Title	Content
Bottling line selection	The packages are filled on the bottling line. You can freely switch bottling lines during the game. No additional costs are charged for switching lines. There are efficient lines, flexible lines and all-round lines. A flexible line has short changeover times, but cannot fill many liters per hour, while an efficient line is the exact opposite. An all-round line is in between the two. Make sure that each finished product is assigned to a bottling line. If a finished product is not assigned, it is not produced, and hence not sold.
Number of shifts	Each bottling line is manned by a fixed number of operators. These operators ensure that the components are supplied and that the finished product is processed. They also sort out breakdowns and change over the lines. The operators work in shifts. One shift can work 40 hours a week, two shifts 80 hours, three shifts 120 hours, four shifts 144 hours while five shifts can work 168 hours in a week. Each operator costs #:generalitem.kostenalgemeen.personeelskostenpervastefte:# per annum.
SMED action	A bottling line will have to be changed over between two production runs. This time is used to ready the components, clean the bottling line and, if necessary, reset the set-up of the bottling line. Between two production runs using packs that are the same size, only a formula change over will be necessary. While between two production runs of packs of a different size – for instance from 1-liter packs to 1.5-liter packs – a size change over is necessary. Size changeovers take more time than formula changeovers. You can also reduce the change over time by implementing a SMED corrective action (Single Minute Exchange of Die). Doing this will cost #:generalitem.productie.kostensmedacties:# per annum, but will result in the changeover times being reduced by about #:generalitem.productie.percentagesmedactie:#.

Optimize bottling line speed	The speed of the line indicates the number of liters that can be produced per hour. The speed can be increased through the action ”Optimizing the bottling line speed”. Although this action costs #:generalitem.productie.kostensnelheidlijnoptimaliseren:# per annum, the bottling line can then produce #:generalitem.productie.percentagesnelheidlijnoptimaliseren:# more liters per hour.
Reduction water usage for cleaning	By means of a project, the water usage for cleaning the bottling line(s), can be decreased by #:generalitem.afvullijninput_verlaginguitstootschoonmaak:#. Each time the cleaning is done, the advantage is yours. Just think, a lower water usage number, benefits the environment and it is therefore positive for your carbon footprint. The project costs #:generalitem.kostenverlaginguitstootschoonmaak:# per annum.
Breakdowns	Each bottling line is subject to breakdowns. These breakdowns are in part caused by external factors, such as ageing and susceptibility to breakdowns, while the quality of the supplied packaging and the tolerances of the bottling lines also play a role. If the tolerances do not match the quality of the packaging, many additional breakdowns will result.
Reduction of energy consumption	By the execution of a project in order to reduce the energy consumption of the bottling line, it can go down by #:generalitem.afvullijninput_verminderingenergieverbruik:#. However, the annual project costs are #:generalitem.kostenverminderingenergieverbruik:#.
Reduction of start up loss	After each change over the bottling line gradually starts up. During this start up, losses occur due to tuning issues. Packs are party filled, caps are missing etc. By taking a close look at the change over process and by making smart changes to it, these losses can be reduced by #:generalitem.afvullijninput_verminderingopstartverlies:#. This smart approach will cost #:generalitem.kostenverminderingopstartverlies:# per annum.

Runtime (%)	Average time per week used for filling the packs or bottles as a percentage of the total capacity (i.e. capacity based on the number of shifts).
Runtime (hours)	The average time per week used for filling the packs or bottles.
Changeover time (hours)	The average time per week used for changing over the bottling line. This time includes changeover times for both size changeovers and formula changeovers.
Outsourced production	The average weekly number of outsourced production hours. Production is outsourced when the weekly bottling capacity required is higher than the weekly available hours. In those cases the capacity shortage can no longer be covered with overtime and outsourcing is the only option left.
Overtime (hours)	The average time per week that the line is not operated by one of the permanent shifts. In this case, flexible labor is used. It could be that, despite a positive percentage of unutilized capacity, overtime has been worked. The demand for labor capacity is not the same every week, which means that on average there may be sufficient capacity, but in some weeks it might be insufficient.
Breakdown time (hours)	The average time per week that the machine is broken down. Should preventive maintenance be undertaken, then the time required for this will also be included in this item.
Changeover time (%)	The average time per week used for changing over the bottling line as a percentage of the total capacity (i.e. capacity based on the number of shifts).
Unutilized capacity (hours)	The unutilized capacity is the average time during which the bottling line is idle. In other words, it is the total capacity of the line minus the average total time necessary (operating time, changeover time and breakdown time).
Unutilized capacity (%)	Average time during which the bottling line is idle as a percentage of the total capacity (i.e. capacity based on the number of shifts).

Start up loss	After each change over the speed of the filling line gradually builds up. During the start up of production the line needs to be tuned. This results in a percentage of finished products that are irrevocably lost in the first hour of production. These products cannot be sold and will therefore be scrapped.
Overtime (%)	Average time per week that the line is not operated by one of the permanent shifts as a percentage of the total capacity (i.e. capacity based on the number of shifts).
Outsourcing (%)	The percentage of total production that is outsourced. Production is outsourced when the weekly bottling capacity required is higher than the weekly available hours. In those cases the capacity shortage can no longer be covered with overtime and outsourcing is the only option left.
Production plan adherence	The percentage of production runs that is completed on time and in full. The production plan adherence is influenced by overtime (in the event of overtime, the production planning is not always met) and by the availability of components.
Breakdown time (%)	The average time per week the machine is broken down as a percentage of the total capacity (i.e. capacity based on the number of shifts).
Dashboard	The dashboard per role gives a performance overview for the historical round you select in the timeline. The trendgraph shows whether your KPIs are changing for the better or for the worse. The vertical bar shows the performance of your team compared to the competition. The area of the graph shows the bulk of the teams; 80% of all teams score within this area. Only 10% of the teams performs better and 10% of the teams performs worse.

General	All the entities in The Fresh Connection have unchangeable characteristics. With respect to components, for example, this can be the number of items per pallet while in the case of suppliers this can be the location of the supplier or the transport costs. In this section we will briefly outline the various entities and discuss their principal characteristics.
Customers	The Fresh Connection has a number of customers, who purchase the products produced by The Fresh Connection. The customers can comprise retailers as well as convenience stores - all with their own requirements with regard to the terms of delivery.
Finished product	All the finished products have a fixed basic price. This is not the sales price that The Fresh Connection receives from its customers, which is dependent not only on the base price but also on customer satisfaction with respect to supply chain performance. Good performance will be rewarded by the customer, while bad performance will be mercilessly punished in the form of a discount on the sales price. Depending on the type of packaging, so many items of finished product will fit into an outer box, so many outer boxes will fit in a layer upon a pallet, and so many layers will fit on a pallet. The finished product has a limited shelf life and the countdown to its expiry date starts on the day that the finished product is produced. The Fresh Connection's customers will insist that they are in possession of the product for a substantial part of that shelf life, so the finished product must be delivered to the customer within the period stipulated under the shelf life agreement that was concluded with the customer. Therefore, if finished product is stocked for too long, it will not be able to be delivered to any customers. In that event, the finished product will have to be destroyed.
Bottling lines	Each bottling line has its own specifications, detailing the number of liters that can be bottled each hour, changeover times, sensitivity to breakdowns, tolerances regarding quality of packaging material and the number of operators. There are also costs associated with depreciation, maintenance, etc.

Mixers	The fruit juices are mixed together in the mixers. Each mixer has its own technical minimum and maximum capacity. The technical minimum is the minimum number of liters the mixer can take for the mixing blades to operate properly - should the content of the mixer be below that level, the juice will not be properly mixed. The maximum capacity is simply the maximum number of liters the mixer can mix in one run. The run time and cleaning time must also be taken into account. The run time is the time needed to mix a batch of juice. Once one flavor of fruit juice has been mixed, the mixer will have to be cleaned – the time it takes being the cleaning time. Finally, there are also variable costs per mixing-hour and fixed costs pertaining to depreciation, maintenance, etc.
Raw materials	All the components have a fixed basic price. Here too we are not dealing with the price paid for the component. Rather, the actual purchase price is determined on the basis of negotiations undertaken with the supplier. Strict terms of supply will lead to higher prices, while more relaxed terms of supply will lower them. Packaging material is delivered on pallets. Given that the packaging consists of large rolls when it arrives at The Fresh Connection, it is delivered on whole pallets. Pulp and additives are in turn supplied in drums, IBC's (Intermediate Bulk Containers) or tank trucks. A drum holds #:generalitem.general.druminhoud:# liters and an IBC #:generalitem.general.ibcinhoud:# liters, while a tank truck holds no less than #:generalitem.general.tankergrootte:# liters. Drums and IBC's are delivered on pallets and so are stored in the raw materials warehouse. Tank trucks are, subject to available volume, emptied in the tank yard. The fruit pulp has a limited shelf life, and should it be stored too long in The Fresh Connection's tank yard or in the raw materials warehouse, it can no longer be used in production and will thus constitute a loss. The countdown to the pulp's expiry date commences on the day it is ordered from the supplier.

Suppliers	Each supplier has a number of unchangeable characteristics, including location, market share in the world market, certification, and others. Location simply refers to the supplier's location, a characteristic which primarily influences transport costs. Distant suppliers will charge higher transportation costs than suppliers located closer by. Considering that The Fresh Connection pays for the transport of the components itself, this could be a significant expenditure. The market share in the world market is indicative of the size of the supplier on the world market. When a supplier is certified, it is a well-run business - they are reliable with respect to keeping to agreements, both in terms of the supply being reliable as well as the quality of the materials supplied. The quality of the supplied packaging is an issue with regard to the rejection rate as well as the number of breakdowns on the bottling lines. Material of poor quality will lead to many work interruptions on the lines. The lead time is the time between placing the order and the delivery of the order, and a distant supplier will have a longer lead time than one closer by. When dealing with packaging suppliers, the means of production also influences the lead time. Suppliers who produce Make-To-Order product require more time than those who provide Make-To-Stock packaging. The same applies to the suppliers of fruit pulp, where a source (a supplier producing the pulp in-house) requires a longer lead time than a trader. The reliability of delivery refers to the percentage of orders that the supplier promises to deliver within the agreed to lead time. Please note, though, this pertains to a promise. There could be any number of reasons why the supplier does not keep his promise. The free capacity indicates how much the supplier can still take on with respect to production capacity. In gross form, it indicates this capacity prior to The Fresh Connection concluding a contract with the supplier, while in its net form it indicates the capacity including the requirements of The Fresh Connection. A low net capacity is detrimental to the reliability of delivery, as the supplier will struggle to meet

	demand during peak periods. This means that his deliveries will often be late.
KPI	Your selected KPIs. From a certain round onwards, you can select different KPIs.
Best score	The best score in your pool. In case a higher score is better (for instance for the KPI ROI), the score is the highest score in your pool. In case a lower score is better (for instance for the KPI Obsoletes), the score is the lowest score in your pool. If it is not clear whether a lower or higher score is better, then no best score is shown.
Trend	The trend graph shows the development of a KPI over the successive rounds.
Your score	Your KPI score from previous round.

General	An important part of The Fresh Connection game is the price-setting. Price-setting takes place both for the sale of the finished product and for the purchasing of components. Under the rules of the game one cannot directly negotiate the price. The basic prices of the components and the finished product are identical for all the teams, but by negotiating the logistical terms you are able to exercise significant influence upon the prices. Should you promise your customers great things, you will get a higher price for the finished product – as long as you can fulfill promises, of course. The same applies to purchasing components and if you give your suppliers more space in the terms of delivery, the price charged for the components will be lower. From a technical point of view, price-setting works as follows:
Finished product	All finished product has a fixed basic price. But this basic price is not the final sales price charged to the customer because, as stated above, the negotiations with the customer will also play a role. The result of the negotiations with the customer is the contract index. The contract index is a type of measure of customer satisfaction. Promises to the customer with respect to good logistics will lead to a high contract index, while moderate promises will result in a lower contract index. The contract index is a number around 1. A contract index of 1.05 means that the customer is prepared to pay a premium of 5% over and above the basic sales price, while a contract index of 0.95 means that the customer will demand a discount of 5% off the basic sales price. But the final sales price is not determined on the basis of customer agreements reached, but on the basis of these agreements being realized. If a high service level is promised but not achieved, the customer will then demand a considerable discount. The contract index is calculated using certain formulas and weighted figures. They are not identical for all customers but rather reflect the importance that each customer attaches to the various delivery terms. The results of good negotiations with one customer will therefore not necessarily apply to another customer.

Raw materials	The final purchase price for components is determined in a comparable manner to the sales price of the finished product. Each component has a fixed basic purchase price. A contract index is determined on the basis of the results of negotiations with the supplier. Should the supplier be granted relaxed terms of delivery, he will provide a discount in the form of a low contract index. A contract index of 0.95 is once again a discount of 5% with respect to the basic purchase price. But if the terms of delivery are strict, the supplier will set a higher contract index. The contract index is also calculated using certain formulas and weighted figures and, of course, these will not be identical for all suppliers either.
General	You will make many decisions in every round, decisions that are converted by a computational model into logistical results and team and individual scores. The TFC computational model is a simulation model. We won't delve into the details of this model, but we will cover the primary aspects that are of concern for the interpretation of the results.
Simulation	In order to negate the inherent statistical uncertainty of simulation models, we have opted to simulate each round with a total simulation time of 20 years, even though every round is only equivalent to six months. So, we will be simulating a six-month period 40 times. The upshot of this is that the results of the teams will be ideally comparable, even though the teams may have made entirely different sets of decisions. Another effect is that the logistical results sometimes have a different significance than you might expect. The number of consignments arrived, for example, will not necessarily be a whole number, given that it will be an average of 40 simulations. It also means that we can avoid a situation where some graphics do not correspond exactly to the actual results in terms of the numbers, as the graphics are created by a sampling of the 40 simulations.

