

MULTIMEDIA ONLINE TEACHING CASE

# **Managing Risk to Global Supply Chains**

## **COVID-19 CRISIS**

*Case by*

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**The Fresh Connection**

THE ULTIMATE VALUE CHAIN EXPERIENCE



## The Fresh Connection – Risk Management<sup>1</sup>

### The Fresh Connection Head Office, Utrecht area, The Netherlands

Toni Rainbow, CEO of The Fresh Connection, was concerned, very concerned. In fact, a bit frustrated too. Less than a month ago, he had thrown a party for the Management Board and all the company's employees to celebrate that for the first time in three years they closed a 6-month period with a profit. Even his boss Bob McLaren, President of the Group to which The Fresh Connection belonged, had made a guest appearance at the party, thanking everyone for the great job.

Three years ago, Bob hired Toni for precisely that mission: to turn a loss-making company around and make it profitable again. With the proverbial 'blood, sweat and tears' that's what he and his Board, and all the people in the company, had achieved: get The Fresh Connection back to positive ROI! And even though some initial signals of the Corona virus pandemic, or Covid-19 as it was officially known, could be detected, it seemed too far away to spoil the party.

However, that satisfying feeling of "mission accomplished" had now suddenly disappeared and had been replaced by a new and uncertain horizon ahead. That morning, Toni had been woken up by an urgent message from Bob McLaren. This time it seemed that Bob had everything but a party on his mind and it seemed that now he was in for some serious business.

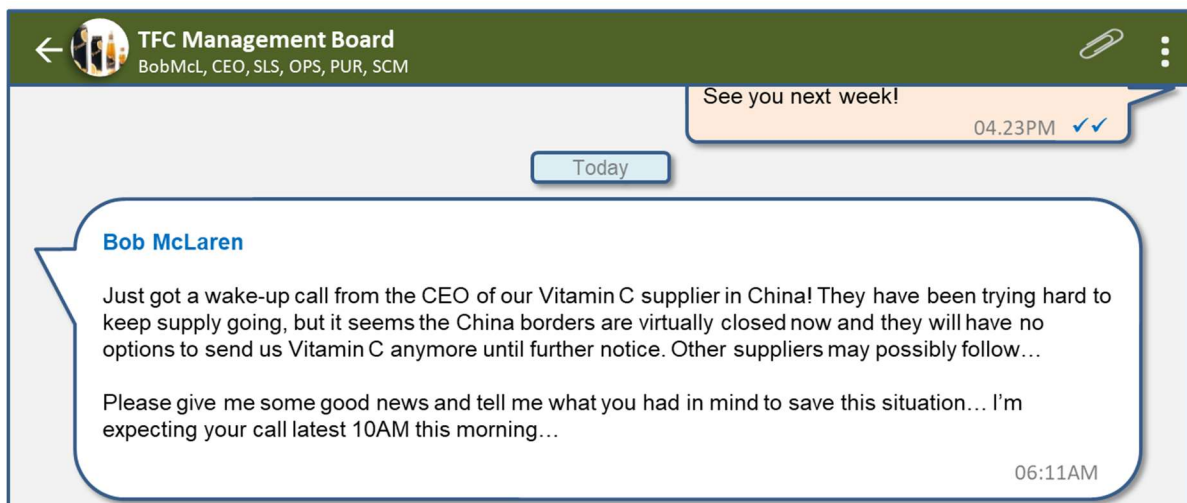
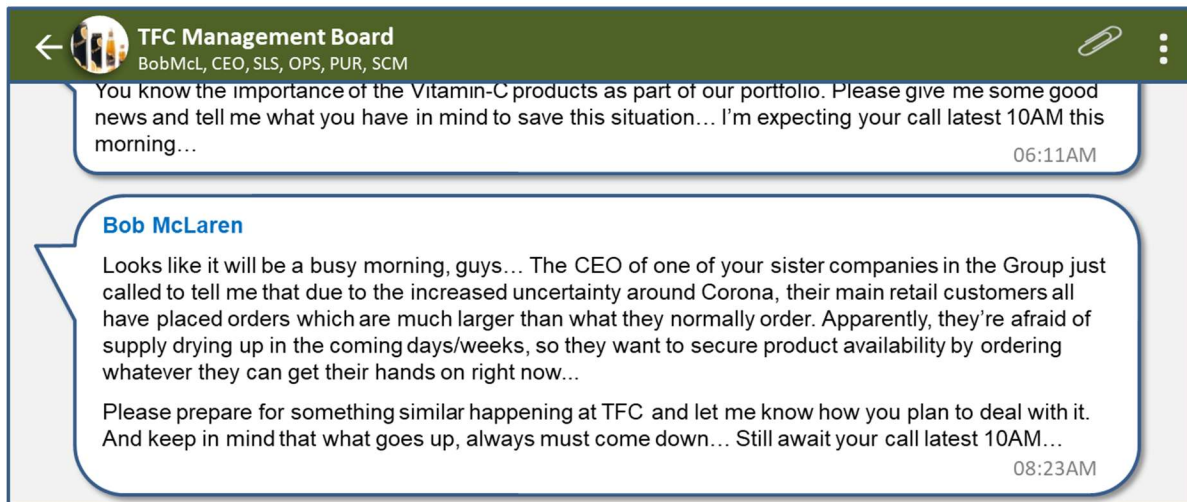


