Embracing the Cloud with Intelligent Systems
Ready for your digital transformation but still having doubts about cloud?

This e-book aims to shed light on the cloud based on our experience and on some industry facts.
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To stay competitive and be sustainable, companies now need to adapt in circumstances more quickly and more effectively than ever before. Such circumstances are:

**Time**

It’s a fast-paced world today and businesses need to learn to transfer, sort, analyze and interpret information quicker. Dedicating more time on planning and innovations rather than processing data should then result in higher ROI.

**“Age of the Customer”**

Technologies are now empowering customers to grow their control over businesses - they demand value immediately or else they leave. To satisfy and retain customers, companies must deploy modern technology within their strategy and routine. Workflows that once were handled manually on paper, via basic software and in-house applications should now be automated and digitalized.

Digital technology is changing how people live and interact, and it therefore changes how they do business as well. **Digital Transformation** is a modern term associated with the process of keeping up with the changing business environment dictated by technology and customer demand.

*Every company is a software company. You have to start thinking and operating like a digital company. It’s no longer just about procuring one solution and deploying one. It’s not about one simple software solution. It’s really you yourself thinking of your own future as a digital company.*

- Satya Nadella CEO, Microsoft
According to the numbers...

45% of CIOs will shift focus from physical to digital to deliver scale, predictability, and speed by 2018.

70% of executives have started the digital transformation of their supply chains.

87% say that digital transformation is a competitive opportunity.

Sources: forbes.com; Capgemini Consulting and GT Nexus
Digital transformation is based on **cloud services** as they offer unlimited capacity and IT resources which facilitate users to consume innovation easier and faster, to unify all business processes and to improve collaboration.

**Cloud is simple...**

Cloud is all about storing and accessing data and programs over the Internet. Via cloud, businesses use desired software without buying hardware, licenses or paying for their upgrade and support. It is a subscription-based model, eliminating the necessity of pricy initial investments, and clients pay only for what they really use - without additional expenses.

Cloud is not only considered the main enabler of business’ digital transformation. It has become a means of survival for companies.

*By 2020, a corporate "No-Cloud" policy will be as rare as a "No-Internet" policy.*

-Gartner

**According to the numbers...**

- **80%** of businesses today are deploying cloud in one way or another
- **80%** of software vendors will change their business model from traditional license and maintenance to subscription-based by 2020
- **41%** of businesses are planning to increase their investment in cloud technologies

*Sources: gartner.com; searchcio.techtarget.com*
Types of cloud services: SaaS, IaaS, PaaS

**SaaS**  
Software-as-a-Service  
With the SaaS model organizations do not purchase software, they rent it. The vendor hosts the software and end users access it via the Internet. The SaaS provider performs regular updates and patch management.

**IaaS**  
Infrastructure-as-a-Service  
The IaaS model provides hardware infrastructure as a service. This way, businesses can use their own software applications and only rent the hardware storage space, servers and connections hosted by the cloud provider, as well as the accompanying maintenance, updates and support.

**PaaS**  
Platform-as-a-Service  
The PaaS provider hosts both the hardware and software tools on their own infrastructure, and provides environment for application development users can rent.
While cloud (IaaS, PaaS, SaaS) allows storing and accessing company's data over the Internet via rented infrastructure, the on-premises model operates from a company's private data center.

Gartner reports that by 2020, public cloud infrastructure-as-a-service (IaaS) workflows will experience more than 60% decrease in security incidents compared to those in traditional data centers.

Gartner also claims that security of major cloud providers is equal to or better than most enterprise data centers, meaning security should no longer be considered an obstacle to the adoption of public cloud.
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<th>Parameter</th>
<th>Cloud</th>
<th>On-Prem</th>
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<td>Security</td>
<td>Cloud is more secure than on-prem because cloud providers:</td>
<td>Based on our experience, on-premises is more exposed to human error than cloud. Our clients using on-prem appear to have fewer, older and weaker security measures applied to their in-house hardware compared to cloud security. To upgrade their on-prem security might cost more than it does to migrate to cloud.</td>
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<td></td>
<td>• specialize in data maintenance</td>
<td></td>
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<td></td>
<td>• do not have access to your data</td>
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<tr>
<td></td>
<td>• apply regular security updates and patches, virus signatures and backup</td>
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<td></td>
<td>• invest in the most up-to-date security systems</td>
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<td>Scalability</td>
<td>Whether your business is seasonal or with high fluctuation, cloud can be easily scaled in accordance to your needs.</td>
<td>You have to buy additional hardware constantly as your needs grow.</td>
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<td>Software Updates</td>
<td>Software is updated regularly and (at most cases) automatically, saving you time and money. All people within the organization have access to the latest software instantly.</td>
<td>With on-prem you or your IT support keeps track of what and when needs to be updated. Upgrading to a newer version is usually a long and complicated process.</td>
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<td>Customer Support</td>
<td>Cloud providers offer 24/7 customer support.</td>
<td>You rely on your IT team’s availability.</td>
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<td>Accessibility</td>
<td>You can easily align your business processes and grant your employees access to important data from any location as long as they are connected to the Internet. You can also restrict access of certain devices or job roles.</td>
<td>With on-prem you can access your data in-house or through an Internet connection which might have serious drop offs.</td>
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<td>Customizations</td>
<td>Cloud gives limited customization capabilities.</td>
<td>Highly customizable.</td>
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<td>Integration with Other Systems</td>
<td>When your software is hosted in the cloud, it is usually very easy to be integrated with other (cloud) systems.</td>
<td>The integration with other systems depends on the infrastructure you have in-house.</td>
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<td>Cost</td>
<td>Cloud-based licensing usually costs less and saves pricy initial investments for hardware purchase.</td>
<td>On-prem is an expensive alternative to cloud as it requires buying the hardware, finding proper location to store it, hiring personnel to take care of it and performing regular hardware and software upgrades.</td>
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<td>Disaster Recovery</td>
<td>Cloud comes with a disaster recovery (DR) plan and equipment designed specifically to prevent unplanned outages. If a disaster such as flood, fire, etc. does occur, cloud providers take immediate measures to restore full access to the services in no time and with minimum impact.</td>
<td>DR is entirely your own responsibility.</td>
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A leading Microsoft Dynamics vendor (in top 5% of all partners worldwide), Intelligent Systems is a certified Dynamics ERP and CRM partner and an authorized SPLA partner (Services Provider License Agreement for Microsoft’s hosting and cloud services).

