

## Increasing the competitiveness of the SMEs with implementation of innovative ICT solutions

*Optimization of the business processes and lowering the operational costs with implementation of mobile and IoT (Internet of Things) devices and innovative software solutions, like: Smart Asset Management, Real-time QA, Predictive Maintenance, Advanced Energy Data Monitoring System, etc.*

**GORD Systems Services**  
Petar Indovski, CEO

# About us



GORD Systems Services was established in 2006 with focus on **IT consulting and outsourcing** services for **international clients**.

Company's **mission is to deliver innovative and best quality software solutions and IT services that meet international standards and clients' specific needs.**

Employees are experienced IT specialists and consultants with **deep understanding of the business process** in several **industry sectors**:

- **Manufacturing, Food processing, Healthcare, Pharmacy, Transport & Logistics** and areas, like:
- **Smart Asset Management, Logistics, Real-time QA Management, Predictive Maintenance, Smart Energy**, etc.).

# IT Outsourcing services

GORD provides IT solutions and services to clients in **EU, USA** and **Canada**, including:

- **Custom Software** development
- **Mobile apps** (Android, iOS, Windows Phone and native-like based on HTML5 web technology)
- **Mobile & IoT based solutions** (Embedded software development and integration with cloud level solutions);  
**QA/Software Testing** services (mobile and desktop solutions on various platforms)
- **Business Intelligence services:** Reporting, Data integration, OLAP and Big data analyses (IBM/SPSS, Microsoft BI, Pentaho, BIRT, Jaspersoft)

**More information on ITO services:**

<http://ito.gordsys.net>

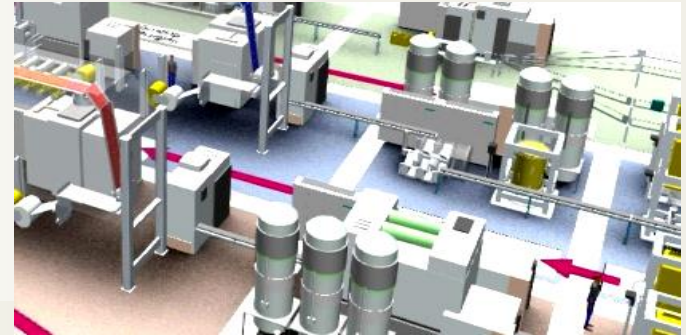
# Innovative solutions based on Mobile and IoT devices

- Our **Mobile** and **IoT based solutions** help the businesses to **gather, monitor, analyze** and **interact** with variety of **measured data**: location, temperature, humidity, light, energy etc., but also other, **equipment specific data** like working hours, rotation speed, supply current, etc.).
- Acquired data are transferred into structured information in the cloud database (**big data**) valuable for decision making in the process automation, asset management, energy efficiency, equipment maintenance and many other areas.
- Combining IoT data with **intuitive end-user SW interface**, give us opportunity to build innovative solutions, like **Predictive Maintenance** (lower risk of unpredictable failures), **Smart Asset Management**, **Real-time Quality Assurance**, intelligent **Energy Data Monitoring**, etc.

# Predictive Maintenance Solution

**Predictive** and **real time** equipment maintenance is based on:

- Continues **data acquisition** of **key life-cycle parameters**
- **Identification of key parts** and **spending materials** for replacement (according measured data and manufacturer's Specifications)