Figure 1: the message from Bob McLaren

<sup>1</sup> This case was written by Ed Weenk MSc PDEng, with the support of Michiel Steeman PhD, as the basis for teamwork and class discussion. The case is not intended to serve as endorsement, source of primary data or illustration of effective or ineffective management. The case, though based on realistic events, is fictionalized. It links to the cloud-based environment of The Fresh Connection business simulation game, as well as the accompanying book "Mastering the Supply Chain". Any resemblance to actual persons or entities is purely coincidental.

After reading the message, Toni quickly got up, did a quick version of his morning rituals and made his way to the office in order to get things sorted out. But even before he managed to get his fellow management team members together for a meeting, there was another message from the boss.



*Figure 2: the second message from Bob McLaren*

It looked like the meeting he had called for with the Management wasn't just going to be about the Vitamin C supplier. Probably, he should focus this as a crisis-meeting right from the beginning. No time to lose, because Bob was expecting some answers before 10AM...

## The Fresh Connection

The Fresh Connection, or TFC as it was colloquially known under its employees, was founded more than a hundred years ago in the Utrecht area, in the center of The Netherlands. Initially it was a distributor for a brand of locally produced drinks, serving a wide range of stores. In the early days, it was in fact only connected to the one particular brand and responsible for distribution in one particular geographical area.

Later, The Fresh Connection started developing its own drinks, focusing specifically on fresh fruit juices, expanding the amount of SKU's in the assortment. The company was now no longer an exclusive partner to another brand, but it positioned itself as a premium juice brand.

Their consumer brand "*Fressie*" and the associated range of value-for-money fruit juices has become a classic household name and is trusted by the consumers.

**Consumers and customers.**

TFC's products aim at the wider consumer market. It sells to a limited set of retail customers and it supplies those retailers directly, typically to their central warehouses. If there is enough product of the agreed specifications in stock, the delivery is made the next day after the customer places an order.

**Products.** The Fresh Connection provides a modest range of flavors, such as Orange or Orange-Mango in different pack sizes: 1-litre cartons and 0,3-liter PET bottles. The finished goods have, from the moment of production, a shelf life of 20 weeks. The customers claim a significant part of these 20 weeks, usually between 60% and 80%. This leaves The Fresh Connection with a total shelf life of between 20% and 40% of these 20 weeks. If the shelf life expires, the product will unfortunately have to be destroyed.

