Systemation helps Jumbo accelerate its business with TIBCO EBX Master Data Management

THE FOUNDATION HAS BEEN LAID, BRING ON THE DATA!

Data is a digital asset for a modern supermarket chain. Especially when it's customer data. Supermarket chain Jumbo wanted to introduce a personalised savings programme for its customers, but realised that master data management needed to be raised to a higher level to gain and maintain more control over its growing volumes of customer data — among other things, by enabling measurement and insight into its quality. It also needed to comply fully with privacy legislation such as Europe's GDPR.

A turning point came through Systemation, with TIBCO EBX™, a technology letting Jumbo manage its master data in one place. Now new data sources can easily be connected to support new business initiatives, like setting up specific recipes for the La Place restaurants, logistical data for shop supply, and the FoodCoach App. But it all started with the customer, like everything at Jumbo.

CONTEXT:

MASTER DATA MANAGEMENT IS A MUST-HAVE FOR JUMBO'S BUSINESS DEVELOPMENT

Jumbo is expanding strongly, with a rapid growth in its number of shops. The family business is growing organically, but also through acquisitions such as La Place, and through alliances like that with Hema. One aspect is central in all these dynamics: the customer. To serve that customer well you need good data: who is that customer, what does he or she buy, and how can Jumbo meet those needs better? "Our customer base is becoming increasingly diverse, behaviour is constantly changing and there are more and more contact channels: the shops, online, the Jumbo food markets, La Place," notes Tim Hehenkamp, Executive Director Technology & Data for Jumbo Supermarkets. "You need to combine the resulting information so as to draw conclusions and take action, and

that's impossible without reliable data. That's why we are extremely data-driven. Data-driven operation makes it possible to differentiate between ranges and formats, among other things. We need to differentiate at the individual customer level if we are to stay ahead of the competition."

Of course a loyalty programme is a great way to learn individual customers' wishes and to offer even more service, such as those for healthy lifestyles. It's unsurprising that Jumbo wanted just such a proposition, but with its own unique approach. Jumbo Extras lets customers save points when shopping, points they can then exchange for free products or discounts on outings. Such a large introduction has to be implemented properly: everything has to be just right, because customers trust Jumbo to handle their data very carefully.

CHALLENGE:

TOWARDS EXCELLENT DATA MANAGEMENT

The project team soon realised that several more data management steps were required. They needed the ability to build up one integral picture of the customer. And that required structured and central Master Data Management (MDM), but in such a way that it could be extended flexibly across several domains. "At that time our

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data was still stored in different systems in a fragmented form," recalls Marc van Weelden, Product Owner Master Data at Jumbo Supermarkets. "We needed a single umbrella system for this management. So for instance if customers want to have their data deleted as mandated under the GDPR, we had to have that ability at the push of a button."

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> **THESE WERE JUMBO'S REQUIREMENTS:**
> - Multi-domain Master Data Management
>   A centralised approach but applicable across multiple domains, such as Customer, Article, Store, Recipe
> - Reference Data Management
>   To enhance data quality
> - 360-degree company-wide view
>   Starting with the customer, but extending across all objects, subjects and items

SURPRISING INSIGHTS

"Our ultimate direction was towards a single, accurate image of reality for each object, to be created from a single central location," notes Rudy Vonken, Manager Data & Solutions at Jumbo.

A structured and thorough selection process in 2018 brought data specialists Systemation and TIBCO EBX into the picture. Systemation's extensive and long experience with similar projects meant it could outline a workable and sustainable solution direction, based on TIBCO EBX, that could be extended across multiple domains. Jumbo first wanted to test the solution's feasibility with a PoC. "We were able to use real data from Jumbo for this PoC," says Jaap Franse, founder and Director of Systemation. "That led immediately to useful insights into the quality of the data, such as duplicates, and that in turn gave our product concrete value for Jumbo." Immediately on delivery in September 2018, the results of the PoC showed where improvements in the efficiency and quality of the information provision could be achieved. It also demonstrated the power of EBX.

But good technology isn't the only success factor. The party helping to implement this technology is just as important. They have to click. Frans: "Jumbo lives up to its

'Seven Certainties', seven promises to the customer. We compared the Seven Certainties of Systemation to show the results Jumbo could count on and that, too, helped to win them over."

SOLUTION:

**CONSOLIDATION AND CENTRALISATION IN EBX**

The introduction of TIBCO EBX was carried out in partnership between Systemation and Jumbo from December 2018. The foundation will be in place by the end of 2021, when all the domains will be connected to EBX.

EBX works on a model basis. The advantage is that modifying the model has a direct effect on the underlying data structures. Systemation helped to set up the data management model's architecture and implementation. Frans: "EBX fits into existing system landscapes, and that lets you start small. The challenge is to decide where you start, and how big or small you start." Another EBX advantage is that it supports an Agile working method; you can adjust and expand the data model step by step. Further development is being undertaken by a scrum team in the Jumbo Tech Campus, with participation by people from Jumbo and Systemation specialists. Systemation has asked its MDM services partner Viqtor Davis to help with the further EBX roll-out in Jumbo. All in all then, a strong and expert team has been put in place.

EBX has been implemented as a Co-Existence Hub, and is connected asynchronously to supplying and receiving systems. This means that queries and changes to Master Data occur on a front system that synchronises with the EBX servers.

Expansion of the model and the Master Data occurs along two axes: by connecting more systems within one
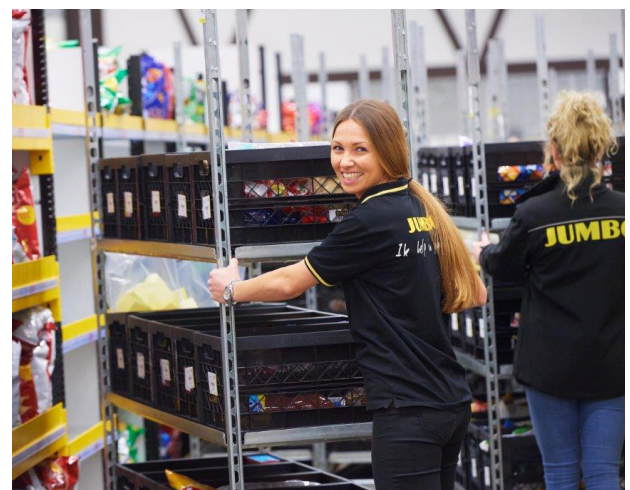
FRAMEWORK ACCELERATES ROLLOUT

Jumbo uses the powerful EBX Development Accelerator & Automated Deployment Framework. This framework has been developed by Systemation and recently acquired formal accreditation from TIBCO. Savings of 30 to 40 per cent in turnaround time and costs can be achieved with the EBX Framework, which also supports fully-automated deployment of MDM applications.

domain in phases, and by adding more domains. The 'Customer' and 'Location' domains were implemented within six months.

DUTIES AND RESPONSIBILITIES

Jumbo's Data Entry Team is responsible for the entry of Master Data and following up quality issues.

The Master Data Management team is responsible for setting up the Master Data quality control with EBX.

The Jumbo Tech Campus is responsible for the further development of both EBX and the validation of data input. Experts from Systemation and Viqtor Davis are part of the Agile Development Team. The Jumbo Tech Campus is also responsible for the distribution of Master Data across the various systems.

The Business teams are ultimately responsible for the Master Data and for its (correct) use.

RESULTS:

MORE EFFICIENCY, FEWER ERRORS AND EASY TO DO IT YOURSELF

"We're well on the way to modelling, controlling and sharing all our data between applications," says Vonken. "The data model is ready, and EBX will be rolled out across all the domains by the end of 2021. This will have laid the foundation for Data Governance, Reference Data and for analytics so that we can achieve 360-degree customer insight." Adds Marc van Weelden: "We can no longer do without data management at Jumbo. We make so many decisions based on data, and you have to be talking about the same data."
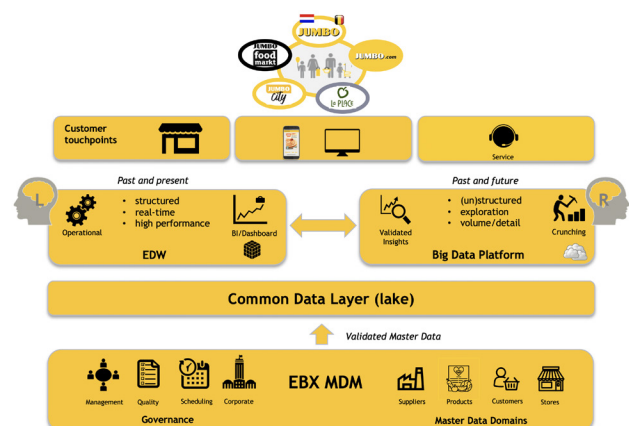
One of the requirements for the solution was an ability to expand over more domains. On the wish list, alongside the customer domain, were the those of 'Locations', 'Suppliers', 'Jumbo Recipe' and 'Products'. 'Customers' and 'Locations' have now been completed, each with a six-month lead time. The La Place Master Data extension is in full swing, as a prelude to the Master Data extension for 'Jumbo Recipe' and 'Products'.

Because a start was made with the Customer Area, it was here that the first results immediately became visible. Introducing the Jumbo Extras savings programme ran virtually without a hitch. Jumbo complies with the GDPR regulations and is able to demonstrate this flawlessly.

Because the data is in order, there are fewer customer queries and the data specialists can focus their attention on other things, adding value to Jumbo.

Jumbo's Customer Service handles fewer approaches to solve issues involving incorrect customer data. Customer Service staff are also able to handle more service calls.

Jumbo's agility has increased because new business initiatives are realised more easily and quickly. More can be done, and in less time. One such initiative is the Food-Coach, with recipes from La Place, advice on healthy eating, and information on dishes and products. This data can also be managed in EBX.

Naturally data management has been greatly improved and streamlined. That was the project's aim, and it has succeeded. The model-based operation of EBX means settings only need to be changed once to be implemented everywhere in the data management of the domains covered by EBX.

The business case for MDM has been met. The implementation remains within the set budget in both time and money. Jumbo is working towards a single version of reality. This will improve decision-making still further. More integration of the supply chain will also be easier and faster if the domains related to it are also accommodated in EBX, such as the 'Products' and 'Suppliers' domains.

The implementation of MDM and roll-out in the various target areas has proved so effective that other business units, such as La Place, are also being included. Restau-

rant chain La Place is in a different business from that traditionally occupied by supermarket chain Jumbo. Powerful data management of 'Products' and 'Jumbo Recipe' means that La Place activities like developing and maintaining recipes can be used for additional services to customers.

Once Data Governance is in place, it will be even easier to demonstrate compliance, because data-handling roles and responsibilities are defined and data's flow through the organisation can easily be made visible (data lineage).

With the implementation of TIBCO EBX, Jumbo has taken major steps towards an optimal customer journey (hyper-personalised customer experience) along the various contact channels (omni-channel).

ADVANTAGES FOR THE BUSINESS
- Faster operations
- Lower costs for creating and managing data
- Costs eliminated for repairing data quality
- Fewer errors
- More opportunities for analytics
- Better decision-making
- Scaling-up data no longer a limitation

ADVANTAGES FOR DATA MANAGEMENT
- Data can be created everywhere
- Check on quality, attributes and metadata occurs automatically, on entry and change
- Validation has been set up flexibly; can be enabled/disabled at any time
- Data is duplicated, enriched and consolidated automatically
- In the Co-Existence Hub the reference data is managed and Master Data is synchronised with the client systems, achieving a Closed Loop between MDM and data consumption
- Easy searching
- (Bulk) update functionality to correct data
- Readymade Workflow and Authorisation model for checking changes in data
- Every change is forwarded to the client systems

LESSONS LEARNED
"Take your time to think about the data model carefully. Any later modifications will need conversion and migration on live systems, and that's quite an undertaking," says Van Weelden. "And be sure to keep the business fully in the loop. An MDM implementation is often somewhat abstract for the users in the business. So the product

owners are then responsible for establishing the implementation between the developers and the users. This is even more the case in working from home. This can easily lead to interference on the line, and miscommunication."

FURTHER ROLLOUT OF MASTER DATA MANAGEMENT AND DATA GOVERNANCE
The structure now exists for a company-wide and step-by-step roll-out across all domains. The foundations will have been laid by the end of 2021, and work can continue on refining and implementing data quality monitoring.

There is now a solid foundation for Data Governance and Reference Data Management. This has consequences for the business, which will be even more involved in the management of the data housekeeping as owner of the data. This will also offer better insights into any redundancies in the application landscape.

The customer acquires authority over its own data. This is more difficult for 'Products.' "An article can have up to 400 attributes that are assigned from a range of sources inside and outside the organisation. That makes Reference Data Management difficult," points out Van Weelden.