Customer demand	There are a number of essential dependencies within the simulation model, the most important of which we will discuss here. The basis for the simulation model is the customer demand. The customer demand is determined using certain parameters that are identical for the teams, making the teams' results comparable. However, each team can influence the customer's demand pattern by negotiating with that customer. This means that the addition of the sales volume rebate policy will make the demand pattern somewhat more volatile and an increase in promotional pressure will lead to an increase in demand. In order to supplement the stock in good time, The Fresh Connection employs a forecast model. The forecast model generates a fresh forecast every week on the basis of the demand pattern. Although teams cannot adjust the baseline forecast, they can, by reaching agreements with their customers, improve the forecasting of promotional special offers.
Delivery	Should The Fresh Connection not be able to deliver an order line (in full) to a customer, it will not be abandoned. Instead, the order line will remain on backorder and be delivered as soon as sufficient stock is once again available. However, a low service level will be penalized in terms of revenue, given that it will lead to a low sales price.
Shelf life	The simulation model keeps accurate records of when a finished product is produced. The shelf life period for the product commences at that point. When delivering orders to the customer, wherever possible the product with the closest shelf life expiry date - that is still within the shelf life agreement with the customer - will be delivered to the customer. Stock that can no longer be delivered to any of the customers will constitute a loss and will be destroyed.

Production planning	On the basis of the parameters established by each team, a production plan is generated each week in the simulation. The production planning is drawn up in such a way that the production orders are, insofar as is possible, spread throughout the week, reducing the peak demands of production capacity. However, it will not always be possible to adhere to The Fresh Connection's production planning. Insufficient production capacity and a shortage of availability of production components are the two biggest factors which negatively influence production plan adherence.
Component demand	Demand for each component is generated using the Bill of Materials and production. A forecast is also created for each component, based on the finished product forecast and the production planning. This forecast is used to administer component stock. Should the component stock be on the point of becoming too low, then a replenishment order from the selected supplier of that component is automatically generated.
Supply	The supplier will deliver the order within the agreed delivery time. However, The Fresh Connection's suppliers are not all equally reliable. The degree of unreliability of the suppliers is translated into an uncertainty regarding delivery time. Unreliable suppliers will frequently deliver late, while reliable suppliers will almost always deliver on time.

Frozen period of production (weeks)	Each week The Fresh Connection s planning division issues a new production plan. This production plan determines which finished product will be produced when. An important aspect for the production plan is the frozen period of production, which is the number of weeks for which the production plan is fixed and therefore may no longer be changed. Should, for example, the frozen period of production be two weeks, the schedule for the following two weeks is then fixed. Outside of this two-week period, the production plan can be changed. A long frozen period of production is great for The Fresh Connection s purchasers, because when the production plan is fixed, the component requirement is then known to an exact degree and the purchasers can ensure that the deliveries arrive at the right time and in the right quantity. Moreover the frozen period drives production levelling over that period, such that capacity usage is more evenly distributed. The disadvantage of a long frozen period of production is that it limits flexibility and responsiveness, which impacts availability of the finished product. If the production plan has been fixed for a long period, one cannot quickly respond to unexpected peaks in demand and customer service will suffer.
iPET	Instead of the regular PET bottle, you can buy a thin walled, extra low weight, so called iPET bottle. The advantage of this bottle is, that it takes less raw material to produce and therefore it causes less CO2 emission. However, it is a bit more expensive as well. You can find more information about the iPET on your "Information" screen. Please note, that if you opt for an alternative component, your system will also go back to its default inventory parameters. So have the VP of Supply Chain check if the settings that he controls, need to be adjusted.

Introduce #:region.slimstock:#	You can acquire the software package #:region.slimstock:# at a one-off investment of #:generalitem.uitlevering.investeringinfolog:# and an annual cost of #:generalitem.uitlevering.kosteninhureninfolog:#. This software package will optimize your safety stock settings for finished products. The software also improves forecasting, since it includes a forecasting module, that is able to foresee the weekly variations in demand, therefore giving you a lower MAPE. So if you choose to start using this package, then you only need to enter service level targets per finished product and the software will set the correct safety stock levels. Please note that #:region.slimstock:# will not take care of setting the correct component safety stocks. #:region.slimstock:# will also NOT adjust long term forecast numbers, please maintain those yourselves, to prevent bias.
LSP	The Logistic Service Provider takes care of the inbound transport of raw materials from the supplier to The Fresh Connection's factory. Each LSP has certain characteristics concerning transportation costs, delivery reliability, lead time and rejection.
Scenario Planner	The Scenario Planner enables to calculate a scenario twice. The package will calculate the consequences of your current settings and decisions. The outcome is a report containing the attained values of KPIs selected by you. The Scenario Planner has an annual cost of #:generalitem.kostenscenarioplannerperjaar:# and requires an investment of #:generalitem.investeringscenarioplanner:#. During a particular round, provided you have not calculated any scenario, you can activate and deactivate The Scenario Planner without any costs or investments. However if you do calculate a scenario, then for that round The Scenario Planner remains active.

Inflating PET	A module can be added to a bottling line that, inflates little preformed PET bottles (preforms), into full size PET bottles. If this module is added, then these preforms can be purchased at the supplier, instead of full size PET bottles. Preforms take significantly less space than full size PET bottles, namely a factor of #:generalitem.productie.factoryverhogingitemspallet:# and they cost half of what a ready-made PET bottle costs. Adding the module will cost an extra #:generalitem.kostenalgemeen.opblazenpet:# per annum and an investment of #:generalitem.investering.opblazenpet:#. In case you opt for preform PET, they can be obtained from the currently contracted PET supplier. There is no need for separate negotiations.
Solving breakdowns training	One way of reducing the duration of the breakdowns is the “Solving Breakdowns” training course. The operators will, after completing this course, be able to solve simple breakdowns themselves, which means they are less dependent on the very busy Technical Services staff. The result is that the average duration of a breakdown decreases by #:generalitem.productie.percentagestoringverminderingopleiding:#. The costs of this training course amount to #:generalitem.productie.kostenopleidingstoringen:# per employee and will be provided to all permanent staff.
LSP	The finished product is stored in a warehouse of the selected Logistic Service Provider. This LSP also takes care of the distribution of the finished product to the customers. Each LSP has unique characteristics concerning distribution and warehousing costs.

Preventive maintenance	The weekly down-time can be limited by undertaking preventive maintenance. A little preventive maintenance costs #:generalitem.productie.urencapaciteitweinigpreventiefonderhoudperweek:# hour a week per bottling line, but will reduce the number of breakdowns per line by #:generalitem.productie.percentagestoringverminderingweinigpreventiefonderhoud:#. A greater deal of preventive maintenance will cost more time #:generalitem.productie.urencapaciteitveelpreventiefonderhoudperweek:# hours a week per bottling line but will reduce the number of breakdowns by #:generalitem.productie.percentagestoringverminderingveelpreventiefonderhoud:#. The number of breakdowns can be furthermore reduced by introducing an incoming goods test, which means that substandard quality packaging material can be rejected before it reaches the bottling lines.
Printing Unit Capsules	You can invest in an additional piece of equipment which prints generic capsules in line during the filling operation. The unit will require an investment of #:generalitem.extrainvesteringprintmodule:#. The advantage is that if you invest in this unit, you will be able to source generic (grey) capsules instead of coloured ones. This will reduce the number of components to you need to source and manage inventory for.
Quarantine	By means of quarantine, the product is blocked for shipment for another 3 days. It allows for carrying out quality tests before it is delivered to customers. This rules out the possibility that inferior products end up in customer's hands. Quarantine has a cost of #:generalitem.kostenquarantaine:# annually.

Relaunch (cups)	A relaunch delivers an improved version of the finished product into the market. This could be driven by product quality and/or packaging improvements. A relaunch will generate consumer interest and supports loyalty. An increase of sales will result. A disadvantage of a relaunch is that you may end up with obsolete stock of products. Once a relaunch has taken place, the "old product" can no longer be sold at its original price, it has to be marked down. Another disadvantage is that you may need to discard packaging material, that can no longer be used after the decision to relaunch.
Relaunch horizon	The relaunch period is the time required between initiation of a relaunch by marketing and new product arriving in the market place. Marketing may want to have a short horizon to quickly respond to changing market circumstances. This could generate additional sales of the relaunched product. The risk, however, is that not all old finished product can be phased out before the relaunch. In that case old product can only be sold at significant discount of #:generalitem.kortingspercentageoudeproducten:#.
Relaunch horizon	The number of weeks before the relaunch is started. If the decision has been made to relaunch, then the timing has to be set, expressed in a number of weeks in the future. In other words the horizon. The idea is to minimize costs of lost sales and depreciation in inventory value.
R&D Frespressie	Participate in this project to develop a Frespressie machine. Participation can only be decided in this round. Once of cost for this project : #:generalitem.kostenrendcups:#.

Shortage rule	In the unfortunate event that The Fresh Connection runs out of stock and so cannot satisfy customer demand, the rule of shortage will determine how the situation is dealt with. If the proportional method is chosen, the shortage of finished product will then be equally divided over all the orders for the day. Each customer then receives a little less. If a 'first-come-first-served' principle is employed, the customer who placed an order first receives delivery first and the customer who placed the order second receives delivery second, etc. Finally, if the principle of customer priority is employed, the customers must be ranked in terms of priority. The customer with the highest priority will receive delivery first, followed by the customer with second-highest priority, etc. This means that the lowest-priority customer will suffer the most from the shortage.
Track & Trace	Special software, that precisely records what happens to the juice after it has been mixed: it records in which filling batch the mixed batch is used and to which customers the filling batches are delivered. This is very useful information if product needs to be recalled for whatever reason, since it is exactly known what the original mixed batch is to which a suspect product belongs. Effectively only this original mixed batch needs to be recalled . This saves a lot of time and money in such a case, since if this information is not at hand, a lot more filling batches need to be recalled to rule out the possibility that suspect product is still on the market. Implementing Track & Trace costs #:generalitem.kostentracktrace:# annually.
Pool Workforce	Staff of the inbound and outbound warehouse can be pooled together. The employees are trained, so they obtain the skills to enable them to do the work in both warehouses. Pooling them makes it easier to handle the volatility in workload. Costs of training are #:generalitem.kostentrainingworkforcegrouping:# per employee per round.
Expected weekly demand	The expected weekly demand in the current round, for all finished products in a product family. The number is expressed in liters.

Increase or decrease (%)	The expected increase or decrease in demand (%) for the next round. Especially if new customers are going to be delivered, or new products are going to be delivered it is wise to review and evaluate forecasted sales numbers.
Weekly demand	The average weekly volume in the previous round, expressed in liters of finished product and totaled based on all the products in a particular product family.
A Brand	A quality product available in many shops.
Loss	Finished product or components that are destroyed because the shelf life has been exceeded.
Cost of goods sold	An accounting classification useful for determining the amount of direct materials, direct labor, and allocated overhead associated with the products sold during a given period of time.
Carrier	The base for the fruit juice; it is often orange juice.
Drum	A vessel with a volume of #:generalitem.general.druminhoud:# liters in which liquid can be stored.
Frozen period	The period for which the production plan is frozen.
Forecast	The forecast of future demand or the requirement of materials.
FTE	Full Time Equivalent, the standard unit in which one person's labor per year is expressed.
TL	Truck Load, a full truck can transport #:generalitem.general.fulltruckload:# pallets.
Shelf life period	The amount of time an item may be held in inventory before it becomes unusable.
IBC	Intermediate Bulk Container, a barrel with a volume of #:generalitem.general.ibcinhoud:# liters in which liquid can be stored.
Rejection	Packaging material that does not satisfy the minimum quality requirements.

KPI	Key Performance Indicator, a statistic that measures the logistical or financial performance at a certain level.
Mixer	A machine that mixes fruit juices.
Outer box	Packaging unit for finished product. The number of packs per outer box depends on the volume of the finished product.
Changeover	The activity involved in readying the bottling line for a new production run.
Order	The collection of order lines from one client for one day.
Order line	Demand from a client for a finished product for one day.
Out-of-home market	Places where consumers purchase products for immediate consumption, such as service stations, restaurants, etc.
Overflow warehouse	Warehouse where pallets are stored should there be no more space in the company warehouse.
Pallet	A wooden surface upon which products can be stored and transported. The most common size is 80 cm by 120 cm.
Pallet layer	A layer on a pallet, with five to seven pallet layers per pallet being the accepted standard.
Bottling line	A machine able to fill packs or bottles with juice.
Pallet location	The area taken up by one pallet in the warehouse.
Shift	Working during irregular hours according to a fixed schedule.
Private label	A product manufactured exclusively for one customer.
Pulp	Concentrated fruit juice.
Retailer	A supermarket formula
Tank	A large vessel with a volume of #:generalitem.general.tankergrootte:# liters in which liquid can be stored.
Tank yard	The collective name for all the tanks in a company.

Tank truck	A tank truck is a truck that is constructed to transport large volumes of liquid or gas by road and that can take #:generalitem.general.tankergrootte:# liters.
Additive	A component of a fruit juice formula that positively contributes to the consumer's taste experience
Tolerances	The extent to which a bottling line can process packaging of dubious quality.
Alert	A warning that announces a possible problem.
Safety stock	In general, a quantity of stock planned to be in inventory to protect against fluctuations in demand or supply.
Sales	The number of pieces the various customers buy
BOM	Bill of Materials, a document that indicates which and how many components are used for a finished product.
Gross margin	The difference between total revenue and the cost of goods sold.
Certification	A procedure whereby an independent and unbiased organization issues an official declaration that the internal process of a supplier satisfies specific requirements.
Component	A part of the finished product.
Distribution	For the distribution of the finished product to the customer energy is being consumed. The amount and resulting CO_2 emission depend on the volume being transported, the distance and the load factor of the truck. For calculation purposes a certain factor is used per tonne-kilometer (tkm). By default the emission is equal to #:generalitem.uitstoot_distributie_road_pertonkm:# kilogram of CO_2 per tkm. When the emission is calculated, the weight of the truck and its load factor are taken into account as well, since having two trucks drive at a load factor of 50% causes more CO_2 emission than having one truck drive at a load factor of 100%.