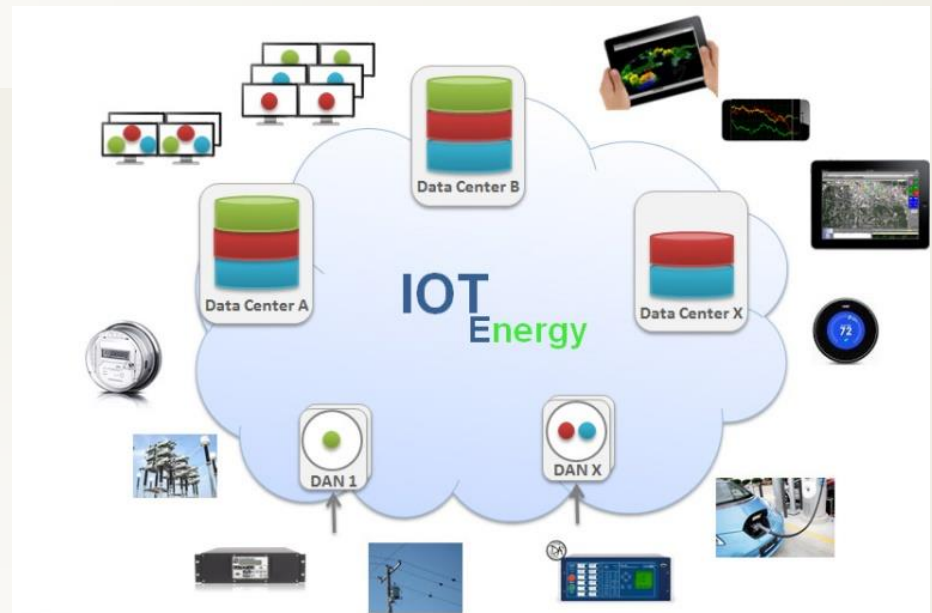


- **Detection of abnormal work conditions** and **prevention of unexpected breakdowns**
- **Maintenance management** module, **Proactive planning** and **control** the **maintenance budget**
- Creation of **maintenance knowledge-base**, and usage of **pattern events from historical maintenance** data
- **Benefits: Low risk of unpredictable failures**, reduced costs of manufacturing, maintenance and operation

# Energy Data Monitoring System 1/2

**Intelligent EDMS solution** includes,

- IoT devices for **acquisition** of **environmental data** (temperature, humidity, lighting, people presence), including **HVAC equipment data**
- **SW tool for monitoring and management** of the overall EDMS system
- **Business Intelligence** (data analysis, reporting)
- **Mapping of building energy efficiency**
- **Planning** for optimized energy spending



# Energy Data Monitoring System 2/2

- Significant **energy saving** (EDMS will bring energy saving of 15-20%, even without feedback control implementation)
- Complete insight into the **consumption of the electrical and thermal energy**
- Continual **monitoring of energy consumption** of AC and heating components, lighting and other electrical equipment
- Comparison of **energy consumption by periods**
- Comparison of **delivered energy** (measured/paid)
- Insight into the **working environment in each room** (temp., humidity, lighting, presence)
- **Analysis and planning** of energy consumption
- **Detection of malfunctions** in the **HVAC** system
- **Mapping the energy efficiency of each room** in the building and planning of future **actions for improvements**

# Real-time Quality Assurance Systems 1/2

- Specialized software solution for **Management of the QA processes** in the enterprises
- Supports **any standard based on QA procedures**, including the food processing standards (HACCP, HALAL etc.) and trace ability off the raw materials and finished products, during all stages of food processing.





# Real-time Quality Assurance Systems 2/2

- Flexible solution, supports **predefined data sets**
- It can be set to **operate with a minimum** data set which is suitable for small production facilities, **up to very high complexity** level needed for MRP2 standard.
- Needs far **less staff and effort** for management of the QA system



- The solution **automatically create**
- **and store data logs** for defined QA processes (data from IoT devices and manually entered data).
- Automatically **generate all required QA documents**, and **alert/notify users about any irregularities**.
- Additionally, it could be used as a **product quality improvement tool**.

# Machine Vision 1/2

## (Vision Recognition, 3D Measuring)

Innovative solutions that **improve and automate manufacturing processes** through implementation of affordable **machine vision technology**.

Designed to **work with price affordable hardware** (hi performance graphic cards for standard PC platform)



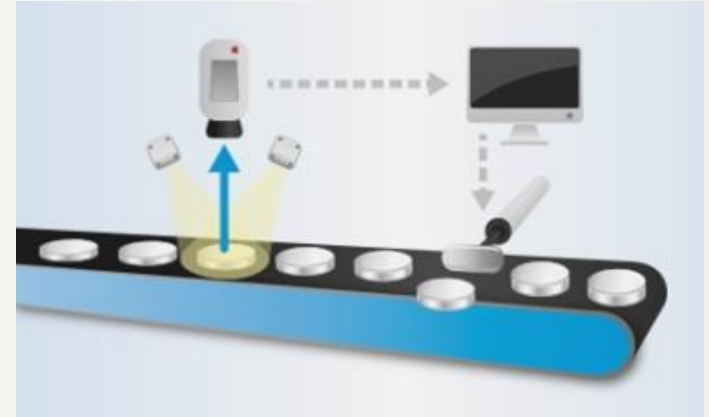
### Key features

- Parts **recognition**
- Detection of **defective products** or **noncompliance** with defined quality
- Support automatic **assembling** (can provide precision mechanisms to orient the assembly machine)

# Machine Vision 2/2

## (Vision Recognition, 3D Measuring)

- The Measurement points and paths are highly customizable. The user can create own parameters for measurement, control points and tolerance items, as well as access all system parameters.
- The system provides trace-ability and monitoring of the production assembling process.



