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## MODERN IT-TECHNOLOGIES FOR BUSINESS: WHY BOTS AND CLOUD STORAGE

The article deals with the latest IT-technologies for business, for Bots and Clouds: among all the latest developments and inventions for the business there are chat bots, but their use in business is at the initial level or on the stage, so we invite everyone to consider this problem.

Keywords: IT technologies, bots, cloud storage, the economy of the future.

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### СУЧАСНІ ІТ- ТЕХНОЛОГІЇ ДЛЯ БІЗНЕСУ: НАВІЩО БОТИ ТА ХМАРНЕ ЗБЕРІГАННЯ

У статті розглядаються найновіші IT-технології для бізнесу, для ботів і хмар: серед останніх подій та винаходів для бізнесу є чат-ботів, але їх використання в бізнесі знаходиться на початковому рівні, тому ми запрошуємо всіх розглянути цю проблему.

Ключові слова: ІТ-технології, боти, хмарне зберігання, економіка майбутнього.

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## СОВРЕМЕННЫЕ ИТ-ТЕХНОЛОГИИ ДЛЯ БИЗНЕСА: ПОЧЕМУ БОТЫ И ОБЛАЧНОЕ ХРАНЕНИЕ

В статье рассматриваются новейшие ИТ-технологии для бизнеса, для ботов и облаков: среди всех последних разработок и изобретений для бизнеса есть чаты, но их использование в бизнесе находится на начальном уровне, поэтому мы приглашаем всех к рассмотрению данной проблемы.

Ключевые слова: ИТ-технологии, боты, облачное хранилище, экономика будущего.

**Relevance of the problem.** Bots — which in the Czech translation means "robot" — become an important and noticeable part of everyday life. However, their use in business is at an early stage.

Internet of things, big data, electronics, cloud technologies, 3D printing. Among all the latest developments and inventions for business, the most trendy and popular are chat bots.

**Analysis of recent research and publications**. Over 170 million Facebook accounts and 48 million Twitter accounts are bots. Such data is reported by researchers from the University of Southern California and the University of Indiana, as well as The Huffington Post. Bots — which in the Czech translation means "robot" - become an important and noticeable part of everyday life.

However, their use in Ukraine. It is the bot technology that becomes the latest trend for companies, primarily retail business. They allow you to optimize costs and processes, and today, according to an expert assessment, they are capable of performing more than 80% of the tasks that exist in communication between the company and the retail client or within the corporation.

Bots work from such Ukrainian companies as Kyivstar, PrivatBank, Alfa-Bank, New Mail, etc. Chat-bots are used on the portal Donor.ua, in the service of registration of companies bot.lawyer, in the service of monitoring of registration data of Ukrainian companies and the judicial register to protect against raider hijackings and control of counterparties OpenDataBot. Ukrainians had developed a telegram- bot i Gov.

"Bots for the service sector is a very good trend, which allows the business to answer the questions of users promptly and through modern technologies. Our bot Zoryana has been answering customer questions for the second year, and we plan to teach her everything new and, as it seems to us, it — an endless product ", — advises the president of Kyivstar company on digital and information technologies

According to him, Zoryana solves typical issues, and in more difficult tasks, he switches customers to the call center staff. Bots in PrivatBank chats also answer simple level questions, but

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for non-typical tasks or vip-clients, call center or concierge service experts are included. Also, Alex Mas is comparing Zoryana with a small call center that characterizes the bot's efficiency. Incidentally, Zoryana became the first commercial bot registered on Facebook and Telegram.

"Our Alla is a girl-bot that helps clients with a pleasant voice. We also recently launched a telegram in Telegram, it helps to solve issues in Alfa Mobile mobile banking and Alfa Bank Internet Bank," says Alfa Bank, the head of the electronic business.

What scripts can be solved with the participation of chat bots? Almost all tasks related to task automation. A technical evangelist, explains that "chat bots" need to be considered as a tool that is effective with the mobile app and website. However, the chat bot is much cheaper than creating a web application or site.

For example, because the chat-bot does not need a user-interface. In addition, bots can be permanently proactive 24/7, which can not be on the site or the web-application.