Footprint	The carbon footprint of The Fresh Connection is calculated by adding all the CO2 emissions (kg) divided by the total number of liters fruit juice that has been sold. The whole chain is included when adding the emissions, from fruit growing through supply, production, storage up to and including distribution.
Handling	Handling of components and finished products in the warehouses of The Fresh Connection consumes energy and therefore causes CO2 emission. First of all, drums, IBCs and tanks in which the fruit pulp is being transported, need to be cleaned. On top, components that have been rejected, need to be scrapped, the same needs to be done with rejected or past shelf life finished products. The handling of pallets in and out of the warehouse consumes energy as well.
Inbound warehouse	For the storage of components energy is being consumed as well. The inbound warehouse and the tank yard need to be lighted and their respective temperatures need to be controlled. The amount of energy consumption is dependent on the actual number of pallet places and tanks in use. Per pallet place #:generalitem.uitstoot_opslag_perpalletplaats:# kg CO2 is emitted annually. The annual amount per tank is #:generalitem.uitstoot_opslag_pertank:# kg CO2. If the overflow warehouse needs to be used or if the tank yard is outsourced, we assume that the same numbers apply.
Inbound transport	The Fresh Connection sources components from all over the world. These need to be transported and this causes CO 2 emission. The amount of emission depends on the volume being transported, the distance and the transport mode. For calculation purposes a certain factor is used per tonne-kilometer (tkm), this factor depends on the transport mode.
Purchasing	The Fresh Connection has requirements for a number of components: packaging material, additives and fruit pulp. These components need to be produced by suppliers and this consumes energy. All the energy consumption is expressed in CO2 emission.

Overhead	The Fresh Connection consumes energy not only in its primary processes. Its building needs to be lighted and heated, and computers, printers and coffeemakers are used in its offices. The private helicopter of its CEO is also included in this number.
Production	When mixing and bottling the finished products, energy is being consumed. The operations of mixers and bottling lines are partly responsible. But also the cleaning of the mixer and tubing after every production run, because the water that is being used becomes polluted and needs cleaning itself, before being disposed off. In other words, this cleaning process consumes energy as well and causes CO2 emission.
Total emission	The total emission of CO2 that can be allocated to the production of the delicious fruit juices of The Fresh Connection. In other words, the addition of all the numbers mentioned above.
Outbound warehouse	For the storage of finished produtcs energy is being consumed. The outbound warehouse needs to be lighted and its temperature needs to be controlled. The amount of energy consumption is dependent on the actual number of pallet places. Per pallet place #:generalitem.uitstoot_opslag_perpalletplaats:# kg CO2 is emitted annually. If the overflow warehouse needs to be used, we assume that the same number applies.
Liters sold	The total number of liters juice sold. To be able to calculate the carbon footprint of The Fresh Connection, the total CO2 emission in kilos is divided by the total number of liters fruit juice that has been sold.
Order quantity (weeks)	The lot size is the minimum quantity that can be ordered. The final quantity ordered will in general be a bit higher than the minimum because when ordering, the actual demand for the component (how low the stock is) is taken into account as well as the trade unit agreed to with the supplier.

Safety stock (weeks)	The safety stock is the stock you set aside to cover uncertainty with respect to production requirements and the supply reliability from the supplier. The higher the stock, the lower the risk of running out of stock and so, with a high safety stock, you guarantee reliability of supply to production. A high safety stock also leads to high stock expenses and higher capital demands. The safety stock is expressed in forecast weeks (demand forecast). During the frozen period of production, the production planning is fixed and thus so is the demand for components. During this period there will be little uncertainty with respect to demand.
Upper limit	If a Vendor Managed Inventory is initiated with a supplier, an upper limit needs to be set. This upper limit concerns the maximum weeks of supply you wish to stock. The supplier manages the inventory in such a way that - in theory at least - the inventory will never rise above this limit. However, in practice this still might be the case if, for example, the forecast is poor.
Minimal lot size (weeks)	The minimal lot size is the minimum quantity that can be ordered.
Lower limit	If a Vendor Managed Inventory program is initiated with a supplier, a lower limit needs to be set. This lower limit concerns the weeks of supply you wish to stock. The supplier manages the inventory in such a way that - in theory at least - the inventory never drops beneath this minimum. However, in practice inventory can drop below this level if the forecast is poor, or in the event of severe delivery unreliability.
Items/liters purchased	The total number of items or liters purchased during the previous round, including rejected items and those past their shelf life.
Number of replenishments	Number of times a replenishment order is issued during the previous round.

Bias (%)	The bias is calculated by evaluating the forecast of the previous round against the real demand in the current round. Given that there is no separate forecast for components, the Bill of Materials for each product is used to derive it from the finished goods forecast.
Obsoletes (%)	The number of purchased items not utilized before the expiry of the shelf life date as a percentage of the total number of items used.
Economic Inventory	Component inventory available for future production orders. This is the amount of component physically in stock plus planned supplier deliveries minus any production requirements already planned.
Order size	Average size of the individual orders
Cost price	The average purchase price per item or liter, including transport costs. In other words, this is the total purchase value divided by the number of purchased items.
Inventory (pieces)	The number of items in stock on an average day.
Inventory (value)	The number of items in stock on an average day valued against the average purchase price (this price includes transport costs).
Inventory (weeks)	The number of items in stock on an average day in weeks of demand.
Demand per week (items or liters)	The average demand per week. The demand per week is determined by the production orders of the finished products that contain the components.
Attained delivery reliability	The percentage of all the items or liters delivered on, or before, the promised time. For that matter, an order delivered within the delivery window is considered to have been delivered on time.
Forecast error	The Mean Absolute Percentage Error is a measure of the forecast unreliability. It is determined by specifying the absolute forecast error (demand minus forecast) on a weekly basis. The sum of the forecast errors is then divided by the sum of the demand. A MAPE of 0% is the

	ideal, in which case the demand is equal to the forecast. But if the MAPE is high then the forecast is unreliable.
Component availability (%)	The percentage of total demand from production directly available upon request. A low availability for production will have a negative effect upon the production plan adherence.
Target	The target is the KPI target you have set in the previous round. Setting ambitious but
Average Daily Usage	The average daily usage is the number of units or liters that are used each day on average.
Lead time (days)	The lead time depicts the number of days between the creation of a replenishment order and the moment it becomes available in the warehouse. It not only contains the lead time of the supplier, but also the effect of the delivery window and the intake time of the inbound warehouse.
Average Daily Usage (next round)	The average number of units you expect to be sold during next round, per day.
Planned Adjustment Factor	The Planned Adjustment Factor should depict the factor with which you think the average daily usage of the
Average Daily Usage (prev. round)	The average number of units sold during the previous round, per day. This number does not take into account
Average Daily Usage	The average daily usage is the number of units that are expected to be sold each day on average.

Administration costs	The administration costs amount to #:generalitem.aanlevering.adminkostenperinkomendeorder:# per inbound order and #:generalitem.aanlevering.adminkostenperinkomendeorderregel:# per inbound order line. In addition, there is also a rate of #:generalitem.uitlevering.adminkostenperuitgaandeorder:# per outbound order and #:generalitem.uitlevering.adminkostenperuitgaandeorderregel:# per outbound order line.
Administration costs webshop	The administration cost for a webshop order amount to #:generalitem.uitlevering.adminkostenperuitgaandewebshoporder:# per outbound order.
Operating profit	Earnings or income after all expenses (selling, administrative, depreciation) have been deducted from gross margin.
Gross margin	The difference between total revenue and the cost of goods sold
Contract costs	Costs related to termination of contracts.
Cost of good sold	An accounting classification useful for determining the amount of direct materials, direct labor, and allocated overhead associated with the products sold during a given period of time
Distribution costs	A logistics service provider takes care of the distribution on behalf of The Fresh Connection to its customers DCs. The rates for this service are: #:generalitem.distributiekostenstaffel1:# if less than #:generalitem.staffelgrens1voordistributiekosten:# pallets are shipped, #:generalitem.distributiekostenstaffel2:# if a number of pallets between #:generalitem.staffelgrens1voordistributiekosten:# and #:generalitem.staffelgrens2voordistributiekosten:# are shipped, and #:generalitem.distributiekostenstaffel3:# if more than #:generalitem.staffelgrens2voordistributiekosten:# pallets are shipped.

Handling costs	The costs for the permanent staff in the raw materials and finished goods warehouses. This item also includes the costs for the use of flexible labor, which is included should the permanent labor capacity be insufficient. Finally, the costs for raw materials inspection are also included here. These costs are valued against the hourly rate of a permanent employee.
Indirect costs	Indirect costs are not directly attributable to a cost object. Indirect costs are typically allocated to a cost object on some basis. In manufacturing, costs not directly assignable to the end product or process are indirect. These may be costs for management, insurance, taxes, or maintenance, for example. Indirect costs are those for activities or services that benefit the whole or part of the organization. Their precise benefits to a single product are often difficult or impossible to trace. For example, it may be difficult to determine precisely how the activities of the director of an organization benefit a specific product. Indirect costs do not vary substantially within certain production volumes or other indicators of activity, and so they may sometimes be considered to be fixed costs. Labor costs, for example, can be indirect, as in the case of maintenance personnel and executive officers, Similarly, materials such as miscellaneous supplies purchased in bulk—pencils, pens, paper—are typically handled as indirect costs.
Purchase costs	The value of the purchased components, including transport costs. The purchase costs are high if the contract indices are high, or if you suffer from a high obsoletes percentage.
Interest costs	The cost incurred related to accounts payable and accounts receivable, as a result of payment terms agreements with customers and suppliers. A rate is calculated of #:generalitem.kostenalgemeen.interestpercentage:# per annum.

Investment	The total amount The Fresh Connection invests in buildings, equipment, working capital and software. The ROI is calculated by dividing the operating profit by the investments.
Contracted sales revenue	The income received by a company from sales or other sources, such as stock owned in other companies. In The Fresh Connection it is the revenue derived from the sales of finished products based on the contract indices of the customers. It is calculated by multiplying the sales price with the number of items sold and the contract index.
Overhead costs	A large amount of money is devoted to numerous other indirectly attributable items – the overheads. The overhead costs include those for water and power. Furthermore, there are costs associated with the number of selected suppliers, components, customers, finished products, etc.
Bonus or penalty on contract	Bonuses awarded and penalties received because of supply chain over- or underperformance. In case of high discounts, it is wise to make more modest agreements, or improve supply chain performance.
Production costs	The production costs are the fixed and variable costs pertaining to the mixers and the bottling lines. For the mixers, these costs are the fixed costs and the hourly rate per mixing hour multiplied by the total number of mixing hours. Each bottling line has its own costs pertaining to investment and maintenance. In addition, there are also the staff costs for the operators manning the lines, both for the permanent staff and the flexible labor that is contracted in case there is a shortage of labor capacity.
Project costs	The costs of the improvement projects like optimizing bottling line speed and SMED corrective actions

Stock costs	The stock costs can be divided up into three categories interest, space, and risk. The interest costs concern those costs incurred for keeping components and finished product in stock. A rate is calculated of #:generalitem.general.voorraadkostenpercentage:# per annum. The components are valued against the purchase costs, while the finished product is valued against the purchase and production costs. The costs for the space are shaped by the costs for the raw materials warehouse, the tank yard (which can be subcontracted) and the finished goods warehouse. The costs of the overflow warehouse (which can be subcontracted) should one of the company s own warehouses be short of capacity, are also included in this item. As stock can 'disappear' (shrinkage), be damaged, or become obsolete, carrying any inventory poses some risks. This risk increases if inventories are higher.
Relaunch costs	After the relaunch of a product, the old product can only be sold out at a significant discount of #:generalitem.kortingspercentageoudeproducten:#. The cost you find here are the residual products valued at direct cost multiplied by the discount percentage. It is important to phase out the old version of a given product by the time the new product comes to market.
Payment terms	The payment terms with customers and suppliers determine when The Fresh Connection pays for the purchased components and when it is paid for the finished products sold. The outstanding accounts form the investment in payment terms.
Machinery	The investment in machinery is formed by the investment in bottling lines and mixers.
Software	To purchase software packages, an investment is needed.
Fixed (including building)	The building The Fresh Connection is located in consumes an investment of #:generalitem.general.vasteinvestering:#.

Inventory	The Fresh Connection invests in component and finished product inventory. The investment in components is valued against average purchasing price. The investment in finished products is valued against cost of goods.
ROI	A relative measure of financial performance that provides a means for comparing various investments by calculating the profits returned during a specified time period. In case of The Fresh Connection it is Operating profit as a percentage of the Investment during the last half year.
Bottling line assignation	Each finished product can be assigned to any bottling line. Make sure that each finished product is assigned to a bottling line, otherwise the finished product will not be produced, and hence cannot be sold. If you withdraw a bottling line you need to assign the associated finished products to a different line.
Forecast	A good forecast is critical for a succesful operation in The Fresh Connection. Without a good forecast it is impossible to assess the required capacities and inventories. The forecast is a result of the first two columns and concerns the average weekly demand for the coming period. The forecast is visible elsewhere in The Fresh Connection. Firstly, it is visible in the production interval tool. The VP Operations and VP SCM will be able to use the forecast in their efforts to set capacities. Secondly, the forecast is used in inventory management. If the forecast is structurally overstated (positive bias), the inventories will be too high. If the forecast is structurally understated (negative bias), inventories may be too low, resulting in service issues.
Product in smaller outer box as well	As a result of the chosen OSA High project you now have the option to deliver a number of your products in a smaller outer box than normally used for packing. The smaller outer box makes it easier for the retailer to (re)stock their shelves and this improves on the shelf availability.

