



LUND UNIVERSITY

Fruity Incorporated

A transition from small German orchard to pan-European fruit business

Steen, Odd; Fiaccadori, Umberto

2021

Document Version:
Other version

[Link to publication](#)

Citation for published version (APA):

Steen, O., & Fiaccadori, U. (2021, Nov 3). Fruity Incorporated: A transition from small German orchard to pan-European fruit business. Department of Informatics, Lund University.

Total number of authors:
2

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00



**SCHOOL OF ECONOMICS
AND MANAGEMENT**
Lund University

Fruity Incorporated

*– A transition from small German orchard
to pan-European fruit business –*

Case Description and Background Story

**Ett IS-Projekt för SYSB13
Institutionen för informatik
Ekonomihögskolan
Lunds universitet
Odd Steen© 2021
med bidrag av Umberto Fiaccadori**

The case about Fruity Inc.

This is a case about a European-wide enterprise in the fruit basket industry. The central business idea in this industry is to deliver customized fruit baskets to offices and other workplaces for the benefit of the employees. Since the late 1980s it has been common knowledge that fresh fruit, containing necessary vitamins and other healthy stuff, rather than cakes and sweets helps to keep the work force healthy and energized. Also, having a fruit basket delivered regularly to the work is a nice signal that the management cares for its employees.

You will find the assignments in the accompanying assignments file: “The Case About Fruity Inc uppgifter HT21”.

Background and history

The Company

Fruity Incorporated (formerly Heidelberg Obstkorb GmbH) started as a small, family-owned company in Heidelberg, Germany. Heidelberg is situated in the Odenwald-Bergstraße region in the southwest of Germany, which is known for its dramatic landscape, fertile grounds, and agriculture – not the least are some fine wines produced in this part of Germany. So, naturally grapes are cultivated here, but also apples, pears and plums are among the fruits.

The company was started by the two brothers Günter and Helmut Bauknecht who together run and manage the family’s orchard. The orchard has been with the family for many generations, and it is a primary concern for the family to honour the legacy and further develop the family business.

Buying and selling fruits is certainly not new business and have been done for millennia. The Bauknecht orchard has historically sold its fruit on the local market in Heidelberg and later to regional companies producing juices, jams etc. Since this is a mature business with well-established competition, making new, prosperous inroads to business is hard. Also, better transportation facilities and a gradual shift to a common market in Europe have meant increasingly stiffer competition for the region’s orchards. Many of the region’s orchards have tried different ways to sustain competition. However, the American idea of regular deliveries of fruit baskets to workplaces was introduced in Heidelberg by the two brothers.

It started as a small operation in 1982 taking orders on fruit baskets and delivering to a handful of friends and people they knew in the Heidelberg business world. The first years of the fruit basket operation helped establish Heidelberg Obstkorb locally, but it never took off the way the brothers had hoped for, and it was a marginal contribution to the orchard’s business. Something had to be done!

New plans

Günter and Helmut gathered the rest of the family for a discussion about what to do with the fruit basket operation. Should they keep it the way it was and be happy about it? Or should they give it up as a good idea that never really took off? Or should they try to develop it further and commit more energy and money?

The family settled for the last alternative and brought in an expensive management consultant to help them develop a new business plan that would make the fruit basket operation more profitable and worthwhile.

The consultant advised them to first change the name to Fruity Inc. which has a more modern and international ring to it than Heidelberg Obstkorb GmbH. Everyone knows that whatever sounds American has a greater opportunity in the European business world and the name Fruity Inc. would also make it possible to expand outside the German market. That the company was German could be downplayed, since it did not give any advantages.

The second advice was to try to expand the business concept in Germany through franchising. The consultant considered the Heidelberg market too small to accommodate any major fruit basket business and without expansion to first the region and second whole Germany, the fruit basket operation would continue to play an only marginal role for the orchard in the future. Surely, the orchard alone could cover the region, but further expansion would either require the family to establish their own subsidiaries in other parts of Germany or to develop a franchising concept.