**Problem statement.** What it's about: Facebook held its annual developer conference this week, and it was all about the bots. OK, it was about more than that. But catboats — and the Messenger Platform they'll run on — were the stars of the show. Facebook launched the Messenger Platform (in beta) along with new developers tools — including the Messenger Send Receive API — for building bots that can interact with and respond to people within Messenger.

And, yes, there was plenty more: Facebook also unveiled a new 360-degree camera, Facebook Surround 360. It's not a new product, per se; rather, Facebook will release open source hardware design and software code for similar camera setups this summer. The company is, hoping the open-source nature of the project will encourage others to build their own rigs. Facebook also teased its future ambitions for VR and Oculus Rift as more than a gaming platform, and Zuckerberg even got in a dig at Donald Trump during his keynote [1].

Results of the research. Why you should care: Indeed, it was a busy event. But when all was said and done, nothing outshined the bots. Like other tech giants, it's apparent that Facebook clearly believes that messaging platforms, driven largely by intelligent (or at least semi-intelligent) automated software bots, are the next big thing online. Microsoft CEO Satya Nadella similarly talked up the importance of bots at Build and at a subsequent conference. If websites gave way to mobile apps, the latter will soon hand over the reins to bot-driven messaging — at least that's how Facebook VP of Messaging David Marcus sees it in this piece by WIRED's Jessi Hempel. "What's more," Hempel writes, "messaging platforms are becoming mini-webs - all-in-one spots for us to do way more than talk to our friends". Indeed, while bots are in their relative infancy, messaging apps are already surging. Once an afterthought, Messenger now boasts 900 million monthly active users. Meanwhile, WhatsApp hit 1 billion monthly users earlier this year. And all of those people will increasingly be interacting with the catboats you build. Get cracking tools such as the Microsoft Bot Framework allow one bot to write — for example, A person spends more and more time in the messengers, and therefore the technology of chat bots becomes so popular. We can write bots, we can speak with send them a picture, or give a task to photograph something and recognize the content [2].

Experts predict that more Ukrainian companies will use chat-bot technology in their day-today work. "The level of the use of bots in business so far is minimal, but it must be understood that the bot is a robot and the work will gradually crowd out people from different spheres of activity. Chat bots will increasingly help in call centers and in the entire service sector, for example, when purchasing different things, tickets, conducting banking operations [3]. Сучасні питання економіки і права 1-2(5,6)'2017

## Works with clouds

The instant switching of chat bots between different applications — skype, telegram, messenger, etc — becomes possible thanks to cloud-based technologies. This IT work has been actively used by companies for several years now. The main task of the bot is to perform a task in a simpler and faster way than it could be done through an application or a site. All processes for combining bots with different programs occur in clouds, including the cloud-based Microsoft Azure service.

For example, in the state Sberbank uses clouds, which allow much more expeditious deployment of services, check the operation of systems and release them in products. It provides customers with faster access to new banking products, with the active use of virtualization and cloud-based technologies, it allows centralization of support and administration functions, which immediately gives the opportunity to save money on software and hardware complexes and optimize the number of employees involved, In addition to cloud-based technologies, it's focused around Big Data. Huge data sets allow us to form behavioral models of clients, to make accurate scorecards and, as a result, to develop products that really need our customers and quickly bring them to the market [4].

"We are working with many latest technologies every day, Big Data helps us design and optimize our customers. Cloud technologies, along with HTML5 and Stream, support our Open API platform, and cloud technologies provide security, reliability, and performance.

"It's important that trading platforms always meet business needs, because business is based on real-time data", says Benny Bohé Johansen, head of the OpenAPI platform for the Saxo Bank Investment Bank [5].

We are considering the latest technology not so much in terms of economy for our business, but in order to provide new services to our customers and increase the convenience of existing offers, for example, we recently launched a new mobile Alfa Mobile Bank with TouchID support to facilitate the entry.

Other interesting examples of conflicts involving bots are Wikipedia's "war" bots. Researchers at Cornell University have estimated that various Wiki bot programs repeatedly corrected each other, because developers laid them different ideas. For example, German-speaking boots corrected each other over the past 10 years on average 24 times [6].

**Conclusions.** In any case, the story with corporate bots is just starting. She, as a history of any successful technology, will at some point become massive. According to forecasts, in 2-3. All major Ukrainian corporations will have chatboots in their assets for organizing communication with clients or intra-corporate contacts.