Mixer assignment	When assigning the finished product to a mixer, it is wise to keep the technical minimum of the mixer into account. This is the number of liters mixed at each batch. If you assign a slow-moving product to a large mixer, then you might mix too many liters in each batch. It will take a while before the items made in one production run are sold and it might result in shelf life problems. In any case, make sure each finished product is assigned to a mixer. Should you not, the finished product will not be mixed and therefore not be sold.
Safety stock (weeks)	The safety stock is the stock you set aside to combat uncertainty with respect to uncertainty on the part of customer demand and the supply of finished product from production. A high safety stock will lead to a high service level for the customer. But it is not wise to set the safety stock too high, as the finished product produced by The Fresh Connection only has a limited shelf life. Overly high safety stock will also lead to high stock expenses. The safety stock is expressed in forecast weeks (forecast of customer demand).
Expected demand increase	The expected increase in demand during the coming period.
Production interval	The production interval is the number of working days between two production runs for the same finished product. If the production interval is 1, then the finished product is, produced every day, and if the production interval is 5, the finished product is produced once every week.
Production output	The production output mainly depends on actual requirements. If inventory for a given product is low, a long production run is planned; if inventory is relatively low the production run will be shorter. The production output also depends on the frozen period. The longer the frozen period, the more production leveling takes place. The advantage of leveling is a more even utilisation of the available capacities.

Target service level	If you opt to use the #:region.slimstock:# software package, then a target service level in pieces must be declared. The software package will set the safety stocks accordingly, so that the desired service level at item level is reached with a minimum of stock investment.
Weekly Demand	The average weekly demand for a given finished product in the previous round. This is a simple average based on all parameters, product and customer portfolio of the previous round. New products and/or clients etc. in the current round will not be taken into account.
Number of batches	Number of production batches during the previous round.
Order lines	Average weekly number of times the product is ordered by a customer
Rejects	Directly after production the products are being checked by means of random sampling. If the quality of the product is questionable in terms of taste or color, it is rejected and scrapped immediately. The quality of the products is mainly dependent on the quality of the pulp being purchased.
Assignable Contribution Rate	The Assignable Contribution Rate is the margin per hour. It is calculated by multiplying the gross margin per unit with the bottling line speed (i.e. the number of units that can be produced each hour).
Bias (%)	The bias is calculated by evaluating the forecast of the previous round against the real demand in the current round.The bias is the relative difference between these components. In other words, it is the forecast minus demand divided by demand. Using this definition, a positive bias means that the forecast was higher than demand, a negative bias means that the forecast was lower than demand.
Carbon footprint	The carbon footprint per finished product is calculated by dividing the total CO 2 emission related to the production of the finished product (from processing the fruit up to and including distribution to the retail shelf) by the number of liters sold of the finished product.

Obsoletes (%)	Stock that is not delivered within its expiry date expressed as a percentage of demand.
Obsoletes (value)	The average weekly value of stock that is not sold before its expiry date.
Economic Inventory	Product inventory expressed in weeks forward cover. The is the amount of product physically in stock plus planned production minus any backorders. So the inventory cover mainly depends on safety stock level and production interval, which largely determine the total physical inventory, and the frozen period, which drives the number of planned production batches.
Average gross margin	The average gross margin per product.
Sales price	The sales price attained averaged over all the customers. This average is calculated as a weighted average on the basis of the volume realized with the different customers.
Inventory (value)	The average amount of inventory expressed valued against the the cost of goods.
Inventory (weeks)	The average amount of stock inventory in weeks requirement.
Demand per week (pieces)	The total demand in pieces per week, being the aggregate of all the customers.
Demand per week (value)	The total demand in a week, being the aggregate of all the customers, valued against the average sales price.
Forecast error	The Mean Absolute Percentage Error is a measure of the forecast unreliability. It is determined by specifying the absolute forecast error (demand minus forecast) on a weekly basis. The sum of the forecast errors is then divided by the sum of the demand. A MAPE of 0% is the ideal, in which case the demand is equal to the forecast. But if the MAPE is high then the forecast is unreliable.

Start up loss	After each change over the speed of the filling line gradually builds up. During the start up of production the line needs to be tuned. This results in a percentage of finished products that are irrevocably lost in the first hour of production. These products cannot be sold and will therefore be scrapped.
On Shelf Availability (%)	The On Shelf Availability (OSA) is a measure for the level availability of finished product on the retailer shelf. The OSA will depend on the retailer, the product, and the service level delivered to the retailer's D/C.
Production plan adherence	The percentage of production orders of the finished product that has been completed according to the production plan.
Service level (order lines)	The percentage of demanded order lines, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level (units)	The percentage of demanded units, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Can I undo terminating a contract with a supplier?	No, terminating a contract with a supplier is final. The associated costs cannot be made undone.
Can I review and undo my decisions?	Before closing time of the specific round it is possible to review your decisions and to change them. After this it is not possible to change anything for this round. Note that some decisions (like terminating supplier contracts) will lead to irreversible costs.
How can I change/select my role?	You can click the arrow next to your name in the upper right corner, and from the dropdown menu select "Edit Profile". From there you can tick the role you would like to take. If that role is not available, probably a team member has selected it already. In that case they would have to untick it and select another role or select the "CEO/CFO" role. Make sure to click save to register the changes.

How can I change my team name?	You can click the arrow next to your name in the upper right corner, and from the dropdown menu select "Edit Profile". From there you can change the name of the team in the "Team" section. Make sure to click "Save"to register the changes.
How can I vacate my role if I need to leave?	You can click the arrow next to your name in the upper right corner, and from the dropdown menu select "Edit Profile". From there you can untick your current role and select the "CEO/CFO" role. In that way, your team members can select your role and make decisions in that department. Make sure to click save to register the changes..
Why am I not able to change a parameter in another department?	You are only able to edit parameters in your own department. If even then you do not see an option to edit your own department, then most probably that parameter is not available yet and will be introduced in the following round(s).
Where can I find the product overview?	The Product Overview can be found by clicking on the "Information" tab at the left of the screen. This screen also includes other interesting information on number of items per pallet, pallets per truck etc.
Where can I find the component overview?	The Component Overview can be found by clicking on the "Information" tab at the left of the screen. This screen also includes other interesting information on number of items per pallet, pallets per truck etc.
How many times can I change suppliers?	You can change suppliers as many times as you want at no additional cost during decision making. Your changes should be final before the facilitator calculates the round. You will be notified when the calculation will be made by the facilitator.
How many decisions can I make?	You can make different decisions as many times as you want at no additional cost during decision making. Your changes should be final before the facilitator calculates the round. You will be notified when the calculation will be made by the facilitator.

Why can I not change a certain parameter?	You are only able to edit parameters in your own department. If even then you do not see an option to edit your own department, then most probably that parameter is not available yet and will be introduced in the following round(s).
What happens if I bring in the decisions of the team too late or not complete?	If you deliver your decisions too late or incomplete we will use predefined default decisions. This decisions will probably not bring you a good ROI.
How many pallet locations are taken by drums and IBCs?	A drum and an IBC both take the space of exactly one pallet location.
Can you maybe clarify where we can find the pallet and box quantities?	The pallet and box quantities can be found by clicking on the "Information" tab at the left of the screen. This screen also includes other interesting information on number of pallets per truck etc.
Where can I find the Bill of Materials?	The Bill of Materials can be found by clicking on the "Information" tab at the left of the screen. This screen also includes other interesting information on number of items per pallet, pallets per truck etc.
How many days does a week contain?	The calculation model of The Fresh Connection uses working days, so a week contains 5 days.
How is the actual demand of any given customer of The Fresh Connection generated?	Customer demand depends on the decision you take as a team. Most relevant are Category management and promotional pressure. Other external changes in the market demand by other factors will be always communicated upfront.
Where do I find the reports per department?	Reports per department can be found by clicking on the previous round in the round timeline on the left of the screen. You can look for historical reports in each department, as well as the financial and CO2 tabs on the left.

Function	The production interval tool can assist you in setting proper production intervals. The tool allows you to set production intervals for the coming period. Based on these settings, the theoretical consequences with respect to production capacity and costs are calculated. The tool thus enables you to safely experiment with production intervals. If the settings do not work out, you can always change them!
The Fresh Connection	Welcome to The Fresh Connection. Before you and your team members save The Fresh Connection from certain ruin, it s useful to understand how its supply chain functions.
Customers and products	The Fresh Connection is a producer of fruit juices. It provides a modest range of flavors. Only a couple of flavors are produced in a limited number of pack sizes. These are delivered to few customers, which are all retail companies. The Fresh Connection supplies its customers directly. The delivery is made on the next day after the customer places an order.
Product storage and shelf life	The Fresh Connection products are stored on pallets in the finished goods warehouse. They stay there until a delivery is made, or until their shelf life has expired. The finished goods have, from the time of production, a limited shelf life. The customers claim a significant part of this shelf life, usually 60 to 80%. This leaves The Fresh Connection with an "internal" shelf life of 20 to 40%. In case the shelf life is expired, the product will unfortunately have to be destroyed. The Fresh Connection does not have its own fleet to deliver to its customer s distribution centres and instead outsources the transportation to an extremely reliable partner.
The production process	The Fresh Connection manufactures the products it sells itself. The fruit juices are mixed in The Fresh Connection’s own mixer. Immediately after mixing the fruit juice, it is bottled using the bottling line. All pack sizes are bottled on the same line.

The components	A finished product consists of two components packaging and pulp (concentrated fruit juice). An extensive bill of materials 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 example, price, lead time and reliability.
Component storage	The components acquired by The Fresh Connection cannot always be immediately employed for production, which is why the company also has a raw materials warehouse and a tank yard. Packaging material is delivered on pallets and stored in the raw materials warehouse. This warehouse also holds the fruit pulp and the additives, which are held in drums or in IBCs . The fruit pulp that arrives in tank trucks is pumped into The Fresh Connection s tank yard.
Further reading	You now have an idea of how The Fresh Connection operates. We advise you to also read The mission , where we explain what is expected from you and your team.
Changes	During any round you can amend your decisions as many times as you like. In general there are no consequences attached to doing so. However, there are some exceptions: canceling a purchasing contract, that was agreed for multiple rounds, CANNOT be undone, nor can the associated costs coming the remaining contract duration and the contract value (the purchasing value at the supplier). Various means of obtaining extra information through the use of (software) tools or ordering reports, cannot be undone either, since the requested information is instantly provided. Finally, once a round

	has ended, decisions for that round can no longer be changed.
Save	Each decision must be saved by clicking on the appropriate "save" button, or by making a deal with a supplier or customer. When you click on the "save" button, a blue bar should appear at the top of the screen displaying a message that the results are saved. If the blue bar does not appear, then the decisions are not saved. To make sure the decisions are saved correctly, we advise you to reload the page, after which the most recent data will be loaded from the database.
General	Each team member has 4 KPIs. At the beginning of the game, the KPIs are fixed. On the main screen, the My Company screen, you can see the KPIs at the bottom. Your team's KPIs are compared against the pool average. You will receive alerts in case your team performs poorly on a selected KPI. These alerts are shown in the text box on the right side of the My Company screen. You can also view the KPIs on the results page of the respective roles. Here the scores are compared with other teams in your pool, excluding the bottom and top 10% performing teams. The result of the best scoring team is also displayed here. You can benchmark your scores against your close competitors.

General	The Fresh Connection is active in several markets, all of which are subject to market forces. These market forces are dependent on the decisions made by the teams in your group. If, for example, all teams select the same supplier, then the supplier's contract index will go up. Decisions made by teams outside of your group do not affect the market forces.
Purchasing	Market forces change the contract indices of suppliers as well as their free capacity. If many teams select the same supplier, then the supplier demands a higher contract index for new teams. In addition, the supplier's free capacity decreases. The results of the market forces are effective after a one-round delay. So the contract index of a supplier in round 2 is based on the number of teams that have selected that supplier in round 1. The decisions of the other teams in round 2 therefore do not affect your decisions (or results) in round 2. Thus you have all the information you require to make the right decisions in every round.
Sales	Market forces affect the sales price you receive for your finished product. If many of the teams do not deliver a certain finished product to a certain customer, then that customer is willing to pay other teams a higher price. This market force will be effective after a one-round delay. So if many teams in round 5 are not willing to deliver a given finished product to a certain customer, then the price the customer pays for this product will increase in round 6.
Welcome to The Fresh Connection	Welcome, and thanks for being a part of The Fresh Connection! Together with your team members, you will be in charge of the fruit juice producer The Fresh Connection. At this moment The Fresh Connection has large problems with its supply chain performance. This results in a negative ROI. Optimize the supply chain, make the right decisions, and let The Fresh Connection prosper.

Roles and responsibilities	The game is played together with three other team members. Together you make up the management team of The Fresh Connection. Each team member has a specific role: VP (Vice President) Purchasing, VP Operations, VP Sales or VP Supply Chain Management. All team members have their own responsibilities in terms of the role they take on, allowing them to also make their own decisions. However, do play The Fresh Connection as a team. Cooperation is the key to making The Fresh Connection a success.
VP Purchasing	The VP Purchasing is responsible for purchasing the components. He/she negotiates the terms of supply and the price with suppliers, can terminate existing contracts and conclude new ones. The VP Purchasing plays a crucial role in the game. By choosing suppliers who offer favorable terms, low prices and a high level of reliability, the total raw material costs are kept under control, stocks stay low and reliability of delivery for components to production is high.
VP Operations	The VP Operations is in charge of the production facilities and the warehouses. He/she orchestrates the work shifts and ensures that the staff are trained. He also decides on the space and manpower deployed in the warehouses and the tank yard. The VP Operations can make or break the game for the entire team. By ensuring that the production system remains flexible, production costs are low and reliability is high, the total production costs are controlled while product availability is high.
VP Sales	Product sales are overseen by the VP Sales. He/she negotiates The Fresh Connection s terms of delivery with the customers. Things such as the service level, shelf life, and promotional pressure are all negotiable. The VP Sales plays an extremely important role in the game and his bargaining can result in a high sales price - as long as The Fresh Connection can keep its promises. And sales are, of course, the launch pad for profits!