The third advice was to redesign some business processes in the company to better facilitate the fruit basket operation and make it possible to expand the business gradually. For instance, the order and delivery processes had to be redesigned to cope with other customers than friends. Friends might be patient and have indulgence. But customers without any ties to the family would not have patience with lost orders and late deliveries, especially when the goods are fresh fruits! Also, contractual arrangements with suppliers and transportation companies outside of the region had to be considered.

The fourth advice was to contract an advertising agency to create the right message and communicate it through the right channels. Without good advertising, the consultant said, the fruit basket concept would not find fertile grounds and become a success.

Fruity Incorporated is born and prospers

The family took the advice to the heart and began the hard work to transform the fruit basket operation from the small-scale, local business to a German-wide business. In 1984 the family launched their new fruit basket concept in the Odenwald-Bergstraße region. It was a rapid development from there and in 1994, just ten years after launch, Fruity Inc. served companies in all the major German cities.

The franchising operation obviously worked well enough to take the concept one step further and aim for the rest of Europe – “Why stop in Germany?” the family thought. Said and done. In 1996 the Fruity Inc. concept was launched in France, UK¹, and the Nordic countries. In Sweden Fruity Inc. got a franchise operation in Skåne in 1998, serving the whole business region.

A pan-European Franchising Operation

In 2015 Fruity Inc. is the leading player in the European fruit basket industry. The open market with free movement of goods, capital and people in EU has greatly simplified Fruity Inc.’s expansion throughout mainly Western and Northern Europe.

The expansion has meant that the organization of Fruity Inc. has developed to cater for the new demands put by the expansion. The headquarters is still located in Heidelberg, with regional head offices in France, Belgium, The Netherlands, Denmark, and Sweden.

The HQ is responsible for managing the overall franchising operation and taking decisions whether to enter a country or not (i.e. accepting a new franchisee in a new country). Major other responsibilities include to continuously develop the franchising concept, coordinate the whole business operation, and taking strategic decisions about the business operation. Hence, it supports regional head offices in local market development, marketing campaign design, regional strategic and tactic decision making, and capital funding. The regional offices report to HQ about operations and contribution to Fruity Inc’s performance.

The Company Fruity Inc.

Organization

Headquarters

The Fruity Inc. organization structure is mainly divisional where each country is a division with a regional head office under the Heidelberg headquarters (HQ). The regional head office has a manager and administrative support staff.

The regional offices report to HQ and are also supported by HQ in legal and administrative matters. The HQ employs a manager team and a CEO. The HQ has four central functions serving the regional offices and the business as a whole: R&D with IT Operations, Legal, Logistics, and Finance.

Research and Development (R&D) is responsible for continuously developing the franchise concept and investigating new possible business ventures. Business analysts, Enterprise Architects, Data Analytics, AI, and BI experts employ their

¹ The Brexit referendum and the ensuing process led to Fruity Inc. withdrawing from the UK

knowledge and expertise for this and can also support regional managers. R&D is also responsible for IT Operations which provides the business as a whole and regional offices with IT support. IT Operations is responsible for providing central IT services, e.g. Enterprise System, for Fruity Inc. and its franchisees.

Legal develops the franchising concept from a legal perspective, including contract texts and brand protection. Legal also keeps scrutiny of EU legislation, like GDPR and food safety regulations, and is responsible for advising Fruity Inc. and its franchisees about food safety and other regulations inside EU.

Logistics together with R&D and IT Operations maintains and develops the logistic system of Fruity Inc. Logistics employ logistics experts for transportation optimization and fleet management. Logistics are responsible for continuously honing the logistic system to maximize staff and energy efficiency and minimize redundant transports and waste. They also lend support to regional offices in this respect.

Finance management is responsible for professional corporate accounting practices and financial management of all enterprise-wide economic transactions as well as rapid reports of financial status. Finance also supports regional offices with expertise in accounting and financial reporting.