# 5 Ways Cloud Computing is Changing Business Technology

Computing capacities are constantly expanding and the ever-growing corporate field is making optimum use of cloud to keep pace with emerging technologies. The transformative influence of cloud has revolutionized the way modern enterprises work. The agility, back-end efficacy, resource efficiency, and cost-effectiveness of cloud technology have made it a permanent part of the IT infrastructure.

### Cloud Technology Has Triggered a Sea Wave in the IT World

Companies are leveraging cloud technology to meet the demands of their information-heavy IT environments. Enterprises offering IT as a service often face policy orchestration problems, but the way cloud computing has accelerated business processes and reduced operational costs, businesses have begun to realize the full potential of this platform to transform business practices. It offers a competitive advantage to enterprises that dare to go beyond the tried and tested.

The presence of cloud has brought a massive change in the traditional enterprise computing; below are five of the top technology changes triggered by cloud adoption:

1. Easy & Instant Updates

Software upgrades have always been perceived as a tedious task especially when the changes are taking place at the corporate level on a large scale. But, cloud service providers handle all these hassles of system updates, so you don't have to keep tabs of all the maintenance aspects. All the system upgrades and security updates are taken care of by the service provider so that companies can focus on the core competencies without being interrupted by ongoing updates.

2. Unparalleled Scalability

Every corporate territory comes with a massive amount of data, which makes the presence of cloud all the more mandatory. Cloud platforms are substantially scalable, which is highly beneficial for the ever-fluctuating storage needs of the IT environment. Before the cloud era, companies were struggling with their storage needs and wasting time upgrading servers. But with the advent of cloud computing, expanding storage needs are no more an issue as every change is managed on the spot.

However, cloud users may have limited control over their hosting framework and this might impose certain constraints with deployment. If you wish to maximize the returns on your virtual infrastructure, Xangati offers maximum capacity utilization without inviting contention storms. It provides prescriptive analysis that helps companies make faster decisions with better business outcomes.

3. Substantial Savings

Moving to cloud allows companies to lower their operational expenses and improve resource efficiency while cutting down on equipment and IT staffing costs. As the service provider handles all the system and security updates, big businesses can bring down their infrastructure budget to half. Cloud technology comes at a considerable investment but when compared to an onsite IT service, it is just a fraction of the total cost. Cloud servers and equipment are housed offsite, which saves a lot of money that can be utilized for system upkeep. Also, virtual servers are much more cost effective as compared to individual servers.

4. Unrivaled Flexibility

Whether employees want to share files and folders across the globe or work from home using their own device, cloud technology makes it all possible. With cloud, companies can easily access business-related documents from any location and share it with multiple users. This allencompassing platform comes with unlimited storage and sharing capabilities to keep corporations connected at all times. This much-needed flexibility for end users invites room for performance issues in the infrastructure. The new BYOD (bring your own device) approach means more complexity for cloud and hybrid-cloud environments.

You can easily overcome this loophole with Xangati. It is intelligently designed to offer second-by-second insights to proactively protect information around the clock. It allows you to make better-informed decisions, offers remediation advice, and provides root cause analysis to accelerate problem resolution.

5. Matchless Security

Storing a substantial amount of sensitive data on a cloud platform may sound risky but this offsite data storage technology is completely secure and reliable. Cloud eliminates the possibility of data theft because all the information is securely stored offsite and away from the device. Сучасні питання економіки і права 1-2(5,6)'2017

Information is always accessible with encrypted passwords and extra care is taken by cloud service providers to ensure that all the stored data remains protected.

# Best Industry Practices for Overcoming the Cons of Cloud Technology

Cloud computing has certainly brought many benefits to IT enterprises in terms of efficiency and cost-effectiveness, but even this exploding technology has distinct limitations when it comes to downtime. Even the best and the most competent cloud service providers face outage issues, which can bring your services to a halt. But with Xangati's consistent visibility, you can easily meet SLAs and remain well-informed at every step.

The transition of business to the latest IT technology is a small start, when the company's management should take responsibility for risks, personnel conflicts, training of employees and suppliers, and, most importantly, learn to look in the future. However, in a situation where it is necessary to maintain and develop business, and there is no opportunity to invest in its own infrastructure, cloud solutions — on the contrary, not the only way from a technological point of view, as a business to remain at the "height".

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