VP Supply Chain Management	The VP Supply Chain Management is the glue that holds the other roles together. By devising a supply chain strategy and undertaking intelligent stock planning, the VP Supply Chain Management plays a decisive role in the team. He/she can ensure that unreliable suppliers or production facilities are covered by strategically deployed safety stock, ensuring that the company keeps its promises to the customer.
Strategy	Each team member can make decisions individually, but as a team you need a good strategy to achieve the best results. It is not advisable, for example, for the VP Sales to agree to high service levels with the customer, while the VP Supply Chain Management is cutting back on stock! That s why it s essential, that you always discuss your decisions with each other.
Approach	The simulation is rich in content with a wide variety of products, suppliers, customers and more. It s just like a real company, which is why you should not try to collect all the facts before making a decision. You ll find it too time-consuming and the fun may disappear. As a Vice President, you concentrate primarily on the main topics. A good starting point for this is the My Company screen and the Finance page. You can then focus on gathering targeted information to respond satisfactorily to the most important issues. You ll see how The Fresh Connection s results start to improve once you make the right decisions!
Further reading	We advise you to also read The Company , where you can dive into the mechanics of The Fresh Connection s supply chain. You will then have an idea of the things you need to consider in the game.
Team	The team score is the ROI, the Return on Investment. More information on the ROI can be found in Important topics/Finance.
Purchasing	The score for VP Purchasing is a weighted average of the contract indices agreed upon with the suppliers. Lower contract indices lead to a higher score for the VP Purchasing.

Operations	The Operations score is based on the production and warehousing costs. The lower these costs are relative to the revenue, the higher the VP Operations scores.
Sales	The VP Sales has only one criterion: revenue. The higher the contracted sales revenue, the higher the score of the VP Sales.
Supply Chain Management	The VP Supply Chain Management is judged by the height of the stock value. The lower the value, the higher the score of the VP Supply Chain Management.
Rounds	The Fresh Connection will be played in an number of rounds. The first round is the most difficult one, because you still have to get used to the game and userinterface.
Scores	The objective of the game is for you and your team to achieve the best return on investments (ROI). In other words, the sole aim is not simply to make as much money as possible – keeping your investments in check also counts. Next to the team score there is also an individual score. These individual scores do not count towards the team score, but it's always nice for an individual to be at the top!
Pools	All the teams are divided up into pools. After each round, you can check the scores within your own pool and across all the pool. You can also select teams from other pools to compare results with your own (a peer pool), so that you can compare results with, for example, real-life colleagues, competitors, clients or suppliers.
Decisions	You will make many decisions during The Fresh Connection. A trade-off is incorporated in every decision, so a decision will never only have positive effects, but negative ones too. The trick is to assess these consequences and to balance them against each other. Should you not make any decisions during a given round, the decisions made in the previous round will then be reused.

Tactics and Strategy	The Fresh Connection is a tactical and strategic game. You will be assessed in terms of the long-term effects of your decisions. This means that you must gear your business towards long-term goals (as if your decisions will be in effect over many years). Given that we will measure the results in terms of their long-term effects, you will never suffer the negative consequences resulting from poor decisions in previous rounds in the present round. The upshot of this is that you can organize the business afresh in every round, without having to take the decisions and results from previous rounds into account. But the results from previous rounds are of course important with respect to making improvements.
Customer Location	The location of the customer's DC
Average gross margin	The average gross margin per customer per product.
Gross margin	The average weekly gross margin per customer per product.
Carbon footprint	The carbon footprint per customer / finished product is calculated by dividing the total CO 2 emission related to the production of the finished product for the customer concerned (from processing the fruit up to and including distribution to the retail shelf) by the number of liters sold of the customer / finished product.
Additional sales as a result of promotions (%)	The number of additional items sold attributable to promotional campaigns as a percentage of the total number of items sold. This concerns the so-called net promotion peak.
Additional sales as a result of webshop service level (%)	The number of additional items sold the following round, attributable to delivering a higher or lower service level than promised, as a percentage of the total number of items sold.
Demand per week (pieces)	Total demand per week.
Demand per week (value)	Total demand per week valued against the average sales price.

Sales price	The sales price attained from the customer. That is, the attained contract index multiplied by the basic sales price.
On Shelf Availability	The On Shelf Availability (OSA) is a measure for the level availability of finished product on the retailer shelf. The OSA will depend on the retailer, the product, and the service level delivered to the retailer's D/C. A high-end retailer will have many products per square meter of shelf space, resulting in a limited space for any given product on shelf. The store inventory is then held in a 'back of store' (in story inventory room elsewhere on the premises). If a product runs out on shelf replenishment from this 'back of store' may not be in time. Especially high runners may suffer from this. Discounters will have less of an issue as the full box of product will be in the shelf. If your service to the retailer's D/C is too low, the stores themselves may not be replenished in time, which may further hamper replenishment to shelf in store: a lower OSA results.
Attained shelf life (%)	The average percentage of the total shelf life that the customer receives.
Service level (order lines)	The percentage of demanded order lines, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level (units)	The percentage of demanded units, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Payment terms	The payment terms relate to the period in which the customer must have paid for the products received. The customer would naturally like to have generous payment terms.

Bonus policy	Through the sales volume rebate policy, the customer receives a price discount if a certain volume of product is purchased within a specific period. Stepping up the sales volume rebate policy means, that customer satisfaction will increase, as will the contract index. But the customer will then also sometimes place bigger orders than expected, so the volatility of customer demand also increases.
Footprint	The customers of The Fresh Connection are becoming more and more environmentally aware. That is why they wish to agree on a maximum amount of CO2 emission (kg) per liter of fruit juice sold to them. The greener the promise (meaning the lower the promise), the higher the contract index becomes. However, once promises are made, you need to live up to it. If you underachieve, then you will have to pay a penalty, if you overachieve, you will receive a bonus.
Contract index	The contract index is the result of these negotiations. This index demonstrates whether the customer is prepared to pay an additional sum over and above the basic sales price for the finished product, or whether he insists on a discount. A contract index of, for example, 0.95 means that the customer insists on a discount of 5%, while for a contract index of 1.05 the customer will offer a premium payment of 5%. This aside, the contract index is not all-determining when it comes to the final sales price. If the supply chain performance does not, in terms of service levels, fulfill the agreements made with the customer, then the customer will require a discount on the contract index. On the other hand, should the logistical service be far better, the customer will be prepared to offer a premium on the contract index.

Distribution pattern	The distribution pattern is the days The Fresh Connection delivers finished goods to customers. Customers appreciate receiving a steady flow of finished goods. In that case there are no peaks in the required capacities at their distribution center. Besides that, the average stock remains limited. However, with an eye on confining the distribution costs it is better not to deliver each day. By combining order lines, the load factor can be increased.
Requested shelf life (%)	All the customers insist on having a part of the total shelf life period of a finished product, which is the requested shelf life percentage. The customer wants the highest possible percentage of that shelf life, enabling him to keep the product in stock for a longer period and to offer the consumer greater shelf life. But the longer the customer can keep the finished product in stock, the shorter the time The Fresh Connection can do so. Therefore, the probability of the finished goods expiring increase in proportion to the percentage of the shelf life promised to the customer.
Trade unit	A trade unit is the unit that the customer uses to place the order lines. If the order unit concerns the outer box, then the smallest quantity the customer can order is the entire contents of an outer box. On the other hand, should the order unit be the equivalent of a pallet, the customer will always order a whole pallet of finished product. Customers value the freedom of being able to order small quantities, but don t forget that this may require additional labor in the finished goods warehouse it takes longer to pick outer boxes than it does whole pallets.
Order deadline	The final time during the day at which the customer can place an order is the order deadline. The customer naturally wants the time to be as late as possible and to that extent offers a higher contract index. However, if the order deadline is set too late, the employees in the finished goods warehouse may not be able to get all the order lines out in time.

Priority	In case there is insufficient stock to satisfy all customer demand, the priority determines which customer demand is satisfied first. If, after satisfying the first customer's demand, there is still stock left, then the demand of the customer with second priority is satisfied, etc.
Promotional pressure	The promotional pressure determines the number and the extent of the special offers involving finished product from The Fresh Connection that the customers launch. When undertaking a promotional campaign, the customer gives the consumer a discount and The Fresh Connection will have to cover a part of that discount. The contract index will thus decrease as the promotional pressure increases. However, consumers will also be buying increased amounts of The Fresh Connection juice during these campaigns. So there is an associated opportunity of increasing the revenue.
Promotion horizon	The promotion horizon is an indication of the number of weeks prior a customer informs The Fresh Connection of an upcoming promotional campaign in terms of type and quantity of product. The customer would like a short promotion horizon but if the horizon is longer, The Fresh Connection has more time to anticipate on an upcoming promotion.
Regional delivery	You can opt for delivery of the finished products directly to the regional DCs of the customer, instead of to their central DC. Customers value this and it will be expressed in the height of the contract index. As a result the transport load factor will decrease and that is a trade off, when looking at distribution costs and carbon footprint.
Service level type	The extent to which the service level is calculated is also agreed upon with the customer and can be either items, order lines or orders. This therefore means that the service level can be calculated either as the total number of items, order lines or orders supplied directly from the stock as a percentage of the total number of requested items, order lines or orders.

Service level	The service level is the most crucial of the agreements reached with the customer. The customer naturally expects a high service level and is prepared to offer a high contract index in return. However, this arrangement also entails a risk. Should the promised service level not be delivered, the customer will insist on a substantial discount on the contract index, which will be detrimental to the final sales price. Once again, the customer will offer a small bonus should the service level prove to be better than had been agreed upon. All in all, the issue of the service level agreement must be finely balanced with that of feasibility.
Complete assortment	You can negotiate with a customer to deliver the complete assortment of The Fresh Connection. Since customers like to offer a broad range of products to consumers, the customer will value this and is willing to pay extra. If you decide not to deliver the complete assortment, you can check/uncheck products on the "Category Management" sheet
Order lines	The weekly number of order lines delivered to the customer.
Pallets	The weekly number of pallets delivered to the customer.
Shipments	The weekly number of shipments delivered to the customer.
Gross margin	The average weekly gross margin.
Carbon footprint	The carbon footprint per customer is calculated by dividing the total CO 2 emission related to the production of all the finished products for a customer (from processing the fruit up to and including distribution to the retail shelf) by the number of liters sold of all the finished products to a customer.
Days in warehouse	The average number of days that the finished product is in the finished goods warehouse before it is delivered.
Attained contract index	Index based on the logistical performance with regard to the customer (so including a possible bonus or discount).

Attained shelf life (%)	The average percentage of the total shelf life that the customer receives.
Revenue	The revenue attained with this customer. That is to say, the total number of items sold multiplied by the sales price. And that, of course, for the sum of all finished products.
On Shelf Availability (%)	The On Shelf Availability (OSA) is a measure for the level availability of finished product on the retailer shelf. The OSA will depend on the retailer, the product, and the service level delivered to the retailer's D/C.
Service level (orders)	The percentage of demanded orders, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level (order lines)	The percentage of demanded order lines, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level (units)	The percentage of demanded units, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
ROI (%)	A relative measure of financial performance that provides a means for comparing various investments by calculating the profits returned during a specified time period. In case of The Fresh Connection it is Operating profit as a percentage of the Investment during the last half year.
Rejection rate components (%)	The number of rejected components as a percentage of the purchased components.
Gross margin (customer)	Difference between the revenue and the cost of goods sold (per customer).
Carbon footprint	The carbon footprint is a measure for sustainability. It is calculated by dividing the total CO2 emission in kilos by the total number of liters fruit juice that has been sold.

CO2 emission	The CO2 emission total (kg) that can be allocated to the production of fruit juice by The Fresh Connection
CO2 emission/revenue ratio	The CO 2 emission total (kg) compared to the sales revenue.
Value at Risk	The Value at Risk indicates how much revenue value is at risk, considering the current risk assessment. It gives an idea about the robustness of the supply chain design. The lower the VAR the better it is.
Value at Risk (%)	The Value at Risk percentage indicates how much % of revenue value is at risk, considering the current risk assessment. It gives an idea about the robustness of the supply chain design. The lower the VAR%, the better it is.
Capacity loss due to changeovers (%)	Percentage of the total available capacity that goes lost due to changeovers.
Capacity loss due to breakdowns (%)	Percentage of the available total capacity that goes lost due to breakdowns and preventive maintenance.
Cost of goods sold (%)	Cost of goods sold as a percentage of total revenue.
Components obsoletes (%)	Percentage of the total purchased raw materials that have been scrapped due to obsolescence.
Components obsoletes (value)	Value of the total purchased raw materials scrapped due to obsolescence (per week).
Finished products obsoletes (%)	Percentage of the total amount of demanded finished goods that have been scrapped due to obsolescence.
Finished products obsoletes (costs)	The value of finished products that have been scrapped due to obsolescence (previous round).
Distribution costs (%)	Distribution costs as a percentage of revenue
Flexible labor raw materials warehouse (FTE)	Number of temporary workers (FTE) deployed in the raw materials warehouse.
Distributed pallets	Number of delivered pallets
Flexible labor production (FTE)	Number of temporary workers (FTE) deployed in production.