**Product storage and distribution.** The Fresh Connection products are stored on pallets in the finished goods warehouse, also called the outbound warehouse. They stay there until a delivery is made, or until their shelf life expires. The Fresh Connection does not have its own fleet to deliver to its customer's distribution centers and instead outsources the transportation to an extremely reliable partner.

**The production processes.** The Fresh Connection manufactures all the products it sells itself. The fruit juices are mixed in a mixer and immediately after, they are bottled using a bottling line. Mixer and bottling line are part of The Fresh Connection's equipment. The different pack sizes are bottled on the same line.

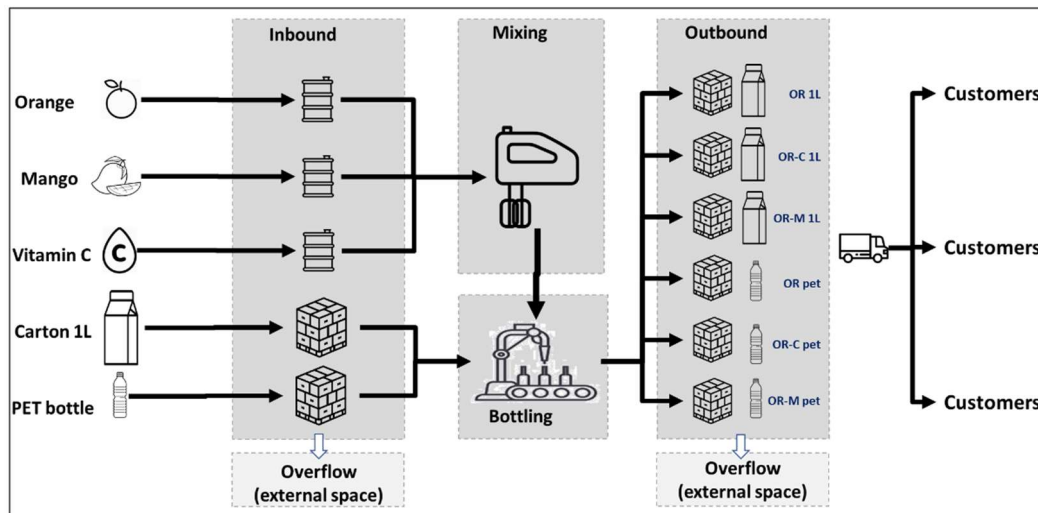
**The components.** A finished product consists of two main components: the packaging and concentrated fruit juice (pulp). A bill of materials that can be found within the system lists what quantity of which component is used in a finished product. The formula - the fruit-pulp mix and additives that give the fruit juices their unique flavor – has been one of the most closely-guarded Fresh Connection secrets for over a century.

**The suppliers.** The components are purchased from suppliers. The packaging material is bought from local and regional suppliers. Pulp is acquired either from fruit traders or producers from across the globe. Each supplier has its own characteristics regarding for size, basic component price, lead time and reliability.

**Component storage.** The components that are delivered to The Fresh Connection cannot always be immediately used in production, that is why the company has a raw materials or inbound warehouse to store them. Packaging material is delivered on pallets and stored in this raw materials warehouse. The warehouse also holds fruit pulp, if it is delivered in drums or IBCs (Intermediate Bulk Containers;

small tanks that hold 1,000 liters of pulp and are the floor-size of a pallet). The fruit pulp that arrives in tank trucks is pumped into a tank yard. The pulp also has a restricted shelf life, although much longer than the shelf life of the produced fruit juices (once water is added the shelf life reduces drastically). Once expired the pulp will be destroyed.

The overall supply chain of The Fresh Connection looked like the chart shown in Figure 3.



*Figure 3: the supply chain of The Fresh Connection*

**Organization.** In terms of the management of the company, The Fresh Connection had a classical functional structure in place, the Board consisting out of 5 members:

- Vice President of Sales, heading the commercial side of the company
- Vice President of Operations, responsible for warehousing and production
- Vice President of Supply Chain, responsible for planning
- Vice President of Purchasing, taking care of the supply side of the company
- CEO, the final responsible for The Fresh Connection

Each VP had some area leaders reporting into them, but as a Small-Medium sized Enterprise (SME), the organization was in fact very flat. The Board had weekly operational meetings every Monday morning with the main team leaders and typically had quarterly meetings to take a look at the longer horizon.

