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Impact of modern technology at Emovis Ltd.

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Introduction:

In this presentation I will talk about the use of ANPR systems at the Dartford Crossing implemented by the company Emovis Ltd.



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BACKGROUND OF ORGANISATION

History

Emovis is a part of Abertis. A corporation founded in 2003 with headquarters in Madrid, Spain. Emovis operates motorway toll road concessions. And since 2014 it has been responsible of collecting and enforcing payments at the Dartford Crossing .



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BACKGROUND OF ORGANISATION

Aim and objectives:

Emovis deals with maintaining road traffic through modern solutions in the field of electronic tolls and intelligent mobility.



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BACKGROUND OF ORGANISATION

Purpose:

Emovis' main goal is to offer a wide range of solutions based on electronic fees that meet the constantly growing needs of mobility in the future.



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BACKGROUND OF ORGANISATION

Mission and vision:

Emovis's works towards being the leading provider of services and technology for all electronic tolling and smart mobility solutions.



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BACKGROUND OF ORGANISATION

Current status and services:

Emovis is currently operating in Europe, North America and Qatar. Providing design, implementation, maintenance and operation of state-of-the-art road pricing solutions.



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Challenges before introducing modern technology:

- Traffic congestions
- Higher levels of pollution
- Higher probability of traffic accidents
- Increased levels of stress for the road users
- Disruption to businesses and the public caused by delays