Together they support the regional offices, which continuously provide HQ reports about performances.

Regional Offices

The regional offices supply the franchisees with brand management, administrative processes, and logistic solutions. Each regional office controls one or more central storehouse as a distribution hub in the local logistic system.

The regional office also provides the franchisees with the Enterprise System used for data and process.

Each office has a Country Manager, an HR department, a Sales and Purchase department with Order department, and a Finance department.

The Sales and Purchase department handles the orders from the franchisees and purchase of local and foreign produce to restock the central storehouses.

The regional offices function as divisions of Fruity Inc. They are responsible for managing the local market and its customers and suppliers.

Regional Storehouses

Each regional office is responsible for and manages one or more central storehouse providing the local market with stocked products. The central storehouses are in some places co-located with the regional offices, but at other places located remotely from the regional office.

Franchisees

The organization structure of the franchisees is not part of Fruity Inc. but probably resemble each other according to size, age, and region.

Each franchisee is contracted to order at least 80 % of their products from Fruity Inc. The rest, 20 %, may be used for the franchisee's own judgement and local market knowledge.

Logistics

Understandably, logistics in the form of transportation, storage, and delivery of products is a main concern for Fruity Inc. Each storehouse must be able to supply the regional franchisees with swift stock replenishment of fresh and quality assured fruits.

Importing, Shipping and Transporting

Fruits are partly imported from overseas, like bananas and pineapples, and partly local produce according to regional climate, seasons, and orchards. Hence, regional storehouses must manage imported fruits that are transported on boat and landed in major European ports and then transported to the central storehouses. Sometimes goods landed in one of the big, international ports are transhipped onto smaller ships for further transport to smaller and local ports, where the goods are finally offloaded and transhipped onto trucks, lorries, and trains to be transported to final destinations.

The transportation duration varies considerably for the variety of fruit that Fruity Inc. handles. Local produce is normally available within the week and regional and European products within two weeks. Transatlantic and transoceanic shipping of e.g. bananas from Costa Rica or mango from Southeast Asia require up to 35 days in transport, especially if the fruit needs to be transhipped onto other vessels for further transport to destination ports.

The orders for exotic fruits must normally and for most of the fruits be placed at least five weeks before needed replenishment of storehouse. Otherwise, stock shortage and/or non-optimal ripening might be the consequence. If the goods need to be transhipped in one of the major ports for further transport by boat to another port before final delivery by cargo truck or train, an extra five days delivery time should be expected.

In the case of stock shortage of import products, sometimes consolidated airfreight is ordered to cover the shortage in days rather than several weeks by boat. The decision for this is based on the current order-book and projected (using predictive analytics) orders for the region(s) in question. Instead of airfreight, which is quite expensive, stock shortage can be covered by intra-organizational orders and sales between regional offices and storehouses. In that case, pro forma invoices are issued for the "buying" regional office.

Geography

Even though the business has expanded outside Germany is the home country still an important market for Fruity Inc. The major international port closest to Heidelberg is Antwerp in Belgium. Other areas of Germany where Fruity Inc. operates are Düsseldorf, Köln, Bonn, and Dortmund, with the regional office and storehouse located in Düsseldorf. Also for this area is the Antwerp port the closest for import of cross-Atlantic and far-east goods. In the northern part of Germany, the business operations in Bremen, Hamburg, Hannover, Leipzig, and Berlin are served by both Bremerhaven and Hamburg port. In Berlin is the central storehouse located in the Waidmannslust locality in the northern part of the city. This storehouse is also responsible for supplying the Leipzig franchisee.

For the operation in southern France, the imported goods are landed in the port of Marseille for further transportation to the Lyon regional storehouse. The Lyon regional office and storehouse is responsible for the operation in the Rhône Alpes region. Fruity Inc. also runs a business in the metropolitan area of Paris which is served by overseas imports via Antwerp port in Belgium. The landed exotic fruits are further transported to the regional storehouse in Surville just outside Paris and is thus responsible for the Île-de-France region.

In Sweden, the Lund regional office manages the regional storehouse in Helsingborg and Stockholm. To these storehouses banana transports first arrive with boat to Bremerhaven where bananas are transhipped from transatlantic ships to smaller ships with destination Helsingborg port. To the Helsingborg storehouse road transports also arrive from Gothenburg with fruits shipped from port of Bilbao in Spain directly to Gothenburg port. Far east and Oceanian fruits are landed in the port of Hamburg, where they are transhipped onto, often enough, East European licensed cabotage cargo trucks for transport to the Helsingborg and Stockholm storehouses.

The regional offices and storehouses of Belgium and The Netherlands are in respectively Antwerp and Rotterdam where they can serve the whole of the countries since they are geographically small with quite short distances between major cities such as The Hague and Brussels.

Fruit Management

The landed import fruits cargo is transhipped onto trucks and lorries for road transport to the final destination. A mix of contracted road cargo services and Fruity Inc.'s own trucking operation carries out road transport. Quite often the road tractors pulling the trailers for the contracted services are from East Europe doing cabotage transports.

The road transports need to be temperature controlled for an optimal fruit preservation temperature during transport. In the summer this means cooling and in the winter warming. Poor temperature control means more scrap and waste.

Likewise, many varieties of fruit are very to relatively sensitive and do easily get pressure marks and other damages. Customers want to have their fruits without

discolorations and marks; hence it is very important that fruits are handled with due carefulness and that packaging of fruits are optimal per fruit variety with maximum feasible protection from packaging materials. This might sound easy, but it is not. Tailored packaging materials are of course more costly than general, since they require stocking and replenishing from possibly several suppliers, meaning more management and control. In addition, this does potentially mean more material usage (which will become garbage) and a greater variety of materials, which entails more complex garbage management.

Exotic fruits from South and Middle America and Southeast Asia are not ripe even when the final destination (central storehouses) is reached. Hence, the central storehouses have facilities for ripening other fruits than banana according to correct temperature, light, time, and humidity per fruit category. Bananas are ripened by the importer as in the case of Helsingborg means SabaFruit. Also in Bremerhaven, where much of the bananas for Europe are landed, the importer has its own ripening facility.

Not before proper ripening may products be delivered to franchisees and from there to final customers. The ripening process is closely and automatically monitored and controlled, and it takes a variable number of days per fruit category to finish.

When the cargo arrives at the central storehouses, the goods are unloaded, tallied, inspected, the bill of landing is filed in the Enterprise System, and the products put away in stock if everything is satisfactory. If the goods received have some kind of fault (e.g. transport damage, wrong or missing products, wrong quantity, etc.) the consignee will log details about the shipment and reason for complaint in the Enterprise System. The missing/damaged products are put on the shortage list in the system for the shortage chaser to work with.

Each product is tagged with article number (EAN bar code) and stored in a zone-based location storage and pallet location with a location identity (EAN bar code) on the pallet. Naturally, a physical pallet and its collars are not uniquely identifiable. Hence, a pallet can be flagged with a new barcode.

The storehouse is partly automated (automated pallet trucks, conveyers, etc. scanning bar codes) and storage location for products are optimized based on product turnover rate analysis. That is, products that have a high turnover will be located for quicker access through shorter way from pallet location to destination for the automatic locator system.

A franchisee places orders with the regional central storehouse. If the products are available the order is confirmed, a picking list is generated, and the items are picked and packed. If all products were available and the order completely picked and packed, the order is confirmed as ready for transport to franchisee.

Thereafter the order is booked for transport and placed in queue for consolidated delivery according to optimized route planning. Each package carries a pack note detailing the contents of the package and who the picker/packer was.

In case of stock shortage of one or more products, the franchisee is offered splitting the order and delivery or cancelling the order. When the delivery arrives at the franchisee it is signed off by the franchisee and the delivery is marked as completed.

Fruity Inc. Business Cycles

The fruit and fruit basket businesses are seasonal in several respects: Different ripening and seasons for fruit in the same climate zones; Consumption patterns for various fruits (e.g. that some fruits are more in demand during Christmas than else); Seasonal greetings (e.g. fruit baskets as employee Christmas present from the employer).

Other important dates and times are national and annual holidays. Since Fruity Inc.'s operation is year-round all workdays need to be manned and scheduled. Also, Fruity Inc. generally runs two shifts in the central storehouses and the shifts turn at 06:30 and 15:30 respectively. Each shift has 40 minutes lunch/dinner break and two 20 minutes breaks – one before and one after lunch/dinner. Shifts only work on workdays unless overtime is requested. These temporalities might vary between country due to several reasons: Local labour market agreements and laws; Local market conditions; etc.

In-house lorry or tractor drivers must comply with work hour and break regulations of EU and the countries that Fruit Inc. operates in, e.g. Sweden (see²). This means for instance that drivers must not work more than six hours without a break. Outsourced drivers of transportation firms also need to abide by these regulations, and it could reflect badly on Fruity Inc. if it was discovered that the company used services that was illegal and potentially dangerous to people.

The franchisee must place an order no later than 12:00 the day before to receive the goods no later than 9:00 next morning (only workdays).

The franchisee is invoiced monthly (the last workday in the month) unless agreements or conditions require other arrangements. The payment must be confirmed within ten workdays from delivery sign off. Overdue payments from franchisees have escalating repercussions: one occasion within a year gives a warning, two to four occasions within a year means cancellation of orders in process and/or outstanding orders, five or more occasions within a year means termination of contract, franchisee deletion, and possible legal process.

² <https://transportstyrelsen.se/sv/vagtrafik/yrkestrafik/vagarbetstid/>

Fruity Inc. Inventory List

The Fruity Inc. products are fresh fruit of many varieties. Important to Fruity Inc. is to store data about e.g.³ Supplier, Fruit variety (e.g. Apple), Name (e.g. Ingrid Marie), Organic status, and Fair trade status.

For incoming cargo Fruity Inc. needs to store data about Package, Pallet, Lot, Container and Shipment for traceability reasons. If there is a health issue (e.g. pesticide residues over an EU regulated threshold level^{4,5}), cheating with organic and/or Fair trade tagged products, or other hazards/cheating, Fruity Inc. needs to be able to trace shipments, containers, lots, and individual packages to the origin. Therefore, they also need to be able to trace from what shipment, container, lot, pallet, and package the fruits delivered to franchisees came from, including delivery in progress.

The traceability needs an unbroken chain between origin and final delivery⁶. There cannot be a situation where e.g. a package of fruit can be traced to a certain shipping, container, and pallet but not further. Likewise, it is not acceptable that a package of fruit, either in- or outgoing, can be traced to delivery truck and franchisee, but not to a specific storehouse, pallet, packer, etc. In addition, packages in transport, wherever they are, must be traceable with exact details. The only way to support this traceability is by storing data about every package and every status and movement of every package: Transports, handovers, internal company geographics, status and place, etc.

In case of a threat to public health or violation of fresh food regulations, orders need to be suspended and transports and deliveries cancelled until the items in question are traced and withdrawn. Since products might be under internal or external transport when this happens, they must be traceable too.

Not only the public in general, the franchisees, and final customers might be endangered from contaminated fruits. Those who really get in contact with the products are the workers in the storehouses and those who deliver the goods.

Food production and transportation is a major concern for citizens, legislators, and businesses in EU member states. Hence, food safety, e.g. pesticide residue levels, is also a major concern for EU. From this perspective it is *highly important* to be able to answer *detailed questions* about franchisees and regional offices in case an audit is needed.

This cannot be overstated: It is *mandatory* that some fruit from a certain lot *at any given moment in time* can be traced to its exact past, current, and projected future

³ Inventory types in the case are partly based on Olhager (2004). *Logistiklexikon*. PLAN Föreningen för Produktionslogistik, Stockholm.

⁴ https://ec.europa.eu/food/plants_en

⁵ <https://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:51999DC0719&from=EN>

⁶ <https://www.livsmedelsverket.se/globalassets/produktion-handel-kontroll/lokaler-hantering-hygien/sparbarhet.-livsmedelsverkets-information-till-livsmedelsforetagare.-2009..pdf>

location that is within the control of Fruity Inc. Hence, there must be an unbroken data chain from supplier to franchisee.

Fruity Inc. of course must also know details of its franchisees for internal business reasons and audit control: the name of franchisee manager, location and addresses, order statistics, scrap rate, running credit worthiness, payment history, etc. It is thus important that the franchisee onboarding process works properly.

Quality Assurance

It is important to Fruity Inc. to manage quality well in relation to their customers – the franchisees. The franchisees are to some extent tightly connected to Fruity Inc. with lock-in effects, but poor service quality of Fruity Inc. might drive franchisees away and deter potential future franchisees (poisoning-the-well effect). Also, franchisees are obliged to order at least 80 % of products from Fruity Inc. but a piece of the last 20 % would of course benefit Fruity Inc. Hence, Fruity Inc. needs to be attentive to franchisees' needs and wants.

Another important area for quality management is minimized waste. Fresh fruit is normally fragile and easily damaged from wrong pressure (pressure marks on apples and bananas for instance), wrong mix of fruit in the same package (e.g. is ethylene emitted by apples which affect the ripening of other fruits), wrong handling of the fruits (using too much force, dropping on floor, etc.), and other risks for fruit damages leading to scrap.

Scrap equals waste and the scrap rate needs to be under control and low. Yearly scrap of 1 % at Fruity Inc. means 10 000 tons of waste yielding unnecessary economic and ecological costs. These 10 000 tons of fruits were sprayed, picked, packed, shipped, and delivered in vain and it is a high priority to decrease this scrap to a minimum. The present scrap rate is 6 % but must be lowered to a maximum of 2.5 % during the next two years. Scrap rate is an important KPI of the company.

In addition to the sheer economics of waste and scrap rate, Fruity Inc. strives to be ISO 14001 certified. This is a strategic decision which will have profound effects on the company's operations and processes. To Fruity Inc.'s customers the company's environmental management and sustainability strategies are important.

The Future of Fruity Inc.⁷

Fruity Inc. is a prosperous and by and large healthy business without critical problems to tackle. However, competition is always a factor in the equation and

⁷ Parts of this text is written by Umberto Fiaccadori.

no business can afford to live off old successes (for very long...) The European food industry has tight profit margins, and the fruit business is no exception.

Fair Trade, CSR (Corporate Social Responsibility), Global Warming (carbon footprint from transports, etc.), potential child labour, trafficking for forced labour or slavery, un-sustainable cultivation (deforestation, monoculture, erosion, threats to habitats, land grabbing, etc.), and so on. They all are aspects that a company like Fruity Inc. needs to consider seriously all the time. They may not present imminent threats to the business, but when neglected might explode in social media as hate campaigns and such towards the company. In this case, ignorance might prove to be not so blissful...

Reporting and Control

Fruity Inc.'s gradual expansion and the EU free market mechanisms (free movement of goods, capital and people) together makes for a blurred organizational structure in practice at Fruity Inc. Cross-border business is much simpler than before EU but has also meant a bit too lax control and reporting structure of the company.

The structure and function of the company is dependent on HQ but at the same time operational and tactical decisions are taken at regional offices and central storehouses. This is not in line with the owner's intentions anymore. Now, in 2021, when the company is solvent and have matured the HQ wants to create a stronger organizational structure where executive and tactical leaders are close to HQ. The regional offices and central storehouses still have some tactical officers, but the bulk will be operational managers to manage the day-to-day business. By creating this organizational structure HQ strives for a leaner integration of strategic goals with the information system of choice. Through this organizational as well as technological change HQ believe that the overall strategic goals can be obtained in time.

Today, Fruity Inc. HQ only work with reports sent from the regional offices. These in turn rely on reports from central storehouses and the different franchisees. Regional offices combine these various data flows into regional reports sent to HQ each quarter. There are obviously delays in this processes that negatively influences tactic and strategic decision-making as well as central audit and EU required accountability.

Hence, Fruity Inc. needs to consolidate and centralize the reporting structure with a modernized reporting process from franchisee to regional office to HQ. Together with appropriate IT systems this will give Fruity Inc. an information systems capability for performance dashboards, decision support, descriptive and predictive analytics, and just-in-time data supply.

Connected to centralization of reporting is also increased central business control. Today, much decision power is distributed and decentralized to regional offices and franchisees. Since franchisees are a kind of customer to Fruity Inc., they should have a limited form of independence and think of the business as

“their business” to a certain extent. However, the regional offices are clearly within the border of the Fruity Inc. organization and should function as an intermediary between HQ and franchisees. The present situation means lack of transparency between HQ and franchisees and between HQ and regional offices. A modernized reporting and control structure will tighten the central control and shorten the distance to the franchisees and create a more common operational picture in the enterprise.

The HQ wants to have both the executive and the tactical competence in Heidelberg. Through this the executives and regional managers at HQ will be able to monitor and hone the business processes and decision management for a more efficient and effective business.

This changes the role and responsibilities of the tactical managers. Today they are focused on the tactical and operational level of the business. Re-allocating them to HQ will require a more strategic and tactical orientation, so that the executives and tactical managers can communicate effectively. Hence, new tactical managers who can create excellence over time are needed. This could be a Communication Manager, a Knowledge Manager or some yet to be specified role as for example IT Excellence User Facilitator (former IT-support manager).

IT Operations

The IT operations of Fruity Inc. has become ever more important for the company. Hence, the IT operations group is starting to outgrow the R&D department. The best way to organize this function in the company has not been decided yet, but HQ is convinced that the present structure does not hold anymore.

The central IT systems of Fruity Inc. has worked well for quite some time, but some staff (not IT) have now become critical and refer to the ERP and other central support systems as legacy. The changes that Fruity Inc. envision in reporting structure, control, and logistics will not be supported by the present legacy systems – some say... And business-IT alignment will suffer in the future.

Even though Fruity Inc. for a long time has used ERP systems to centralize data and standardize business processes, expansion in logistics have meant parallel systems for data and process management – meaning poor data and process integration. The now quite old ERP system’s moderate (low according to some) level of modifiability complicates and sometimes (often according to others) inhibits necessary changes.

Logistics

New Business Opportunities

Four years ago, CEO Helmut Bauknecht gave the business analysts and BI experts the task to analyse and report on possibilities for Fruity Inc. to diversify the operations and add a branch to the business. The report detailed and ranked

three possible business development directions and suggested, based on analytics of both internal and external data, that Fruity Inc. should use its logistic knowledge and systems to also provide other businesses with fresh fruits: marmalade, jam and other fruit and juice-based industries (e.g. candy and cosmetics).

This change would bring new customers, new contractual agreements, new business processes and decisions – in essence a new Business Model (as the Business Administration people likes to term it. . .) At the same time, the present operation of fruit baskets and franchisees must not be jeopardized.

More Efficient Delivery and Transport

Competition in the mature fruit business is fierce and cost control is essential to make profit. Hence, logistic optimization (e.g. optimized route planning and fleet management) and minimized product waste is imperative to make profit. Centrally, waste percentage is increasing due to non-optimized logistics.

One way to make the logistics of Fruity Inc. more efficient is to have regional offices manage the transport to the bigger clients for the franchisees. This would relieve the franchisees of much of the storage needed to furnish the clients. Instead, the franchisees would provide the regional storehouse with local produce to complement the delivery. Of course, this would be to a certain fee for the franchisees, but at the same time they would have decreased waste and lowered need for storage capacity. For Fruity Inc. as an enterprise this would mean more efficient use of transportation capacity (better fill ratio of transports, easier route optimization, etc.), better control of goods in transport, faster delivery, faster inventory turnover rate (ITR) and possibly lower waste rates.

To make this work, Fruity Inc. will probably need to take a central and firm control over the full logistic network for transport and delivery. It is not totally necessary, but maybe a good option, that Fruity Inc. insources the transportation facilities and employs the staff itself.

Another solution is for Fruity Inc. to negotiate an agreement with a major freight company to do all the transports and deliveries for Fruity Inc. This would still require a uniform aesthetic scheme and form manual for trucks (make, paint work, age of fleet, etc.), working clothes for staff (looks, logos, tags, etc.), and other things important to signal belonging and branding – brand management for sure. For the layman or bystander there would not be much telling that a subcontractor carries out the operation.

A modern fleet, whether in-house or outsourced, means that all sorts of technologies can be applied for better fleet management, route planning, goods traceability, and safety management. Internet of Things (IoT) makes it possible to have sensors for temperature, humidity, light, and so on sending data both to local monitors and control systems (e.g. in a truck) as well as to central systems for audit and analytics purposes. Geographical Information Systems (GIS) of maps, satellite positioning (GPS) and route planning systems together form a fabric for calculated and dynamic route selection: A traffic accident means a detour which changes the layout of the route requiring new optimization on the fly; CO₂ calculations of various routes could help to reduce emissions; etc.

Sustainable Logistics

The carbon footprint of Fruity Inc. is heavily bound to the transports of goods to and from ports, storehouses, and franchisees. Much of the transports carried out are either via boat or via trucks and lorries. The emissions from boat freight might be relatively low per carried ton of goods, but there are problems with the fuel used in transoceanic shipping.

Cheaper fuel means higher emission of e.g., SO₂ and, thus contrary, lower emissions of SO₂ requires more expensive fuel, which will mean higher shipping costs. Fuel efficiency is another factor and newer vessels with more modern motor technology means higher fuel efficiency and reduced CO₂ emission. Demanding new ships will, due to vessel shortage, mean higher transportation costs for Fruity Inc.

An interesting alternative to motorized vessels is wind-powered freight ships⁸. This is a new alternative that Fruity Inc. needs to investigate in terms of availability, costs, feasibility, etc. This might mean reduced pollution and CO₂ emission, but what demands does it put on the business in terms of planning and logistics?

When it comes to road transports, it is of course much cheaper to use contractors that rely on East European tractor drivers with poor wages and very little influence on working conditions – they might even need to steal the fuel! Apart from the socio-economic side of this, cabotage will mean increased emissions by close to 30%, while decreasing the cost for transportation⁹. Increased cabotage will also move freight from trains to road transport, which is one reason for the increased emissions.

To reduce emissions from road transport will mean both to work with local and regional hauling companies that does not rely on East European (or from other parts of Europe) cabotage drivers, working with and supporting non-fossil fuel trucks, lorries, and tractors, and moving goods onto train transport as much as possible. All this will mean higher costs for logistics and even more careful planning. But Fruity Inc. could turn this into an advantage in the competition in a world already marked by global warming and climate change.

Sustainable also means social wellbeing and health. To avoid unhealthy competition in the hauling business (e.g. social dumping), having fair employment conditions (not gig economy or Amazon work culture), etc. is part of social sustainability. Minding health has been described before connected to product traceability¹⁰ and is also a part of a sustainable business.

⁸ <https://wind-ship.org/en/transoceanic-wind-transport-towt-transport-a-la-voile-iwsa-supporter/>

⁹ https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1096&context=scm_pubs

¹⁰ Farm2Fork: https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy_en