### **Bob McLaren is waiting...**

Toni Rainbow got himself another coffee, his fellow Board members were about to arrive to the meeting room. Toni had written a large question mark on a flipchart. Together with the words “Corona Virus”...

As he was about to get ready to open the meeting, Toni saw an email coming in on his laptop in front of him. Another message from Bob McLaren:

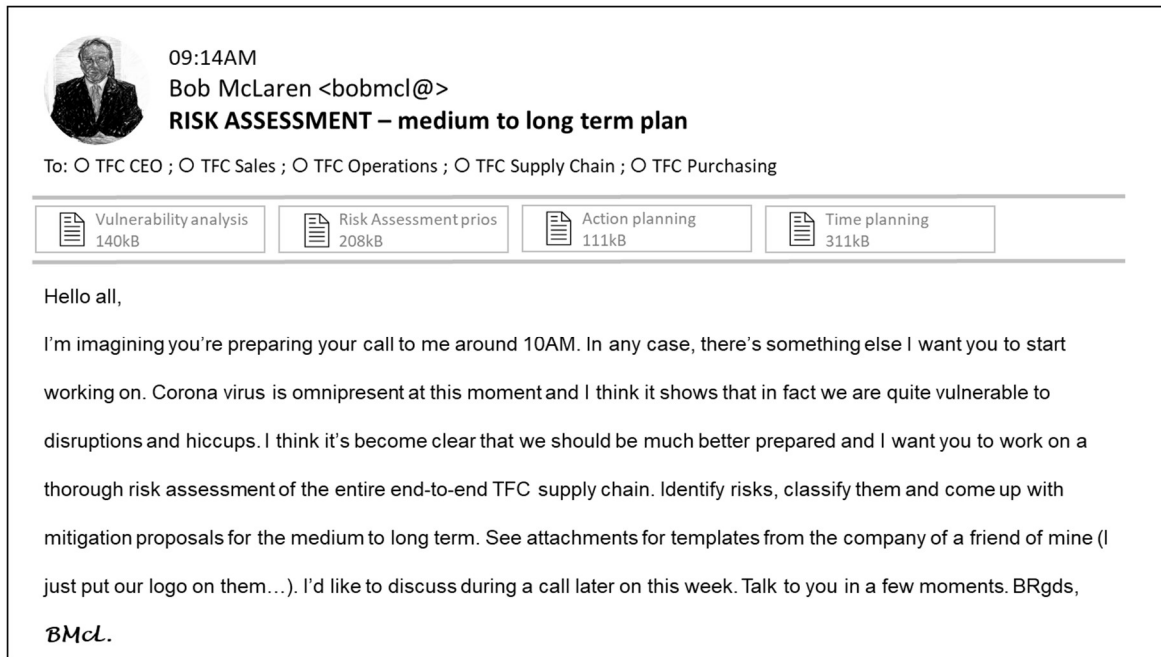
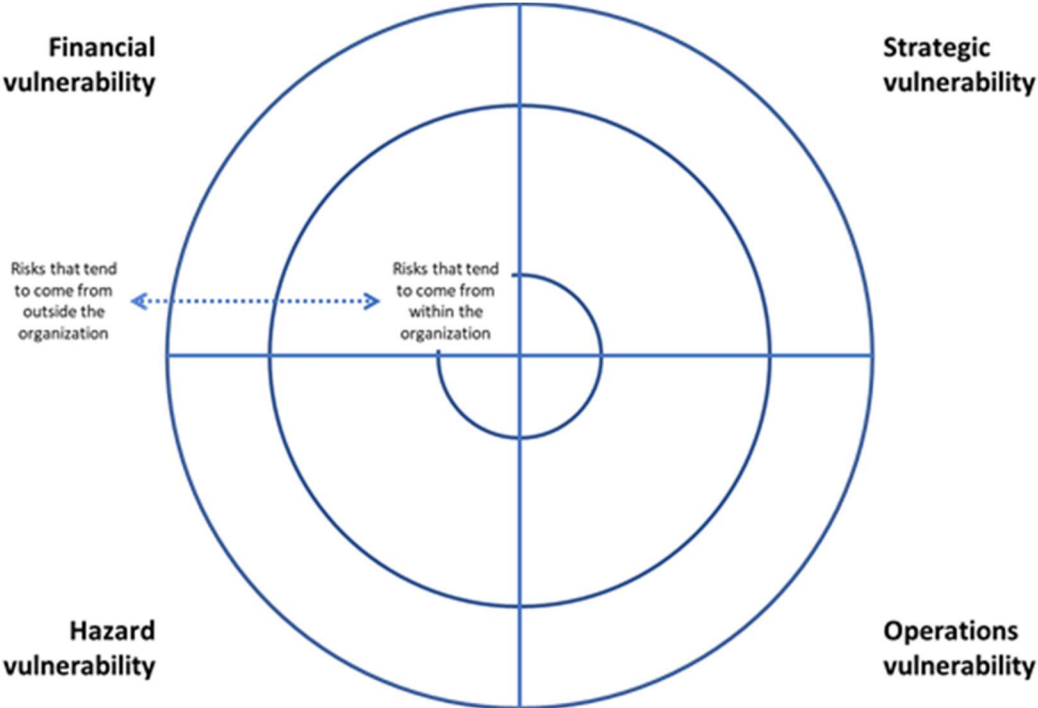