"For us, data is a digital commodity. That's why we are very data-driven. With EBX we now have a robust MDM platform. Systemation has proved to be of great value in implementing this properly," says Tim Hehenkamp, Executive Director Technology & Data at Jumbo Supermarkets

SYSTEMATION ADDED VALUE
Systemation is the business partner of TIBCO EBX™ for the Benelux. Systemation has a long and proven track record in the field of data. The company operates in accordance with the Agile method and in close partnership with Jumbo. EBX Development Accelerator & Automated Deployment Framework, developed by Systemation and certified by TIBCO, has significantly accelerated the application of EBX.

"Systemation's in-depth knowledge of data and the EBX functionality, along with its experience in such complex implementations, has produced enormous added value. Their expertise and practical approach meant we were able to get off to a flying start, and could then maintain that momentum and achieve a high level of quality," says Vonken. Systemation made a major contribution to building and setting up the data model, advised on the best architecture and supported the implementation, and is

actively involved in developing the solution further. Vonken: "Systemation's knowledge is now also useful for the upgrade to EBX version 6. It's great that they know all its ins and outs. And that they share that knowledge with us. The cooperation is very pleasant because the communication lines are short. Systemation has really made a name for itself within Jumbo."

RESULTS AT A GLANCE
1. Successful implementation, within the set time and money budget.
2. The business case for MDM has been achieved.
3. Improvements in MDM have a direct influence on the general data quality and flexibility of the organisation(s).
4. Short lead time: 2.5 years after the project's launch, a significant part of the company-wide data housekeeping is already being managed from EBX.
5. Foundation is laid for Data Governance and Reference Data.
6. Major efficiency leap has been achieved in creating, managing and using data.
7. From 'nice-to-have' to 'must-have' and from 'Push' to 'Pull': Jumbo is convinced of the value of MDM in EBX. The Data team sometimes has to stand on the brakes.
8. Trust in the proven quality of TIBCO EBX and Systemation.
9. Jumbo has taken major steps towards offering the optimum customer journey (hyper-personalised customer experience) across the various contact channels (omni-channel).

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TIBCO EBX™ ADDED VALUE

TIBCO EBX now plays a prominent role in Jumbo's IT landscape. One of the pleasant aspects is the technology's power and scalability. "The modelling ability is a huge advantage," says Van Weelden. "You create the model and then it's rolled out automatically across all sources. That means building it entails relatively little work. We were able to cope with a small team of six developers for further development. We're currently using EBX version 5, and we expect a lot from EBX version 6 which was released recently; we're looking forward very much to the upgrade."

TIBCO EBX™

EBX makes Master, Reference and Meta Data Management easier. Custom applications and purpose-built DM solutions are difficult to change, where EBX is flexible and agile. Just like the project roll-out, the solution itself is end-user focused, which hugely enhances and accelerates adoption across the organisation. EBX uses a unique 'what-you-model-is-what-you-get' design approach, with applications generated on the fly and fully configurable. This eliminates the need for long, costly and endless development projects. EBX also includes all the business features required to create data-driven applications. Data stewardship, workflow, data quality and data integration are built in.

JUMBO SUPERMARKETS

Jumbo is a family business from the province of Brabant in the south of the Netherlands, with a rich entrepreneurial history. It began as a wholesaler in 1921, and has since undergone impressive growth to become the second-largest supermarket chain in the Netherlands. Its first outlets in Belgium were added in 2019. Jumbo currently has more than 680 supermarkets, including eight food markets and a successful online ordering and delivery service via Jumbo.com. The group also operates the Jumbo City convenience store concept, combining elements of the regular Jumbo shop, Food Market and La Place restaurant chain. Jumbo's related intention is to make tasty and healthy food easily accessible to all.

The wishes, needs and expectations of the customer come first in everything Jumbo does. The supermarket chain does everything possible to continue surprising and inspiring its customers and to offer them the best shopping experience every day. The unique Jumbo formula is used in all shops and online: the best service + the largest range x the lowest price. Customers can rely on Jumbo's 7 Certainties. By always putting the customer first, Jumbo is one of the best-appreciated supermarket chains. Jumbo welcomes over 10 million customers every year.

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Systemation is constantly looking for technology that can be of interest to its clients, for a range of organisations facing the same challenges. Innovative IT solutions that accelerate the digital transformation.

Systemation also ensures that the organisation can use this technology successfully, and that it offers maximum and lasting benefits. That means: support in implementation, training, product and application management. In TIBCO EBX™ we have found a very powerful platform for setting up and supporting Data Management in both large and small organisations.