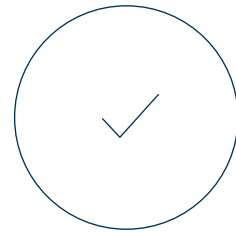**AS** ARVATO SYSTEMS

Zilliant & Arvato Systems

Arvato Systems - Competencies and skills

As an internationally active IT specialist, Arvato Systems supports well-known companies in digital transformation. Around 3,000 employees at more than 25 locations worldwide stand for sound technological know-how (e.g. SAP and Microsoft) with broad industry expertise (retail, consumer goods, media and utilities) and a focus on customer requirements. As a team, we develop innovative IT solutions, transfer our customers to the cloud, integrate digital processes and take over the operation and support of IT systems. In addition, Arvato Systems develops intelligent services and IT solutions that make our customers more agile and competitive and open up innovative business models for them. We also act as a consulting partner for SAP solutions.

Within the Arvato Group, we are able to design complete value chains and combine them with other Arvato services to ultimately provide integrated services from a single source. For the partnership with Zilliant and the associated potential future number of customer projects, Arvato Systems is leveraging the expertise of the entire Arvato Systems Group and the high level of technical know-how of all employees worldwide. Arvato is a wholly owned subsidiary of Bertelsmann. Our business relationships are personal, we work with our customers as partners. We combine the online and offline world with the latest technologies for businesses to create sustainable competitive advantages, so that together we can achieve long-term success. Arvato Systems has also developed a new software for retail price optimization called SPOaaS, which is presented on the following pages.

Contents at a Glance

Zilliant - Competencies and Skills

Zilliant is an American company that offers various software for distribution, manufacturing and industrial companies. To maximize a company's sales and profits, Zilliant has developed Price IQ, an intelligent pricing software for its customers. This tool is designed to increase the competitiveness of a company and to retain and win customers by offering products at traceable prices. The Zilliant solution provides another important benefit for customers. Companies that have worked with the software have reported higher sales (3-10%) and increasing profits. Every single step you had to take to find an economically reasonable price for your product is now automatically handled by Zilliant's Price IQ. The current economic situation for your sales process is automatically adjusted so that you always have the optimal price for your product and the right customer. In addition, you can provide your sales team with appropriate prices so they can be confident in negotiations because your pricing is transparent and everyone understands how and why each price was developed.

Partnership between Arvato Systems and Zilliant

Zilliant has selected Arvato Systems as its service partner to offer its customers four service variants and the connection of Zilliant IQ for real-time price optimization within its own infrastructure (SAP - price calculation for customer orders). In addition to real-time integration for price optimization, the focus will be on simplifying the maintenance of the price calculations themselves. As an option, Arvato Systems also offers efficient and targeted management of the corresponding IT infrastructure in terms of interface integration, monitoring and performance. Most Zilliant customers use SAP software with different release levels and interface technology to manage their business processes. The current IT infrastructure used by such customers is often not sufficiently equipped to meet new requirements. To save future customer investments for time-consuming projects to improve the necessary interface technology, Arvato Systems will offer a reliable, scalable IT infrastructure with a PaaS model service package. The necessary organizational steps will be carried out with a possible phase-based project approach, taking into account Arvato Systems' Constant Framework. In the partnership with Zilliant, Arvato Systems will also fill out a consulting interface so that Zilliant's customers have the best possible contact with Arvato Systems for all questions regarding SAP and automation.

The importance and difficulty of pricing

Through an intelligent pricing strategy it is possible to increase your own company profit. But many distributors and industrial manufacturers pursue a strategy that does not lead to increasing sales or profits. There are some mistakes that could have cost the company a certain amount of income. To avoid mistakes such as target margin percentages that are too wide or cost-plus rules, and to enable profitable pricing, Zilliant has developed Price IQ and Zilliant Price Manager. Prices also influence customer behavior. If pricing seems appropriate to them, by avoiding too high or too low prices, customers remain loyal to the retailer or manufacturer. Against the background of globalization and working in a global market, it is all the more important to be able to react quickly to economic fluctuations caused by the world economy and to be able to adjust one's own prices.

Price difficulties in production, distribution and trade

Zilliant applies its pricing solutions to two different lines of business. On the one hand, they support real-time market pricing for industrial manufacturers and on the other hand, they support wholesale distribution. Both sectors have different difficulties in pricing their products correctly. Similarly, Arvato Systems has developed a price optimization tool (SPOaaS) to improve pricing in the retail sector, as pricing in this sector also has a certain complexity.

»The average B2B retailer loses 0.6% to 5.2% of its profit each year due to incorrect market prices and 1.4% to 6.5% due to inconsistent pricing practices.«

(Quote from the White Paper „Enabling More Profitable Pricing in Wholesale Distribution" by Zilliant (2020))

Difficulties in the distribution

Wholesalers often use price modes to understand how prices are created. There are several problems. Often these are caused by price lists. They are often outdated, as it is impossible to adjust them regularly to changing prices. Furthermore, dealers make all the work with price lists more difficult, because they try to influence the behaviour of the sales staff by increasing the price, which is not a very efficient and well working solution. Another challenge is dealing with fixed contracts. It is difficult to enforce increasing prices, because the sales representatives do not want to lose their key customers by increasing prices.