Figure 4: email from Bob McLaren (templates from the attachment can be found in the Exhibits)

All right, he thought, so it is indeed going to be a very busy day, as Bob already hinted at in his second message that morning. So right after this urgent crisis meeting with a clear short term focus, he would need to start thinking about risk assessment and an action plan for the medium to long term. But first things first.

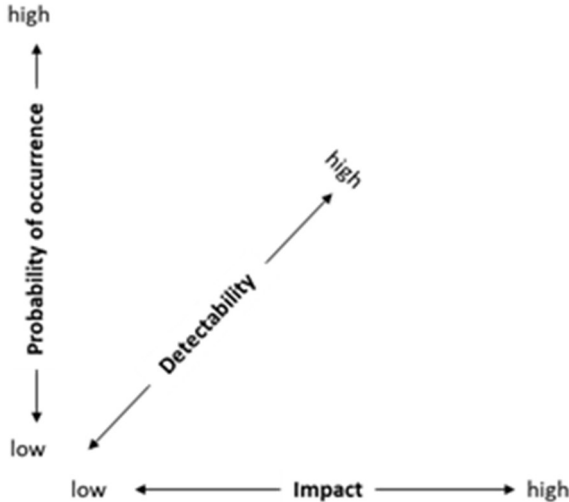
“Good morning everyone”, he kicked off the meeting...

Exhibit 1: framework for vulnerability mapping



Weenk, E. (2019) *Mastering the Supply Chain*, Figure 2.9, after Sheffi (2007)

Exhibit 2: categories for risk assessment – priority settings



Risk prioritization, after Sheffi (2015)