Flexible labor finished goods warehouse (FTE)	Number of temporary workers (FTE) deployed in the finished goods warehouse.
Forecast reliability components	Deviation of the forecast of components from the actual demand (mean absolute percentage error)
Forecast reliability finished products	Deviation of the forecast of demand of finished products from the actual demand (mean absolute percentage error)
Outsourced tank yard (tank-days)	Average number of tank-days (per week)
Average number of pallets in stock	Average number of pallets in stock in the finished goods warehouse
Handling costs (%)	Handling costs as a percentage of revenue
Attained shelf life for customer (%)	Percentage of shelf life actually attained for the customer
Purchase costs (%)	Purchase costs as a percentage of total revenue
Delivery reliability (%)	A performance criterion, expressed here as a percentage, that measures how consistently goods and services are delivered on, or before, the promised time.
Availability for production (%)	The percentage of components that was available for production when demanded.
Revenue value (per product)	Revenue value (per product)
Revenue per customer	Revenue per customer
Inbound order lines	The number of order lines received
Outbound order lines	Number of outbound order lines
Overflow raw materials warehouse (%)	Use of the overflow warehouse for stocking components in case of lack of capacity in the raw materials warehouse
Overflow chilled finished goods warehouse (%)	Relative utilization of the overflow warehouse in case of lack of capacity in the chilled finished goods warehouse
Overflow finished goods warehouse (%)	Relative utilization of the overflow warehouse in case of lack of capacity in the finished goods warehouse

Overhead costs (%)	Overhead costs as a percentage of revenue
Overtime production (%)	Percentage of worked hours over and above the normal shifts
Production plan adherence (%)	Reliability of production relative to the production plan
Utilization rate bottling lines (%)	Percentage that indicates how intensively (based on the deployed number of shifts) the bottling lines are being used. Utilization compares actual time used to available time. Traditionally, utilization is the ratio of operation time charged (run time plus setup time) to the clock time available. Utilization is a percentage between 0 and 100 percent that is equal to 100 percent minus the percentage lost due to the unavailability of machines, tools, workers, and so forth.
Production costs (%)	Production costs as a percentage of revenue
Service level order lines (%)	The percentage of demanded order lines, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level order lines fresh (%)	The percentage of demanded order lines for fresh products, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level orders (%)	The percentage of demanded orders, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level units (%)	The percentage of demanded units, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.
Service level units fresh (%)	The percentage of demanded units for fresh products, that was satisfied through inventory or by the current production schedule in time to satisfy the customers requested delivery dates and quantities.

IBC overflow (%)	Percentage of the ordered volume that has been pump into IBCs because the tank yard capacity is exceeded
Total capacity loss in production (%)	Percentage of the total capacity available lost on changeovers and breakdowns
Components stock value	Average stock value of the components
Cube utilization chilled finished goods warehouse (%)	A measurement of the average utilization of the total storage capacity of the chilled finished goods warehouse (as a percentage of total capacity).
Components stock (weeks)	Average stock of the components expressed in weeks
Finished products stock value	Average stock value of the finished product
Finished products in stock (weeks)	Average stock of the finished product expressed in weeks
Stock costs (%)	Stock keeping costs as a percentage of revenue
Profit (%)	Profit as a percentage of revenue
Inbound deliveries	The number of deliveries received
Outbound deliveries	Number of outbound deliveries
Bias finished product (%)	The average forecast bias of the finished product. The bias is the % difference between the forecast and the actual demand.
Bias Components (%)	The average forecast bias of components. The bias is the % difference between the forecast for components and the actual consumption of components.
On the Shelf Availability per product (%)	The average on the shelf availability per product. On the shelf availability is dependent on the customer- and product type, the attained delivery reliability to the customer and on possible improvement projects.
Cube utilization, raw materials warehouse (%)	A measurement of the average utilization of the total storage capacity of the raw materials warehouse (as a percentage of total capacity).

On Shelf Availability (%)	The On Shelf Availability (OSA) is a measure for the level availability of finished product on the retailer shelf. The OSA will depend on the retailer, the product, and the service level delivered to the retailer's D/C.
Economic Inventory (weeks)	Economic Inventory is total inventory available for future orders. This is the amount of product physically in stock plus planned production minus any backorders. So the inventory cover mainly depends on safety stock level and production interval.
Economic inventory components (weeks)	Component inventory available for future production orders. This is the amount of component physically in stock plus planned supplier deliveries minus any production requirements already planned.
Assignable Contribution Rate	The Assignable Contribution Rate is the gross margin per hour. It is calculated by multiplying the gross margin (per item) with the production rate (items per hour) of the bottling line.
Source Cycle Time (weeks)	The source cycle time is the time needed for the purchasing process. A finished product is made out of components. Of all the components sourcing times, this is the longest sourcing time of them all. Sourcing time comprises the order interval, the lead-time and if applicable, the intake time.
Make Cycle Time (weeks)	The make cycle time is the time needed for the production process. It comprises the frozen period and the production interval.
Days Sales Outstanding	A measure of the average number of days that a company takes to collect revenue after a sale has been made. A low DSO number means that it takes a company fewer days to collect its accounts receivable. A high DSO number shows that a company is selling its product to customers on credit and taking longer to collect money.
Days Payable Outstanding	A measure of the average number of days that a company takes to to pay its bill after a purchase has been made.

Cash to Cash Cycle	The Cash to Cash Cycle is the time it takes for an investment (cash outflow) to contribute to revenue (cash inflow). It is the time that passes between the moment a payment is made for the purchase of a component and the moment a receipt is made from the sale of that component (as part of a finished product). The longer the Cash to Cash Cycle, the larger the need for working capital.
Return on Fixed Assets (%)	The Return on Fixed Assets is profit compared to the investment in fixed assets. The latter includes investments in building, equipment and software.
Utilization rate, tank yard (%)	A measurement of the average utilization of the total storage capacity of the tank yard (as a percentage of total capacity).
Return on Working Capital (%)	The Return on Working Capital is profit compared to working capital. The latter includes investments in inventories and payment terms.
Overall Equipment Effectiveness	Overall Equipment Effectiveness quantifies how well a manufacturing unit performs relative to its designed capacity, during the periods when it is scheduled to run. It is the outcome of a multiplication of the availability, performance (or speed) and quality. Availability represents the percentage of scheduled time that the operation is available to operate. Often referred to as uptime. Performance (or speed) represents the speed at which the bottling line runs as a percentage of its designed speed. Finally, quality represents the products, that meet specifications (first time right) as a percentage of the total of products produced.

Total Effective Equipment Performance	The Total Effective Equipment Performance is the effectiveness of the bottling lines compared to calendar days. Essentially it measures how effectivey a bottling line is being used when its actual deployment is compared to a theoretical available time of 365 days times 24 hours in a calendar year. Total Effective Equipment Performance can be calculated by multiplying the percentage of total calendar time that a bottling is actually scheduled for operation (also called loading) times the Overall Equipment Effectiveness.
Cube utilization, finished goods warehouse (%)	A measurement of the average utilization of the total storage capacity of the finished goods warehouse (as a percentage of total capacity).
Gross margin (product)	Difference between the revenue and the cost of goods sold (per product).
Payment terms effectuation	The payment terms can take effect at the moment of ordering, or the moment of delivery. The method that the supplier employs is one of his characteristics.
Certification	Certification indicates whether the supplier controls his internal production processes. Certified suppliers are more reliable than non-certified suppliers, both in terms of delivery reliability as well as the quality of the delivered material.
Agreed delivery reliability (%)	The agreed percentage of the number of units that will be delivered on, or before, the promised time. Whether the supplier will fulfill this agreed percentage depends on his free capacity and certification.
Lead time (days)	The lead time is a supplier characteristic. It cannot be negotiated. The lead time is the number of days between the moment of ordering and the moment of delivery. Suppliers that are located far away have, in general, a longer lead time than suppliers located close by.
Location	The city where the supplier is located

Transport costs	The Fresh Connection not only pays for the components, but for the transport costs from the supplier to The Fresh Connection too. These transport costs are dependent on the distance to The Fresh Connection. Suppliers located far away charge higher transport costs than those located close by. The mode of transport also influences the transport costs. Sea shipping is cheaper than road haulage.
Free capacity	The free capacity is the part of the supplier's total capacity that is not yet utilized. A supplier with a high free capacity is able to process the orders from The Fresh Connection on time. On the other hand, a low free capacity indicates that the supplier has reached the peak of his capacity and therefore cannot instantly settle each order from The Fresh Connection.
Batch rule	A batch rule can be set for your packs and your caps supplier. This batch rule influences the number of components ordered when an order is placed. That is, when there is a need for a specific component supplied by the supplier, it is checked whether an TL (full truck load) can be created for the order. For this purpose, components are ordered which are not immediately required so as to create the TL. Ordering TLs means that transport costs are lower, but it also means that components are ordered that are not immediately required. The time indication determines the maximum period a replenishment order is put forward. If the batch rule is set to one week, then replenishment orders are put forward that are planned for next week. Replenishment orders that are planned after next week are left as is.
Payment terms (weeks)	The payment terms is the period within which the supplier must be paid. Suppliers want the payment terms to be as short as possible.

Contract duration	The contract duration is the number of rounds for which a contract is valid. Suppliers generally prefer long-term contracts, which provide them with more security. As suppliers strive to maintain a good relationship, a longer contract also results in improved delivery reliability. Please note, though, that the costs related to terminating a contract depend on the duration of the agreed contract. Buying out a long-term contract is more expensive than buying out a short-term one. So if you wish to switch suppliers more frequently, agree to a shorter term contract to lower the cost of termination.
Contract index	The contract index is the result of these negotiations with the supplier. The contract index reflects the terms of delivery you impose upon the supplier. If your requirements are high the result will be a high contract index, and as the requirements decrease, so does the contract index. For example, a contract index of 1.05 will mean that you will pay a premium of 5% over and above the basic price of the component. A contract index of 0.95 will, on the other hand, lead to a discount of 5% off the basic price.
Review period (days)	The review period is the number of working days between two review moments. Suppliers prefer a long review period, in which case the average size of the order will be greater and the number of orders smaller. This means that the supplier has lower handling and administration costs. However, should the average size of the order be larger, then so will the average stock and the peak capacity load in the raw materials warehouse will likewise increase.
Delivery window	The delivery window is the margin within which the promised time of delivery falls. Should the delivery window be four hours, the supplier is then obliged to deliver within a very precise period, while if the delivery window provides for one week, the supplier may deliver a week earlier or a week later than agreed to. Suppliers naturally prefer a large delivery window.

Trade unit	A trade unit is the unit you use when placing orders with the supplier. Should the trade unit be a pallet, you will then always order a multiple of pallets, and if it is a FTL, you will always be supplied in a multiple of full truck loads. The relevant trade unit depends on the type of component supplied by the supplier. Packaging is delivered in large rolls on pallets, so you can only order it by the pallet or TL. The other packaging material can be ordered by the pallet layer, pallet or TL. Pulp and additives are liquids and can be supplied in drums (#:generalitem.general.druminhoud:#-liter content), IBCs (#:generalitem.general.ibcinhoud:#-liter content) or tankers (#:generalitem.general.tankergrootte:#-liter-content). Suppliers prefer large trade units, as it saves on handling and administration costs. Increasing the trade unit size will thus decrease the contract index, but it will also increase the average stock as well as peak capacity load for the raw materials warehouse.
Trade unit	A trade unit is the unit you use when placing orders with the supplier. Should the trade unit be a pallet, you will then always order a multiple of pallets, and if it is a FTL, you will always be supplied in a multiple of full truck loads. One exceptionn is when you order in pallets and the cost per FTL are lower, you will be supplied in a full truck load. The relevant trade unit depends on the type of component supplied by the supplier. Packaging is delivered in large rolls on pallets, so you can only order it by the pallet or TL. The other packaging material can be ordered by the pallet layer, pallet or TL. Pulp and additives are liquids and can be supplied in drums (#:generalitem.general.druminhoud:#-liter content), IBCs (#:generalitem.general.ibcinhoud:#-liter content) or tankers (#:generalitem.general.tankergrootte:#-liter-content). Suppliers prefer large trade units, as it saves on handling and administration costs. Increasing the trade unit size will thus decrease the contract index, but it will also increase the average stock as well as peak capacity load for the raw materials warehouse.

Transport mode	With some suppliers you can negotiate about transport modality. This modality influences delivery lead time and transport costs. Transport by boat has a longer lead time, than transport by truck, but also lower transportation costs.
Order lines	The number of order lines delivered by the supplier during the previous round.
Shipments	The number of shipments delivered by the supplier during the previous round.
Rejection (%)	Rejected material as a percentage of the total value of delivered material. Packaging material can be rejected if the quality does not meet the tolerance levels of the bottling line. Fruit pulp can be rejected if the aroma, color or taste does not meet the specifications of the quality inspector of The Fresh Connection.
Relation	The quality of the supplier relation. This relation has a big influence on the Time to Recover (TTR), in case the supplier gets hit by a calamity. In general one can say that supply to important customers with the best supplier relation is restored the fastest. Elements to strengthen the relation are e.g. long term contracts and close collaboration.
Purchase value	The total purchasing value, including transport costs, over the previous round.
Transport costs	The transport costs made previous round to transport the purchased components to the The Fresh Connection site. This includes the cost for shipments , FTL's or pallets and an administrative cost of 10.5%.
Price effect	The number of heads is an indication of the number of teams that have contracted the supplier. If a supplier only has one head, then none or few teams have selected this supplier. If however a supplier has four heads, then many teams have contracted this supplier. If many teams select the same supplier, then this supplier asks for higher contract indices and his free capacity drops.