We do our best to transfer our knowledge into essential value for our customers. Our more than 160 certified professionals put all their expertise and efforts to ensure the best working business solution. They do this with passion following any specific business need and requirement.

Today, more than 80% of our customers are already in the cloud. We constantly invest in upgrading our cloud infrastructure and in trainings on the latest trends in cloud security, which is why we consider ourselves a reliable and trustworthy cloud partner. We are here to take care of all your IT platforms, so you can focus more on your core job and daily activities such as inspiring innovations or delivering exceptional customer experience to your clients.
Benefits

Intelligent Systems provides a wide range of software applications as cloud services, including Microsoft Dynamics ERP (AX and NAV) and CRM. What you get:

- No capital investments due to avoided hardware, software and premises expenses
- No need of hiring specially trained team for maintenance and support
- Fast time-to-value due to short installation and configuration periods
- Timely and reliable support and problem-solving delivered by the professionals of Intelligent Systems
- Automatic update to the latest software version assured by Microsoft and Intelligent Systems
- Access to data anytime, anywhere via highly secured VPN connection
- Flexible pricing of services based on customer requirements, real consumption and no additional taxes
- Option to synchronize requested IT resources with current business needs at any time
**Data Center.** The infrastructure (IaaS) is hosted in a Equinix’s data center. It is a Tier 3 designed facility, built in accordance with the highest industry standards. Sofia-1 is a resilient, secure and carrier-neutral environment with high-speed connections ready to serve the EU, Turkey and the Caucasus. Equinix operates a network of 145 data centers worldwide.

**Access & Security.** HID iClass DG access cards for all doors. 24/7 CCTV camera monitoring of the rooms and doors in the data center. The facility features BOSCH fire detection and suppression system with laser-based Very Early Smoke Detection Apparatus (VESDA). There is also:

- Multi-zoned detection system for all areas
- Intelligent fire extinguishing system based on environment friendly NAF S 125 gas agent
- Dual alarms - heat and/or smoke activation

All doors and storage facilities are auto-lockable, fire-proofed and withstand 72 minutes of open fire without constructive malformations. All cable paths that are room-to-room crossings are filled in with Intumescent fire-stop sealant. All floors and rooms are equipped with handheld CO₂ & Dry powder fire extinguishers, as required by state fire regulations.

**Isolation of Networks.** A secure infrastructure ensuring that every customer’s virtual machine is isolated in a multitenant environment while the various networks within the infrastructure are inaccessible of each other, is a crucial responsibility of the team of Intelligent Systems. And we take it very seriously! The isolation is achieved by the means of virtual network appliances providing multi-tenant readiness, scalability, safety in implementation, as well as the API’s and interfaces required to work with existing infrastructure for each of the networks, utilized through combination of 802.1q VLANs and V switches.
Disaster Recovery. Intelligent Systems maintains a high level of operational excellence and strives to prevent unplanned outages. If there is a such, Intelligent Systems operations personnel works as quickly as possible to restore full access to the services with minimum delay. The data centers are designed to tolerate any system or hardware failure with minimum impact for the customer.

The Intelligent Systems’ existing cloud infrastructure has fully doubled HW redundancies, thus making its best to ensure that customers are not impacted by any unplanned outages.

Physical Data Center Security. All customer data stored with Intelligent Systems Cloud is situated in a data center providing state-of-the-art physical and environmental access controls.

Environmental Controls. The data center is equipped with environmental hazard detection systems and climate control utilization systems to maintain a consistent operating temperature and humidity level.

Logical Security. Intelligent Systems’ cloud infrastructure requires management authorization for employees accessing any critical application and system. Access is granted according to the user role and business need. Logical and physical access is revoked for employees who have left the organization. Continuous monitoring of sensitive logs is in effect all the time, and system audits are conducted periodically to detect inappropriate access to critical assets, if any.

Data Protection. Intelligent Systems’ cloud services use AES 256-bit data encryption at rest and support HTTPS TLS v1.0 and higher for protecting data in transit. A designated personnel of Intelligent Systems accesses the customer data only during certain business and support functions, or as required by law.

Intrusion Detection, Response and Monitoring. Intelligent Systems’ cloud uses a variety of monitoring systems to detect network security anomalies, denial of service, IP spoofing, port scanning and other advanced attacks.
About Intelligent Systems

160+ Specialists  
4 Offices  
450+ Projects

Customers in 55+ countries  
Partner network in 30+ countries
Ready for your Digital Transformation?

Speak to our experts to find the best fit for your business.

+359 2 817 33 66

info@isystems-group.com

www.isystems-group.com