Sector   : IT
Foundation Year   : 2019
Number of Employees   : 15
Web   : https://robobizz.com/

USING AI TO AUTOMATE E-COMMERCE BUSINESSES

RoboBIZZ

An AI technology that ensures intelligent automation of e-commerce processes 24/7/365. Our e-commerce software streamlines complicated business processes and assists companies in managing their inventory, calculating taxes, and managing other business-related tasks effectively.
"Best Innovation" winner of E-commerce Germany Awards 2020.

Crisis:
E-commerce management, Supply Chain management

About

RoboBIZZ' mission is to provide companies with user-friendly AI technology which elevates the process of digitalization to conceptually new technological stage, optimizing and speeding-up the working processes inside the businesses to unprecedented levels. RoboBIZZ' team is made up of highly motivated young people experienced in Software Development & Architecture, Project Management, Business Development, Analysis, Design, SEO, Digital Marketing. Key factors underpinning the company's success are the innovative way of thinking and the flexible management combined with modern, proven technologies and methodology of work.

RoboBIZZ was awarded 1st place in category "Best Innovation" at the "E-commerce Germany Awards 2020" global exhibition, paneled by experts from Facebook, Universal Music, Bosch, Mercedes-Benz, Porsche Design, Mytheresa, and many other established brands. In its essence, RoboBIZZ does not have an equivalent on the global software market since all competitors provide partial solutions for automation and not a complex one that considers all business processes and is flexible enough to adapt to any business logic.

RoboBIZZ is a combination between a cutting-edge AI technology and an eCommerce business model aiming to allow companies to develop their businesses in a steady and sustainable way instead of just offering a generic software solution with limited functionality.

The solution is completely tailored to customers' needs and can be used for both B2C and B2B purposes.

Background

The company experienced its biggest difficulties during the developing phase. Initially, the idea of the RoboBIZZ was to develop an online e-shop. Some of the employess were entrusted with the task to load the database with articles for sale. The employees barely managed to include up to 50 articles per day. This was insufficient because one day the company received a delivery order for 300 laptops. RoboBIZZ failed to deliver these laptops because there was a delay with contacting the supplier and other workload factors. The delay led to a change in the dollar exchange rate which resulted in a failure to achieve a successful order. These conditions motivated the company to develop an artificial intelligence /AI/, which was ready after a year and a half of hard work. So, the first major problem for the company was the invention of AI. Contrary to the expectations, the team tackled the challenge and managed to create AI, which automatically, without any human intervention and flawlessly, managed an on-line store with 5 suppliers and 150000 items.

The second major obstacle for the company was to deal with the competition: This was tackled easily but slowly as a process, unlike other companies that have developed partially functioning AI, RoboBIZZ offered a fully automated solution based on AI, which effortlessly and in minutes was able to build a well-structured product catalog in a completely empty e-shop template, together with all the necessary photos and descriptions of an unlimited number of products and suppliers. Currently, the AI manages orders, issues invoices, changes pricing policies and even automatically declares a courier. All this optimizes the staff costs, eliminates the human errors and reduces the products' delivery time.

The marketing strategy of the company wasn't so developed, to a certain point:

The biggest hindrance is that entrepreneurs must perform substantial investments in their eCommerce business without clear and guaranteed results. In most cases the costs for maintaining

the business exceed the profit and that is why 90% of the companies go bankrupt in the first year. After the COVID-19 pandemic, companies are in need more than ever to be digitally transformed. There are a lot of challenges like: the successful integration of all different vendors/suppliers to the eCommerce platform and the regular updates and re-calculation of their prices in accordance to established by the management different price policies, the upload of proper descriptions of products and corresponding images, the regular checks of inventories, various documents exchange, SEO, digital marketing and sales in different channels, ads in social media and many more which all require skillfully trained staff and undisputed IT support.

Solution:

A cost-effective and risk-free pricing model to enter the eCommerce market – subscription on a monthly basis, is provided by RoboBIZZ. A customer is offered a complete automation of one's e-shop, regardless of the number of suppliers he wants to integrate with and the kind of ERP system they use. He can afford to run the e-shop alone or with less people, allowing him to take a bigger market share thanks to the smaller investment in human resources and the proper sales strategy, based on gathered by RoboBIZZ customers' behavior real data.

The routine processes in eCommerce are completely replaced by RoboBIZZ, allowing every entrepreneur that struggles with the overall management to: optimize costs, operate through a personal brand, have full visibility of how the business is progressing, prevent human errors and late updates, focus on digital marketing and finally – emphasize on quality and personalized customer service (something which is currently lacking in the major eCommerce markets).

Digital Tools

Most of the solutions used in the company's daily job are custom-made. An own set of ERP, CRM, PROJECT MANAGEMENT SYSTEMS have been created.

HOW WE CREATE OUR SOLUTIONS	
METHODOLOGIES	Agile / Scrum

CONCEPTS	Artificial Intelligence, Service Oriented Architecture (SOA), Platform as a Service (PaaS), Software as a Service (SaaS), Infrastructure as a service (IaaS), Model View Controller (MVC), Model View View Model (MVVM)
SERVERS & MODULES	Apache, TomCat, HAproxy, GlassFish, Application Server, JBoss Application Server, Internet Information Server (IIS)
MAIL SERVICES	Zimbra, Sendmail, Postifix, GroupWise, SoGo
BACKUP & RECOVERY	Rsync, Bacula, Amanda, Unison, FS dump and restore
PHONE SERVICES	Asterisk
MONITORING	Nagios, Munun, RRD, Graphite, Collected, Symon, SNMP
NETWORKING	Quagga, Cisco, routing, switching, BGP4, OSPF, RIP, Bonding, Wireless, LAN
VIRTUALIZATION	VMWare, VirtualBox
INFRASTRUCTURE	ISC Bind, ISC DHCP, PowerDNS, REX, OpenSSL, NTP, Radius, SNMP, OpenVPN
OPERATIONAL SYSTEMS	Windows, Linux, Ubuntu, OpenBSD, NetBSD, Debian, FreeBSD
DATABASES	DB2, Oracle, Maria DB, MS SQL, MySQL , Sphinx, MongoDB, CouchDB, Memcached
TOOLS	UML, CVS / SVN, Eclipse IDE / Visual Studio, Unit testing (JUnit / NUnit), Automated testing (Selenium), CI (Hudson / Jenkins), IBM Websphere, IBM Lotus Notes and Domino, Maven / Ant

Method

Through applying the digital solutions listed above, the crisis and the ensuing obstacles faced by RoboBIZZ and its customers have been successfully overcome. Each of the solutions has played an important role in contributing to the digitalisation of companies and automation of e-commerce, which have developed to a great extent in response to the pandemic.

Digital solutions	Benefits of application
Free eCommerce platform development and design or integration of **RoboBIZZ** to existing one	No need of initial or additional investment into eCommerce platform development and design. **RoboBIZZ** supports integration to any kind of eCommerce platform, regardless of whether it is open-source or a customized one.

Uploads product catalogues & pricelists automatically	No more data entry work and human errors
Checks regularly and updates product listings, price listings and inventories	No more late price updates, wrong prices and unsatisfied customers because of unavailable products they have ordered
Creates product combinations	Opportunity for selling more products
ERP/WMS software integration	Integrates flawlessly to any ERP/WMS software.
Automated document exchange.	Automatically transfer and translates any kind of document as invoices, protocols, shipping receipt, warranty card etc. from suppliers ERP systems to clients ERP and accounting software. No more data entry, human mistakes as well as hiring new staff because of increase in sales orders
100% data security	Multilayered structure and the complex architecture of **RoboBIZZ** make it a reliable solution against malicious attacks. It is practically unbreachable from cyber security point of view.
Automatic SEO algorithm	No more elevated costs for SEO
Eliminates the need of IT support	Cut elevated costs for IT support
Automatic formatting and upload of best images for a specific product	Products always have the best images and no more doubled descriptions
Integration to different sales channels	Opportunity to sell products through unlimited numbers of e-shops, partner e-shops, marketplaces and other digital channels
Real data analysis	Easy decisions about overall business management, focusing on strategic tasks instead of operating ones
Full visibility	Complete history log where all actions performed operations are recorded

Conclusion

RoboBIZZ is currently mainly operating on the Bulgarian market. Its network is rapidly being extended in Europe, United States, India, Indonesia, Japan, Hong Kong, Philippines, China and the Arab League countries.

Key factors underpinning the company's success are the innovative way of thinking and the flexible management combined with modern, proven technologies and methodology of work.