Number of permanent employees in the raw material warehouse (FTE)	The labor force of the raw materials warehouse is primarily engaged in taking in the delivered pallets and making their contents available in good time for production. The intake of deliveries costs #:generalitem.aanlevering.arbeidsproductiviteitingaandperorderregel:# hour per order line and #:generalitem.aanlevering.arbeidsproductiviteitingaandperpalletinminuten:# minutes per pallet, while making a pallet available for production costs #:generalitem.aanlevering.arbeidsproductiviteitingaandperpalletinminuten:# minutes and making a tank available for production costs #:generalitem.aanlevering.arbeidsproductiviteitingaandpertankinminuten:# minutes time. In addition, the employees lose approximately 4 hours per day in keeping the warehouse and tank yard running. When there are insufficient pallet locations in the raw materials warehouse, the manpower is also used to move the pallets to and from the overflow warehouse, costing them an average of #:generalitem.aanlevering.arbeidsproductiviteitingaandperpalletinminuten:# minutes per pallet. They are also responsible for filling the IBCs (Intermediate Bulk Containers) if there is insufficient capacity in the tank yard, costing them a further #:generalitem.aanlevering.arbeidsproductiviteitingaandperibc:# hour per IBC. Should more manpower be required than is available on any given day, The Fresh Connection will then hire in flexible labor, using a completely automated system. This flexible labor must be given induction training and its productivity per hour is subsequently a little lower than that of the permanent staff. An employee can work 40 hours a week and costs #:generalitem.kostenalgemeen.personeelskostenpervastefte:# per annum, while an hour of flexible labor is rated against a tariff of #:generalitem.kostenalgemeen.personeelskostenpervariabefte:#.

Pallet locations	The delivered packaging is stored in the raw materials warehouse, while fruit pulp and additives delivered in drums or IBCs (Intermediate Bulk Containers) are stored in the same warehouse. The costs related to the raw materials warehouse are #:generalitem.kostenalgemeen.kostenperpalletplaatseigenmagazijnperjaarongekoeld:# per pallet location (the area required to store one pallet) per annum. You may be able to decide whether to increase or decrease the number of pallet locations in the raw materials warehouse in each round. Increasing or decreasing the pallet locations involves no additional expenditure. You will always pay the fixed rate for each pallet location every year. If there is insufficient space for storing the pallets, the remainder is then temporarily stored in an overflow warehouse. The rate for this overflow warehouse is #:generalitem.uitlevering.prijsperpalletplaatsdagbuurmanuitgaandongekoeld:# per pallet location per day.
Tanks in tank yard	Fruit pulp delivered in tanks is pumped straight into one of the tanks in the tank yard. Should there be insufficient space in the tank yard, the pulp will be pumped into IBCs (Intermediate Bulk Containers) and stored in the raw materials warehouse. The tank yard naturally also involves expenditure and a tank costs #:generalitem.kostenalgemeen.kostenpereigentankperjaar:# per annum. You can decide to increase or decrease the number of tanks in the tank yard in each round. There are no costs associated with increasing or decreasing the number of tanks. You will always pay a fixed rate for each tank per year.
Intake time, raw material warehouse (days)	The intake time is the number of days the employees in the raw materials warehouse require to take in the incoming pallets. This intake time only applies to the delivery of pallets, as the contents of tankers are immediately pumped into the tanks upon arrival. Increasing the intake time will lower the peak labor requirements in the raw materials warehouse, which means that the need for flexible labor will likewise

	decrease. However, it will then naturally take longer before the raw materials are available for production.
Outsourcing tank yard	Your tank yard 3rd party #:region.uitbesteedtankerpark:# will deliver pulp Just-in-Time for production. Cost for this partnership are #:generalitem.aanlevering.uitbestedingtankerparkingaandperopslagdagpertank:# for each day a tank is being used ,#:generalitem.aanlevering.uitbestedingtankerparkingaandinslagperftl:# intake cost per delivery and #:generalitem.aanlevering.uitbestedingtankerparkingaanduitslagperorderregelincltransport:# delivery cost (including transportation to The Fresh Connection) for each delivery to production.

Permanent employees in finished goods warehouse (FTE)	The employees in the finished goods warehouse must store the pallets arriving from production. They also pick the customers order lines and ready them for end-distribution. Storing the pallets coming from production costs #:generalitem.uitlevering.arbeidsproductiviteituitgaandperpalletinminuten:# minutes in time for every pallet. The picking costs #:generalitem.uitlevering.arbeidsproductiviteituitgaandperorderregelinminuten:# minutes per order line, #:generalitem.uitlevering.arbeidsproductiviteituitgaandperpalletinminuten:# minutes per pallet or pallet layer and #:generalitem.uitlevering.arbeidsproductiviteituitgaandperdoosinminuten:# minutes per outer box. Should there be insufficient pallet locations available in the finished goods warehouse, the staff will then move the pallets to an overflow warehouse. Moving one pallet from or to the overflow warehouse costs #:generalitem.uitlevering.arbeidsproductiviteituitgaandperpalletinminuten:# minutes. Processing a pallet of obsoletes for destruction takes the same time. In addition, the staff spends 4 hours per day cleaning and tidying up the finished goods warehouse. An employee can work 40 hours a week and costs #:generalitem.kostenalgemeen.personeelskostenpervastefte:# per annum, while an hour of flexible labor costs #:generalitem.kostenalgemeen.personeelskostenpervariabefte:#.

Pallet locations, chilled warehouse	The fresh juice will have to be stored in a chilled environment, for which a separate chilled pallet warehouse is required. A pallet location in this chilled warehouse costs #:generalitem.kostenalgemeen.kostenperpalletplaatseigenmagazijnperjaargekoeld:# per pallet location per year. You can decide whether to increase or decrease the pallet locations in the outgoing warehouse in each round. Increasing or decreasing the pallet locations does not involve additional expenditure, and you will always pay the fixed rate for each pallet location every year. If there is insufficient space in this chilled warehouse for storing the finished product, the rest of the pallets will then once again be temporarily stored in an overflow warehouse with the expenditure there being #:generalitem.uitlevering.prijsperpalletplaatsdagbuurmanuitgaandgekoeld:# per pallet location per day.
Pallet locations	The finished goods warehouse is used to store finished product that is ready for delivery. The costs for the finished goods warehouse are #:generalitem.kostenalgemeen.kostenperpalletplaatseigenmagazijnperjaarongekoeld:# for each pallet location per year. You may be able to decide whether to increase or decrease the pallet locations in the finished goods warehouse in each round. Increasing or decreasing the pallet locations does not involve additional expenditure, and you will always pay the fixed rate for each pallet location every year. If there is insufficient space in the finished products warehouse, the rest of the pallets will then be temporarily stored in an overflow warehouse. The rate for this overflow warehouse is #:generalitem.uitlevering.prijsperpalletplaatsdagbuurmanuitgaandongekoeld:# per pallet location per day.

Outsourcing the finished goods warehouse	You can opt to outsource the finished goods warehouse. An option exists to outsource the warehouse to a conventional warehouse or to a fully automated warehouse. Should the finished goods warehouse be subcontracted, the produced pallets will be collected every day and stored until end-distribution takes place. If you outsource your finished goods warehouse, you will no longer require your own finished goods warehouses. The fee for the conventional warehouse is #:generalitem.uitlevering.uitbestedingconventioneeluitgaandperpalletplaatsdag:# for each day one pallet is stored. Furthermore there is an intake fee of #:generalitem.uitlevering.uitbestedingconventioneeluitgaandinslagperpallet:# per pallet, and a dispatch fee of #:generalitem.uitlevering.uitbestedingconventioneeluitgaandperorderregel:# per order line. The automated warehouse has a fee of #:generalitem.uitlevering.uitbestedingautomatischuitgaandperpalletplaatsdag:# per pallet location per day, an intake fee of #:generalitem.uitlevering.uitbestedingautomatischuitgaandinslagperpallet:# per pallet, and a dispatch fee of #:generalitem.uitlevering.uitbestedingautomatischuitgaandperorderregel:# per order line. Destroying any obsolescent stock will cost #:generalitem.uitlevering.uitbestedingautomatischuitgaandperorderregel:# per batch. If the finished goods warehouse is outsourced, then no costs (either in terms of space or handling) are incurred for The Fresh Connection s finished goods warehouse. Instead, handling costs are incurred for making the pallets available for storage in the outsourced warehouse.
Average lot size (liters)	The average number of liters of juice created in the mixer. If the average lot size is much smaller than the mixer s maximum capacity, the flavors are produced in small batches.
Cleaning time (%)	The time during which the mixer is cleaned as a percentage of the total time that the mixer is operational. A large cleaning time percentage indicates small lot sizes.

Bottling line characteristics	Each finished product can be run on each bottling line, regardless of the type of packaging material used. Each bottling line has certain characteristics, such as the number of liters that can be filled each hour, the number of operators, sensitivity to breakdowns and changeover times. When switching from bottling one finished product to a different finished product, a changeover is needed. This changeover time is used to prepare the components for production, clean the bottling line, and if necessary change the size settings of the bottling line. Either a formula changeover is needed (if the packaging material and size do not change, but only the flavor) or a size changeover. A size changeover takes more time than a formula changeover.
Overtime	Should more labor capacity be required in a given week than is available, The Fresh Connection will hire flexible manpower. The costs associated with flexible manpower are #:generalitem.kostenalgemeen.personeelskostenpervariabefte:# per hour. Moreover, flexible manpower has less experience in operating the bottling lines than permanent employees, and so the flexible manpower is less efficient than the permanent staff. Insufficient work capacity is also detrimental to the production plan adherence. If the production plan adherence is low it often takes longer before the finished product is in stock.

Overtime	If, on a certain day, the required labor capacity exceeds the availability of labor in the raw materials warehouse, then The Fresh Connection will hire flexible manpower. This flexible manpower needs to be trained and is therefore less efficient than permanent employees. Permanent employees cost #:generalitem.kostenalgemeen.personeelskostenpervastefte:# per annum, while flexible manpower is charged at #:generalitem.kostenalgemeen.personeelskostenpervariabefte:# per hour. Lack of capacity in the raw materials warehouse will also negatively influence production plan adherence. Should the warehouse employees be extremely busy, then it will be impossible for them to prepare all components for production. In that event, production will not take place as planned.
MCC	In a Manufacturing Consolidation Center (MCC), storage and distribution activities from different manufacturers are combined, leading to improvements in efficiency. The efficiency improvements can lead to a 5 % drop in the distribution costs for outbound orders. But this percentage is, of course, dependent on the synergy achievable between the manufacturers. In general, customers are also happy with an MCC. Consolidation allows a reduction in the number of shipments sent to their distribution centers. The price increase that The Fresh Connection's customers will offer can rise to about 0,5 % on top of the contract index, depending on the reduction in the number of shipments. An MCC costs #:generalitem.kostenalgemeen.samenwerkingmcc:# per annum. The cost structure regarding storage is the same as the automated variant of warehouse outsourcing, i.e. #:generalitem.uitlevering.uitbestedingautomatischuitgaandperpalletplaatsdag:# per pallet location per day, #:generalitem.uitlevering.uitbestedingautomatischuitgaandinslagperpallet:# per inbound pallet and a price of #:generalitem.uitlevering.uitbestedingautomatischuitgaandperorderregel:# per outbound order line. Customers no longer incur the cost of maintaining their own outgoing warehouse (pallet locations and personnel). However,

	handling costs are charged instead for making pallets from production available for transfer to the MCC.

Mixer characteristics	Each mixer has certain characteristics, such as a technical minimum, a maximum capacity, an operating time and a cleaning time, costs per annum and per hour and an investment. The technical minimum is the minimum number of liters the mixer can take. Should the content of the mixer be below that level, the juice will not be properly mixed. This technical minimum therefore influences the lot size of the finished product. If the technical minimum is for instance 10,000 liters, then of a finished product in 1 liter packages at least 10,000 packages are filled at each batch run. The maximum capacity is the maximum capacity of the mixer - the number of liters the mixer can mix in one run. The mixing of one batch consumes a number of hours of operating time. Once the finished product for a particular flavor has been mixed, the mixer will have to be cleaned before a new flavor can be mixed. The time taken to do this is the cleaning time. Both the operating time and the cleaning time must be dealt with by staff and this is expressed in costs per mixing-hour. For the hours that the mixers are not operational, no expenses are incurred. Aside from the costs per hour, there are also fixed costs associated to owning a mixer and an investment which is added to The Fresh Connection's total investment.
Mixer selection	The mixers mix the unique flavors of The Fresh Connection. You can choose between three mixers, each with its own characteristics - the large mixer, a small mixer, and one in between the two. You can freely switch mixers during the game. However, make sure that the finished product is always assigned to a mixer. If this is not the case, then the finished product is not mixed, and hence not sold.

Overtime	If, on a given day, there is a need for more additional labor than is available from the permanent staff, The Fresh Connection will then hire in flexible manpower. This flexible manpower needs to be trained, and is therefore less productive than permanent employees. An hour of flexible labor costs #:generalitem.kostenalgemeen.personeelskostenpervariabefte:#. A lack of permanent capacity in the finished goods warehouse is detrimental for the service level towards the customer. If the employees are too busy, then they are not able to prepare all orders for the final distribution in time.
Hours per week raw materials warehouse	Average required labor capacity per week in the raw materials warehouse
Hours per week finished goods warehouse	Average required labor capacity in the finished goods warehouse per week
Hours per week	Average needed labor capacitity per week
Raw materials inspection	A raw materials inspection can be introduced to check the quality of the supplied materials upon arrival in the inbound warehouse or tank yard. The materials will be inspected by means of random sampling and, should the quality be substandard, it will be immediately rejected. This inspection will result in a decrease of breakdowns at the bottling lines, as the defective packaging material is rejected before it gets there. It also decrease rejects of finished products, since the fruit pulp is inspected before it is processed.
Cube utilization (%)	A measurement of the utilization of the total storage capacity of a warehouse or storage facility. So the average number of pallets or tanks on stock divided by the number of pallet locations or tanks. If the utilization rate exceeds 100%, then there is a structural undercapacity. It might be that the utilization rate is below 100%, but overflow is used to cater for peak demands in capacity.
Capacity	The capacity of the warehouse or tank yard, so the number of pallet locations or tanks.