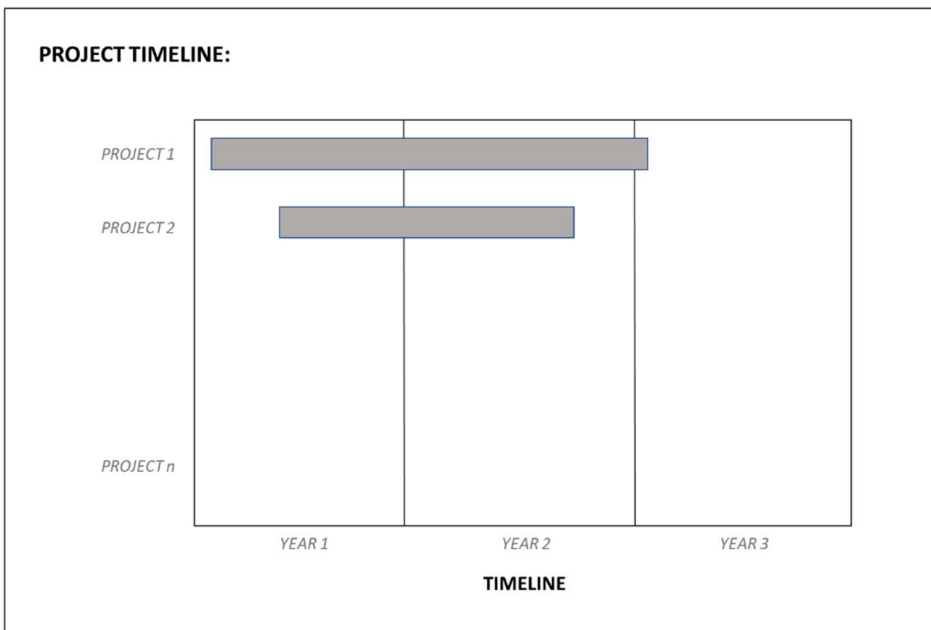


Exhibit 3: Risk assessment – action planning

<b>CHALLENGE: <u>RISK ASSESSMENT</u></b>						
<b>RISK #1, DESCRIPTION:</b>			<b>POTENTIAL DETECTION MECHANISMS:</b>			
<p><b>RISK SCORE*:</b> <span style="float: right;"><b>48</b></span></p> <p><b>P</b> - PROBABILITY (1-5): <span style="float: right;">3</span></p> <p><b>I</b> - IMPACT (1-5): <span style="float: right;">4</span></p> <p><b>D</b> - DETECTABILITY (1-5)**: <span style="float: right;">4</span></p> <p><b>MAIN FACTS/ASSUMPTIONS BEHIND SCORES:</b></p> <p>...</p> <p>...</p> <p>...</p> <p><small>* Risk score = P x I x D</small></p> <p><small>** Detectability (1-5): higher score → more difficult to detect before impact</small></p>			<p>...</p> <p>...</p> <p>...</p> <p><b>POTENTIAL MITIGATIONS:</b></p> <p>...</p> <p>...</p> <p>...</p> <p>...</p>			
<b>PROPOSED ACTIONS:</b>						
<b>SALES</b>	<b>OPERATIONS</b>	<b>SUPPLY CHAIN</b>	<b>PURCHASING</b>	<b>HR</b>	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...

Weenk, E. (2019) Mastering the Supply Chain, Figure 12.18

Exhibit 4: Risk assessment – time plan



Weenk, E. (2019) Mastering the Supply Chain, Figure 15.2

## Annex: getting access to TFC data

To provide your students with access to The Fresh Connection (watch only), refer them to the instructions below:

1. Go to the webpage <https://my.inchainge.com> and click on the link "No account yet? Register as a new user".
2. During the registration process you can define your own password, which should meet the following requirements:
  - minimum of 8 characters, of which:
    - minimum 1 CAPITAL
    - minimum 1 number (123)
    - minimum 1 non-alphanumeric symbol (!?#)
3. After registration you will receive a confirmation email on the email address you have specified as username. Follow the instructions in this confirmation email.
4. After registration has been completed, you can now log into the platform again at <https://my.inchainge.com>, using the specified email address and the password you created. On the screen that opens then, there is a field called "Code entry". Here you can insert the course code **RISKSTCASE** and click on submit.
5. After inserting the course code and potentially refreshing the page, you should now find a widget on the right-hand side of the screen called **TFC - Teaching Case Risk Student**.
6. By clicking on **Enter Simulation**, you can get into the system and see the screens with the required company data.