- The system is using parameters like: length, width, area, position, average level of the pixels.
- Detection of quality noncompliance is automated and precise.
- The software estimate the shortest route for assembling, outstanding in quality detection (automatically discarding defective products), etc.

# Business Navigator 1/2

## ERP Solution for the local Government

Functional modules integrated in the solution:

- **Electronic document records** (document archiving)
- **DMS** (Document Management System)
- **Public procurement** (management of procurement process)
- **Contract management**
- **Inventory management**
- **Accounting and Financial Management**
- **Primary Inspection**
- **Primary administrative procedures**
- **Cost management**
- **Budget management** (planning and realization of budget)
- **Human resources and salaries**
- **Asset management**
- **Alerting system** (notification and alarms for previously set events)

# Business Navigator 2/2

## ERP Solution for the Local Government

- Enables **full control over the internal processes** in the organization (preparation, monitoring and control of the procedures and tasks, documents and involved staff)
- The solution **increases the efficiency** through reduction in procedural errors, **decrease of costs and** decrease of **paperwork**
- **Multi-language** interface
- **Web based** solution: HTML5, JavaScript, Java
- **Integrated workflow** (work processes and tasks), flexible solution enables customized settings to **adopt** the **specific** organizational **needs**, and **changes of legislation**
- **Enable public institutions to prove their transparency** and provide reporting documentation and evidence for a review

ЈН Процес1.0

РАКОВОДИТЕЛ 1.0

КОРИСНИК  
Ана Trajkovska

ПРОЦЕС  
Пребарување  
(збор1,збор2...)

БРЗО ТЕКСТУАЛНО НАПРЕДНО

Одобрен	Започнува на	Приоритет	Активен	Опис	Одговорно лице	Краток назив	Почетен датум	Краен датум	Статус	Порака
✓	07/07/2016 00:00	2	✓	Консултански услуги	Ана Trajkovska	Постапка со прегова	05/11/2016 11:06	06/29/2016 11:06		
✓	06/01/2016 00:00	2	✓	Набавка на канцелар	Ана Trajkovska	Отворена постапка	05/11/2016 10:53	06/29/2016 10:53		
✓	06/01/2016 00:00	2	✓	Реновирање и изград	Ана Trajkovska	Отворена постапка	05/11/2016 12:22	06/29/2016 12:22		
✓	06/01/2016 00:00	2	☐	Набавка на апликати	Ана Trajkovska	Постапка со барање				

- The flexible workflow enables easy to define and manage all procedures and improved performances of the public organizations.
- The system track the changes of data status, and sends notifications to the relevant users (due time of current processes, renewing a contracts, missing docs in some processes, etc.)

ЗАДАЧИ

МОИ ЗАДАЧИ СИТЕ ВО ПРОЦЕС

Процес	Назив	Забелешка	Одговорно лице	Минути крај	Извршен	Статус	План почеток	План крај	Почетно време	Крајно в:
Набавка на апли:	Отпочнување на постапка		Simona Stojanova	1440			05/19/2016 12:21	05/20/2016 12:21	05/19/2016 12:21	

- Predefined templates creates a control process where all the daily tasks are predefined which makes easier for the process to be controlled and minimized possibility for errors.
- The solution enables the organizations to conform to certain standards and to reassure that they are observed.

ДОКУМЕНТИ ЗАВИСНОСТ ФОРМИ

Форми

Форма:  Помош:

Форма:  Помош:

[ПРЕГЛЕД НА ЈН](#)

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# Thank you for the attention!

GORD Systems Services  
Petar Indovski, CEO

# How to contact us

GORD Systems Services

F.Ruzvelt 6/Gal 6, 1000 Skopje, Macedonia

Tel: +389 2 3163-419, 3109-659

Mob (also Viber): +389 78 279206

Skype: gord\_sys

Email: