance Industry e.V. (2016) online

[English version]

Page 2:

Description of the goods

Pears belong to the Rosaceae family. Their origin is assumed to be in parts of Asia and Europe.

Pears belong to the pome fruit along with apples and quinces. They are pseudo-fruits with a whitish, firm pulp and a mostly sweet-sour taste. The small brown seeds (kernels) sit in a parchment-like core house consisting of five compartments.

We distinguish among early varieties (ripeness for consumption on the tree) and late varieties (ripeness for consumption only after harvest) according to the time of harvest. Colours range from green to yellow-green to yellow. Some varieties are even partially reddened. Their taste is very sweet due to low fruit acid content of many varieties. Imports also from the southern hemisphere enable year-round availability.

Picked when green, pears taste like beets and tend to shrink prematurely. Preclimacteric pears do not ripen easily, remain green and hard, and many seed cells are grouped around the core.

To determine the degree of ripeness of pome fruit, pulp hardness measurements are carried out using a pressure tester by pressing a cylindrical steel pin into the pulp. The maximum pressure is read in pounds. Pears have a hardness of 9 - 10 pounds; during ripening the hardness decreases by 3 - 4 pounds. For comparison, most apple varieties are 18 - 20 pounds. Their hardness decreases by 5 - 6 pounds during ripening. Therefore, pears are more delicate than apples.

Commonly known varieties are e.g.

- Williams Christ
- Conference
- Abate Fetel
- Gute Luise

Quality / Storage period

Pears that ripen quickly can lose 3 - 4 pounds before they are overripe. In cold store at 0°C, however, they can still have a hardness of 9 - 10 pounds after months.

A characteristic feature of pears is their rapid transition from the mature to the overripe stage. Therefore, it is always associated with large losses if a load of pears is unloaded in ripe condition, as these will then be overripe within a few days and lose market value. For this reason, when carrying out cargo checks, great care must be taken to ensure that no pears are loaded whose degree of hardness differs significantly from that specified above. Only an approximate deviation of 1 pound is the maximum tolerance.

The pears must be firm, clean, free of mould and extraneous odours or tastes, well coloured and contain as few seed cells as possible.

The maximum storage period for pears is very dependent on the variety. Generally, it can be said that pears can be stored for approx. 1 - 5 months, at a temperature of approx. minus $1 - plus 1^{\circ}C$ with a relative humidity of approx. 90 - 95%.

Controlled atmosphere transport (CA) can extend transport and storage duration. The following parameters must be set for this [16]:

Temperature	Relative humidity	02	CO2	CA suitability
0,6 - 1,7°C	90 - 95%	2 - 3%	0 - 1%	very good

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Use

Pears are mainly used for fresh consumption but preserves, juices and fruit brandies etc. are produced from them as well.

Illustrations



Countries of origin

The list below represents only some of the most important countries of origin and is therefore incomplete.

Europe: The Netherlands, Italy, Spain, France, Germany, Austria, Belgium Africa: South Africa Asia: China America: Argentina, USA, Brazil Australia: Australia, New Zealand

Packaging

Pears are individually wrapped in tissue paper to reduce susceptibility to pressure and impact. They are transported in crates, tubs and boxes. The packaging must allow air circulation for cooling.

Pears from Brazil are wrapped in sulphate paper to protect them from light.

Transport Symbols

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General cargo

temperature-controlled

Means of transport

Ship, plane, truck, train

Fitness for container transport

Refrigerated containers with fresh air supply or with CA

Handling

Due to their sensitivity to impact and pressure, the fruit must be handled with appropriate care. The specific cooling temperature must also be maintained during cargo handling. During wet weather like rain or snow, the cargo must be protected from moisture, otherwise there is a risk of premature spoilage.

Stowage

2.52 m³/t (cartons) [1]

2.45 m³/t (jointed boxes) [1]

2.26...2.29 m³/t (boxes) [11]

2.05...2.96 m³/t (cartons) [11]

Stowage place requirements

Cool, dry, good ventilation

Separation

Marking pencil, oil crayons, fibre rope, thin fibre nets

Cargo securing

Due to their high impact and pressure sensitivity, appropriate packaging must be secured to prevent damage. Space between the packaging items or pallets must be filled to avoid slipping or tipping over. By selecting the correct packaging size or cargo unit (area modules or area multiple modules) holds can be tightly loaded without free spaces.

Page 5:

Odour

- Active behaviour: pears have a slightly pleasant odour

- Passive behaviour: pears are highly odour-sensitive and should not be stowed together with goods such as meat, butter and cheese.

Contamination

- Active behaviour: pears are not contaminating

- Passive behaviour: pears are sensitive to dust, dirt, grease and oils. Since the goods can spoil very quickly due to mould or bacterial infestation, clean packaging is vital. Correspondingly, the holds or containers must be clean and hygienically flawless before loading.

Shrinkage / loss

The normal loss of mass due to moisture content decrease of the goods is <1% [1].

In addition, volume losses occur due to packaging breakage, but should not exceed 0.4% [2].

4. Extracts from the Austrian "Trend" magazine article: "11 problems managers are facing in emerging markets"

trend.

1. High currency fluctuations

Occasional high currency fluctuations are some of the problems which companies exporting outside the EU are facing. "But only 2 percent of exports are hedged against exchange rate fluctuations," explains Helmut Bernkopf, member of the ...

2.Political risks are on the increase

Nevertheless, Austrian companies do not disregard the risks. Risk-protection ...

7.Difficult recruiting of experienced staff

Many western companies are also struggling to attract experienced employees to emerging markets. "In the 70s and 80s it was still easy to find well-trained adventurers," says Schmidt. But those days are over...

8.Corruption: The bigger the project the bigger the danger

Siemens Urban Transport manager Gott-Karlbauer also knows the pitfalls in projects in terms of corruption, especially in emerging markets. The danger is particularly great in the case of large-scale projects. "I've experienced a lot of corruption," admits the manager...

9.Difficult negotiating partners

Maximum flexibility is required in discussions with managers, politicians and stakeholders in these countries. Especially with public projects, negotiations are not always easy. "Many a counterpart in emerging markets, such as the Middle East ...

Proissl (2016) online.

5. Staff e-mail from me

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From: martina.mayer@vdelicate.at
To: team-scm@vdelicate.at
Re: Important info for preliminary China project analysis
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Dear All!

The Management Board has informed me that we assume the following for the preliminary analysis of the new product idea:

- 3 jars of jam à 260 ml can be obtained from 1 kg pears (= 7 pears).

- The Production Department assumes the maximum transport content (considering any free space) of a 20-foot container for the production quantity.

- Transport from the port of Vienna to our premises will be by two trucks – otherwise access would be too difficult.

Regards

Martina Mayer

6. Information from the Production Department

MEMO from the Production Manager		O Vienna's Delicate		
Dear SCM-Team!				
Since we do not yet have any concrete figures and data, 9 suggest as follows:				
Please refer to the cost structure of the jam product "Apple Dream" (very similar to pears) and then consider the determined cost increases for the final calculation of the pear jam production (see note). That should be enough for the initial planning.				
Remember to consider the following additional cost factors as well: - share of depreciation (Other production facilities): 25.000 € - other costs (e.g. for energy, marketing): 45.000 €				
And please don't forget that we would have to buy a new kettle due to quality regulations. Mrs. Salzer has looked up the necessary information for you:				
Notes from asset file: - cauldron usually used for 5 years - acquisition always at the beginning of the year	NOTE 5000-litre cauldron, price: 8.900 € net			
Best regards Production Department				

Annual costs "Apple Dream"		
Cost category	Assessment basis	Costs
apples	per kg	1.20 €
sugar	per kg apples	0.65€
lemon juice concentrate	30% of the apples purchase price (relative to the total apples quantity)	0.36€
pectin	per kg apples	0.12€
glass jars	per jar (lid including)	0.45€
labels	perjar	0.60€
personnel costs	perjar	0.50€
Comments:	• • •	•

- The price per pear is 25% higher.

- The sugar price remains the same.

- The surcharge for the concentrate also remains the same for the pears.

- The pectin price remains the same. We simply buy more from the supplier.

- The price for the glass jars remains the same. We bet on the old quality.

- The label must be adapted, as the product must stand out from the others (10% increase).

- Production would have to be extended by one step. Therefore, more personnel required (10% cost increase expected).

7. Transport distances



Name: Liuting IATA: TAO ICAO: ZSQD Qingdao, China Latitude: 36°15' 54" N Longitude: 120°22' 24" E Elevation: 33 (Feet) Arrival Location Name: Schwechat IATA: VIE ICAO: LOWW Vienna, Austria Latitude: 48°6' 37" N Longitude: 16°34' 11" E Elevation: 600 (Feet)

Distance: 4,323.19 (NM) / 4,976.10 (MI) / 8,006.55 (KM) Trip Time: 9:39 (includes 15 minute bias and air speed at 460Kts)

FlightManager (2016)

8. Transport-related data from the internal file

20-foot-container	
Permissible total weight	30 480 kg
Tare weight	2 250 kg
Free space for damage	230 kg
prevention	

H&S Container GmbH (without year) online

CO ₂ emissions		
Road	78 g CO ₂ /t	
Rail	15 g CO ₂ /t	
Inland navigation	35 g CO ₂ /t	
Ocean shipping	16 g CO ₂ /t	
Air transport	656 g CO ₂ /t	

Note: Road transport in China increases emissions by 10%.

Koch (2016) slide 19.



Currency calculator



World Freight Rates (2016) online.

Quick internet research (approximate prices): - Handling costs ship: about 300€/customer - Rail handling costs: around 150€/customer - Rail transport; around 400€/TEU - Transport with own trucks; according to cost calculation 10€ per kilometre driven

Regards Martina Mayer