Usage	The average number of pallets on stock or the average number of tanks used. A higher usage number than capacity number, means a capacity shortage and this leads to overflow: a shortage in tank capacity means pulp needs to be stored in IBCs in the inbound warehouse, a shortage in the inbound warehouse leads to overflow to another warehouse.
Flexible manpower (FTE)	The average number of flexible workers contracted to undertake work in the raw materials warehouse. It may be that the average capacity in the raw materials warehouse is sufficient, but flexible manpower is still contracted in order to cater to peak demand with respect to capacity.
Order lines per week	Average number of inbound order lines in the raw materials warehouse per week. For the finished goods warehouse it is the average number of outbound order lines.
Overflow (%)	For the warehouses this is the number of pallet location days in the overflow warehouse as a percentage of the total demand for pallet location days. For the tank yard this is the volume that is pumped directly into IBCs upon arrival at The Fresh Connection (because of lack of space in the tank yard) as a percentage of the total volume supplied. It might be that the utilization rate does not exceed 100%, and still overflow exists to cater for peak demands in capacity.
Pallets or tanks per week	Average number of inbound pallets or tanks per week for the raw materials warehouse and tank yard. The average number of outbound pallets per week for the finished goods warehouse.
Outsourced tank-days	The average number of tank days at the consumated outsourced tank yard each week.
Price effect	The number of heads indicate the number of teams supplying the product to a customer. One head indicates that few teams supply the product customer combination, four heads indicate that most teams do. If few teams supply a product customer combination, then

	the customer is willing to pay a higher price to the teams that do.
Function of a dual source	If a dual source is selected, then replenishment orders are issued to this dual source if The Fresh Connection threatens to run out of stock. In this event the size of the replenishment order is equal to one week of expected demand. By selecting the correct dual source, it is possible to reduce supply chain risks.
Function of a dual source	If a dual source is selected, then replenishment orders are issued to this dual source when your Principal supplier cannot deliver according to expectations. The dual source will help you out for as long as necessary. By selecting the correct dual source, it is possible to improve supply chain resilience.
Function of a dual source	If a dual source is selected, then replenishment orders are issued to this dual source when your Principal supplier cannot deliver according to expectations. The dual source will help you out for as long as necessary. By selecting the correct dual source, it is possible to improve supply chain resilience.
No supplier selected	Should you – either accidentally or deliberately - not select a supplier, then the corresponding component will not be delivered. The result is that the finished product which is dependent on this component cannot be produced, and consequently cannot be sold. This is bad for sales and revenue. So do select a supplier for each component!

Negotiations	The Purchasing Manager can negotiate the terms of delivery with the suppliers. Negotiations can be held regarding trade units ordered, delivery windows, duration of the contract, terms of payment and review periods, amongst other things. If you impose high requirements on a supplier, then the latter will have a high contract index. This means that the purchase price will be high. By imposing lower requirements on a supplier, you will be able to insist on a lower purchase price.
Cancelling contracts	If a contract with a supplier is not to your liking, you can cancel it. However, there are costs associated with cancelling contracts. These costs depend on the remaining contract duration and the contract value (the purchasing value at the supplier). Cancelled contracts CANNOT be undone, so think carefully before accepting the associated costs.
Supplier selection	The VP Purchasing can select suppliers on the supplier market. Only one supplier can be selected per component type. The small packs and the large packs are, for example, delivered by the same supplier. Each supplier has a number of non-changeable characteristics, such as certification and free capacity. Aside from these characteristics, you can negotiate the terms of delivery with the supplier.
Selecting a dual source	A supplier can also be selected as a dual source. Only one dual source can be selected for each component type. You can select a dual source by navigating to the suppliers market and selecting "Dual source". Before selecting a dual source, remember that for each selected supplier an amount of #:generalitem.kostenalgemeen.kostenoverheadleverancierperjaar:# is charged per annum for supplier management.

Supplier development	For each supplier you can specify whether you wish to implement a supplier development program. A supplier development program costs #:generalitem.kostenalgemeen.samenwerkingsupplierdevelopment:# per annum. This type of program improves the performance of suppliers and facilitates the certification of their production processes. The delivery reliability and the quality of the materials delivered by suppliers also improve, and their emission index decreases. The success of a supplier development program depends on several factors, including the importance of The Fresh Connection to the respective supplier and the duration of the contract.
Expiring contracts	The remaining contract duration decreases by one round each new round. If you do not extend the contract duration, then the contract will expire. In that event you will receive a notification email in your inbox, after which you can either select a new supplier free of charge or offer your old supplier a new contract.
VMI	Vendor Managed Inventory (VMI) can be employed for each supplier. If you select this option you relinquish control of the stocks of the respective components, and the supplier ensures that sufficient stock is present. Control limits for stock levels must now be specified, where the upper and lower limits indicate the scope available to the supplier for steering stock levels. The safety stock levels and lot sizes set by the VP Supply Chain Management are overruled by these upper and lower limits. Suppliers prefer VMI schemes and in this respect they will provide discounts off their sales prices. The discounts depend on a number of factors, including the amount of scope given to the supplier for steering stock levels, suppliers' lead times, supplier and component type, etc. A VMI project costs #:generalitem.kostenalgemeen.samenwerkingvmileveranciers:# per year. Please note, VMI cannot be employed for alternative suppliers (dual sources).

Certification	A certified supplier has greater control over his production process, which means he is more reliable with regard to fulfilling an agreement.
Component	The component to select a supplier for.
Location	The supplier's location. Suppliers that are located nearby usually have lower transport costs and shorter lead times.
Price indication	An indication of the purchasing price.
Free capacity	An indication of the supplier's available capacity, including a possible contract with The Fresh Connection. A low free capacity will negatively influence the reliability of the supplier.
Quality	Quality is a characteristic of a component. Quality can either be good, average or poor. Good quality components are obviously more expensive than poor quality components.
General	Besides the obvious objective of learning, the goal of The Fresh Connection is to achieve the highest score. Several scores are calculated throughout the game - the team score and scores for each participant. The final scores are calculated on the basis of the highest scores in individual rounds or on the basis of the highest weighted average score over all the rounds.
Sustainability	
Finance report	The report summarizing the financial results of the previous rounds.
Bottling and mixing report	The report containing the results of the bottling lines and the mixers.
Warehousing report	The report containing the results regarding stocking components and finished products. A distinction is made between the raw materials warehouse, the tank yard and the finished goods warehouse.
Component/Supplier report	This report contains the operational results regarding the supply of components.

Supplier/component report	This report contains the operational results of the suppliers. A distinction is made between the components supplied.
Supplier market report	This report contains the results regarding the market forces on the supplier market.
Customer report	The report containing the aggregated results regarding the sales of finished product to customers.
Customer market report	The report containing the results of the market forces per customer finished product combination
Customer Market volume report	This report shows the change in market share per customer. The new market share is valid for the next round, so the forecast can be adjusted if that needs to be done.
Customer/product report	The report containing the results regarding the sales of finished product to the customers.
Product report	The report containing the results related to the sales of finished product
Product/customer report	The report containing the results regarding the sales of finished product to the customers.
Component report	Th report containing the operational results per component related to storage and availability for production
Product report	The report containing the operational results per finished product related to production, storage and availability
Analysis page	The analysis report allows you to create your own queries to view the operational data you find relevant of all previous rounds.
Category management	VP Sales can manage The Fresh Connection's assortment. It can be decided in terms of whether or not to deliver finished product to a certain customer. By reducing The Fresh Connection's assortment valuable revenue may be lost, but one may also significantly reduce costs.

Consequences of excluding a component	If certain finished products are excluded so that a certain component is not used anymore, then this component will not be purchased. VP Supply Chain Management does not have to decide on safety stocks or lot sizes. However, the contract that VP Purchasing has agreed on remains valid since there are costs associated to cancelling contracts. Recall that for each supplier that is contracted costs are incurred each round. If you want to save these costs, VP Purchasing needs to cancel the contract with the supplier.
Consequences of excluding one finished product	If a finished product is excluded for all customers, then it is not delivered to any customer. This means there is no need to stock or produce the finished product. VPs of Supply Chain Management and Operations no longer need to make decisions on this finished product.
Consequences of excluding one finished product for one customer	If you deselect one finished product for one customer, then the finished product will not be delivered to that customer.
Consequences of excluding one customer	If a customer is excluded (for all finished products), then no finished product is delivered to this customer. The negotiation screen will still be at the tab of VP Sales, but the negotiation won't have an effect.
Factory Gate Pricing	Factory Gate Pricing makes the customer responsible for the end-distribution to its own distribution center. Factory Gate Pricing will therefore lower the contract index; if the customer collects the pallets at The Fresh Connection's finished goods warehouse, then he receives less service.
Negotiations	The VP Sales can negotiate the terms of delivery with The Fresh Connection’s customers. Negotiations can concern order units, service levels, shelf life, payment terms and many other things. A well-negotiated sale can result in a good contract index being agreed to.

VMI	Vendor Managed Inventory (VMI) with customers provides insight into the stock levels in their distribution centers. The Fresh Connection can use this information to improve the quality of forecasts. VMI also enables The Fresh Connection to prepare orders independently for the respective customers. This means converting trade units into pallet quantities in order to generate efficiency in the outgoing goods flow. Because the details of orders prepared by The Fresh Connection are obviously known in advance, the maximum deadline for placing orders can also be lowered to 14.00. The success of VMI depends on several factors, including the type of customer and the available space that customers have in their distribution centers. A VMI project costs #:generalitem.kostenalgemeen.samenwerkingvmiklanten:# per annum.
Demand pattern	The demand for the finished product in the previous round.
Volume factor	The factor of customer market share growth or decline in the next round. Based on the results of the previous round, customer market share can either increase or decrease. It depends on the team's performance in relation to the performances of the other teams in the pool. The attained customer contract indexes are compared. Better than average performing teams can win up to a total of 10% customer market share. Worse than average performing teams can lose up to a total of 10%. Gains or losses are always based on the initial volume settings of customers, not on their current volumes. In other words, only a difference in volume factor between the previous round and the round before, indicates a change in customer market share. This means the forecast needs to be reviewed too.
Stock development	The stock development of the component or the finished product during the previous round

Utilization rate	Percentage of how intensively (based on the deployed number of shifts) the bottling lines are being used. Utilization compares actual time used to available time. Traditionally, utilization is the ratio of operation time charged (run time plus setup time) to the clock time available. Utilization is a percentage between 0 and 100 percent that is equal to 100 percent minus the percentage lost due to the unavailability of machines, tools, workers, and so forth.
Disclaimer	The tool calculates the theoretical consequences of the chosen settings. In practice, things can naturally work out very differently. For example, the theoretical calculation does not take demand peaks and the need for capacity into account. Other matters such as lot sizes and shelf life percentages can also influence the results in reality.
Expected demand	The expected demand shown in the production interval tool is the forecast created by the VP of Sales.
Settings	The tool takes the decisions of the VP Operations into account. If, for example, the VP Operations has decided to optimize the speed of the bottling line, the operational time will then be shorter than if he had not made this decision. If the VP Operations has decided to implement SMED corrective actions, the changeover time will then be shorter.

Costs	The inventory costs cover the expected cycle stock levels. If one produces in larger batches, the average inventory will be higher. This will drive your inventory cost up. These cost include both interest and space. Changeover cost: based on production interval setting the expected number of changeovers is calculated. If smaller batches are produced, more changeovers result. This will drive up the the capacity required. These cost cover the labour cost of personnel on the filling line. After each changeover it will take time for the filling line to come to full speed. Before that point start up losses are incurred. Some products will not comply to the high quality standards of The Fresh Connection, cannot be sold and will be destroyed. The costs generated due to this are the start up costs. The more changeovers the higher these costs will be.
	A high-end retailer will have many products per square meter of shelf space, resulting in a limited space for any given product on shelf. The store inventory is then held in a 'back of store' (in story inventory room elsewhere on the premises). If a product runs out on shelf replenishment from this 'back of store' may not be in time. Especially high runners may suffer from this. Discounters will have less of an issue as the full box of product will be in the shelf. If your service to the retailer's D/C is too low, the stores themselves may not be replenished in time, which may further hamper replenishment to shelf in store: a lower OSA results.
	Either postive or negative biases are likely to lead to issues. A positive bias drives increased inventory. Clearly this is due to the fact that the predicted requirement is higher than actual sales. As a result your inventory cost will increase and potential for obsolescent products increases.A negative bias on the other hand, can lead to low inventory covers, which may result in poor service delivery.

	If the required capacity in a week is higher than 168 hours, then automatically the load above 168 hours is being outsourced to a reliable partner. This partner bottles the juice at a similar line as The Fresh Connection does. Due to the transport of components and the finished product, the personnel costs of outsourcing are #:generalitem.factoroutsourcingproductie:# times as high as the costs of overtime.
	Once the bottling line is started, then inevitably there will be a start up loss, due to tuning issues. This causes partly filled packs, caps missing on packs etc. This start up loss is expressed a a percentage. In general there is only a start up loss during the first hour of running a new batch. After the first hour, normally there is no start up loss anymore.
	order and the moment it becomes available in the warehouse. It consists of the frozen period and a week review time.
	The quality of packaging material affects the number of breakdowns at the botlling lines. The better the quality , the lesser breakdowns occur. The quality of the fruit pulp affects the taste of the juices The Fresh Connection makes. Directly after production the taste is tested by an official taste inspector. This officer decides if the juice lives up to the aroma, color and taste standards of The Fresh Connection. In case they do not, the finished product is put aside to be scrapped immediately. Luckily in most of these occurrences production can be stopped, so not too many components go to waste.