Difficulties in the manufacturing industry

Manufacturers tend to standardize costs to achieve a margin target, but they forget the uniqueness of the customer. If costs and prices are not adapted to the individual customer, the manufacturer loses potential profits. After the price decision, it is a common process to discuss a markup. Such a discussion usually ends with unchangeable prices. This decision is often based more on feelings than on rational decisions. It can lead to them losing customers because they are not willing to pay a higher price if, on the other hand, costs need to be reduced. As a result, instead of a price increase, this leads to missed profits. Both manufacturers and retailers have to struggle with the complexity of pricing, since there is always the possibility of losing profits or customers. Zilliant's pricing software is designed to address these challenges.

Difficulties in trade

Wholesalers and retailers have to cope with many different price problems in the course of a season. On the one hand, goods sell at different speeds during the season, while on the other hand, company weaknesses lead to difficulties, such as identical markdown plans for each product group, which in turn leads to prices that are either too low or too high. Both result in opportunity costs in the form of lost revenues and profits. Arvato Systems' SPOaaS solves these challenges.

Zilliant's pricing solution

Often the pricing strategies are outdated and do not achieve the optimal price. The solution is the digitalization and automation of pricing, which is now possible thanks to the partnership between Zilliant and Arvato Systems. The use of this solution enables profitable decisions to be made, which is particularly beneficial in the context of global competition. In addition, customer acquisition is influenced by the software solution, as many customers now pay attention to transparent pricing. In order to improve the company's pricing processes and address these issues, there is a cloud-based solution that works with SAP S/4HANA, SAP Commerce Cloud, SAP Sales Cloud and the SAP Customer Experience portfolio.

Manufacturers and retailers fear that the use of a data-based solution would not work with their data. But in most cases, these companies have even more usable data than they think. The data in the ERP system (transaction, product and customer data) is the perfect foundation for working with Zilliant's pricing solution. This data is usually the most trusted of all possible data sources. Using a REST API or a flat-file batch process, Zilliant's system can collect the necessary data from unlimited sources. Pricing from this system eliminates the need for data transfers to ERP systems as this technology runs through a batch process or real-time integration. The optimal price is implemented via a real-time API call from SAP S/4HANA to Zilliant. This significantly reduces technical hurdles by eliminating the need for extensive uploads to the ERP system, thus increasing overall speed

The decision as to whether such an intelligent approach is desired lies with the individual company. However, connecting the Zilliant solution via a REST API to a cloud-based optimization platform is a great advantage for manufacturers and distributors. The connection via REST API makes it possible, for example, to name a market-compliant price that fits every sales situation. Furthermore, such an intelligent approach can be used to determine revenue forecasts for different pricing strategies based on what-if scenarios. In global companies, it is also important to be able to react quickly to changing market conditions, which leads to higher customer satisfaction and greater transparency through real-time price publication. Zilliant's intelligent solution can also be used to determine the impact of your own pricing strategy, taking into account all price types and modes, project-based and configured pricing. In a negotiation with the customer, sales representatives have a much better starting point if they are well informed about the origin and impact of prices and know that they can negotiate with fair and competitive prices.

Due to the fact that each stakeholder has his or her own opinion on pricing, an automated and intelligent pricing system brings a huge advantage, so that everyone in the company knows how and why the current price was created. Furthermore, the reasons for different prices per region, customer, etc. are visible. The analysis and processing of prices by the Zilliant solution resulted in an immediate ROI for many companies. A large number of companies had a positive effect of automated pricing in less than 12 months. This is particularly evident at Terreal, which has been able to secure both a higher margin and market share by working with Zilliant. Another clear advantage is the network between the system and all data. Profit and loss data are determined from the CPQ, as well as other data from the e-commerce solutions.

Integration of Zilliant's solution

After the decision for an intelligent price optimization system has been made, the optimal conditions for the correct implementation of the system results must be created. This is usually done via a combination of a CPQ tool (Configure Price Quote), an e-commerce channel and an ERP system, so that the order can be entered directly. However, the price and management process is very complex to find a high quality price orientation, which is necessary for a wide range of CPQ uses and makes the application look like a hurdle at first. However, the price adjustment within CPQ promises attractive advantages for manufacturers and retailers. For example, the speed of the price decision can be improved during a tendering process. CPQ is also able to present current price strategies and cost changes as well as market changes. Specialized analyses also increase customer confidence and loyalty. Arvato Systems is available as a competent partner for optimal integration and implementation.

Another cost-saving effect of CPQ is the simplification of an entire quotation process through various optimization options, such as individual item pricing. But even without CPQ supplementation, the Zilliant solution can be used by making minor settings in the ERP system at the time of ordering (start, target prices). The pricing strategy has an enormous impact on the customer's perception, although the development of such a strategy is currently not yet a top priority for either the manufacturer or the distributor. With the combination of the SAP Commerce Cloud and the intelligent price optimization solution, this can be easily changed so that everyone benefits. Real-time price updates, price personalization and an automatic negotiation function promise dynamism and competitiveness in the company. Zilliant and SAP have now turned these different concepts into two essential products. The Zilliant Price Manager, which can set and organize prices on a regular basis and also updates previously criticized contracts with price lists. The sales representatives have immediate access to new prices and are always up to date in order to achieve the best possible result for the company.

In addition, Zilliant Price IQ was developed, a data-based optimization application that takes into account all statistical influences on prices. The relationship between prices, customers, and orders is scientifically interpreted and so-called win-only data is determined, so that profit and sales-increasing prices are enforced. The application uses restrictions to define business rules and, together with what-if scenarios, to find an optimal price adjustment. The cloud-based SaaS platform uses REST APIs to provide SAP solutions with intelligent pricing and to help companies with pricing.

Arvato Systems' solution for retail (Sales Price Optimization)

Scope of functions of the Sales Price Optimization (SPOaaS)

SPOaaS carries out a comprehensive sales and inventory forecast at the finest level for a given markdown plan and planned advertising up to a given end of season. As far as the markdown plans are known under existing conditions, the target function and planned advertising, an optimal markdown is also suggested. Even customer-specific features and settings can be considered without any problems. A special advantage are the - compared to a product based on an AI approach - much more accurate and small-intelligent forecasts by statistical models. This also avoids the AI black box effect. Furthermore, SPOaaS does not work with comparative articles from the previous season to determine a missing history, but instead uses article master data of similar articles and the strength of the store. The input of master data such as articles, markdown calendars, the point of sale and the supply channels between the stores and the input of transaction data such as inventory changes, price histories, advertising data and receipt data results in the desired output for SPOaaS. In addition to a sales and inventory forecast per item, this includes the derived recommendation for the markdown depending on time.

Special features of SPOaaS

SPOaaS is particularly suitable for low sales volumes per PoS at the level of individual articles. No maintenance of comparison articles is necessary, even if they are new articles. The system automatically searches for similar articles, which saves a lot of time. Traceable algorithms are used for this. Another special advantage is the prediction of future sales at SKU (stock-keeping-unit) store level, taking stock levels into account. Furthermore, optimal markdown plans are suggested under given conditions and a freely agreed target function is maximized until a given end of season.

Sequence of the optimization process with SPOaaS

At the beginning the receipt and advertising data of the last 2 years, price data, master data and inventory data are determined and checked. The customizing informs about general conditions such as price scales, maximum discounts, end of season, etc. Thereupon an optimal price-sales function is calculated and optimized on different aggregation levels, e.g. advertising effect, season and trend. The result is an improvement of sales by 2-5% and the transfer to a graphical process view.

Technology

The SPOaaS is a cloud-based system with data storage in Apache parquet files, which can be up to three years in the past. The massive parallel processing runs via Apache Spark Cluster. The programming language used in SPOaaS is Python and Java, and the data exchange of the very high data volumes is handled via files and web services.

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Advantages over competitors

For new articles no maintenance of comparison articles from previous years is necessary. Reliable forecasts are determined even for very small sales volumes at SKU level. Comprehensible and transparent algorithms are used.

Possible further steps

A possible step would be the demand forecast. It is used to support the automatic replenishment. It is also possible to calculate all optimal markdown plans in advance. This would be very CPU-intensive and would provide much faster answers to inquiries. But also the consideration of the corona effect is a reasonable second step. Certain historical periods are not considered here, such as periods in which there has been a sharp drop in sales, as during the COVID 19 pandemic. So here an adapted consideration takes place. In addition, customer-specific conditions or target functions can be included in the optimization.

How does Arvato Systems support Zilliant and what benefits does the partnership bring?

The partnership between Arvato Systems and Zilliant offers many advantages. Zilliant provides its intelligent pricing solution and Arvato Systems supports as a recognized SAP consulting partner. This consulting offering is available to both Arvato Systems and Zilliant customers. In addition to the consulting task, Arvato Systems also provides a calculation function that automatically outputs the results of Zilliant's Price IQ to the end customer. The result is that everyone benefits from this collaboration.

Conclusion

The combination of Zilliant's technology and the consulting and automation expertise of Arvato Systems promises immense benefits in everyday business. Product prices are automatically calculated based on the current market situation, specific customers and other decision criteria. On the one hand, this saves time for employees, but even more important is the possible negotiating security in sales talks. Because a fair and comprehensible price can be offered, from which both buyer and seller benefit. Thanks to the partnership between Arvato Systems and Zilliant, problems such as incorrect pricing, problems with SAP handling and technical application are a thing of the past.

You have questions, need information or a contact?
Get in touch with us.

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Arvato Systems is an international IT specialist that supports major companies in Digital Transformation. We stand for strong industry knowledge, in-depth technology expertise and a clear focus on customer requirements. Working as a team, we develop innovative IT solutions, transition our clients into the Cloud, integrate digital processes, and take on IT systems operation and support. As part of Bertelsmann, we are built on the solid foundations of a German global corporation. At the same time, we rely on our strong strategic partner network with top international players such as AWS, Google, Microsoft and SAP. We make the digital world easier, more efficient and more secure and our customers more successful. We Empower Digital Leaders.

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