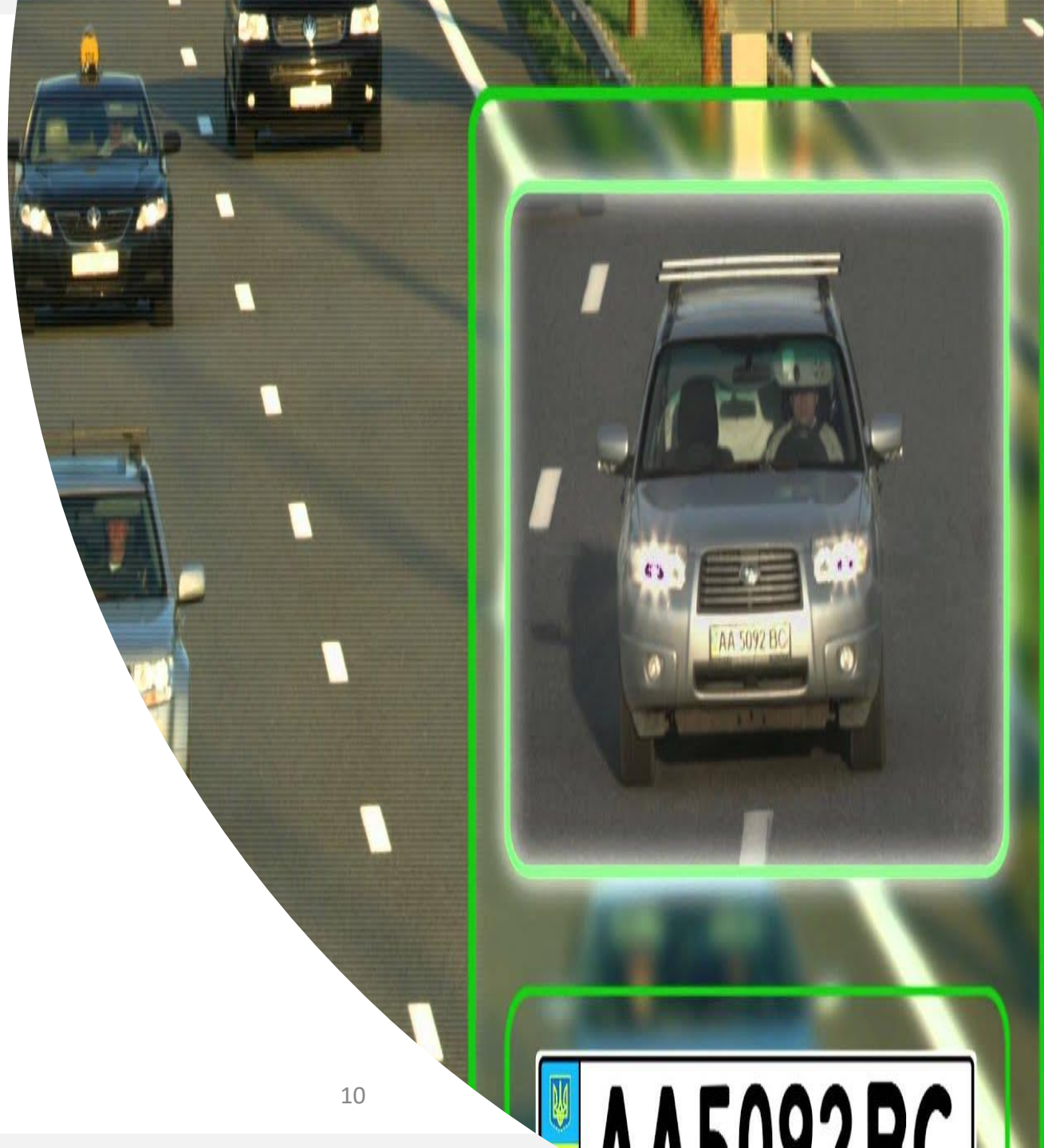


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INSIGHTS OF THE TECHNOLOGY INTRODUCED

Definition of ANPR:

ANPR is a technology that allows you to read the number plates of cars traveling on the road using a camera system and appropriate software



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Characteristics of the technology:

Registration recognition of plates is automatic. The image from the cameras observing the vehicles is sent to the server, where after analysis the registration numbers are read. The recognized board numbers together with the photo are saved in the journey database. Information about the plate number can be used to automatically open the entrance or to other signaling assigned to vehicles from a specially defined list



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Models of ANPR

ANPR has two main models that can be used both in mobile and static form.

Examples of using ANPR models :

- Police/law enforcement purposes
- Road-rule enforcement
- Electronic toll collection
- Cataloguing the movements of traffic
- Closed-circuit television (CCTV)



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ADVANTAGES/DISADVANTAGES OF ANPR

Advantages:

- Provides access control
- Easy and quick search in the database
- A valuable source of information for customer profiling
- Realistic registration of vehicles entering or leaving a specified place



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ADVANTAGES/DISADVANTAGES OF ANPR

Disadvantages:

- Blurry images difficult to recognize
- Poor lighting and low contrast due to overexposure, reflection or shadows
- Lack of consistency between countries or countries



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IMPORTANTS OF ANPR

ANPR system offer powerful and effective methods of controlled access or monitoring vehicle movements. This system can deliver substantial benefits to car park operators and customer alike. The technology can enable an environment in which customers feel they are treated more fairly and consistently.

The ANPR system is helpful in detecting many crimes, including locating cars that have been stolen or moving without valid insurance, and another cases of serious crimes.



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Positive impacts of modern technology at Emovis Ltd.

By using modern technology Emovis Ltd. are helping millions of motorists travel seamlessly along the world's busiest highways. Their advanced mobility solutions help spur productivity of leading freight operators. Smart electronic tooling help increase the traffic capacity of constrained road infrastructures, reducing traffic jams, emissions and operating costs.



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Negative impacts of modern technology at Emovis Ltd.

Using modern technology in this case raises legitimate concerns regarding privacy. Special services have fairly free access to records from hundreds of thousands of cameras, including those mounted by private entities.

It is easy to imagine that in the jungle of poor-quality regulations there may be abusive in the use of modern systems.



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Differences between traditional and modern technology

Traditional technology generates high amount of direct employment.

Modern technology generates low amount of direct employment.

Traditional technology generates high amount of indirect employment through backward linkage.

Modern technology generates low amount of indirect employment through backward linkages.



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Why modern technology is important for the organization

Through dynamic changes in dimensions (economic, technical, socio-cultural, political) to maintain balance with such a turbulent environment, organizations must understand these changes, obtain information about them and methodically transform them into specific decisions. The changes designed and implemented should be innovative. The implementation of technological innovations is crucial for the use of becoming market opportunities by developing new products, providing innovative services or innovative implementation of various processes. Modern technology enable achieving higher economic indicators in enterprises, such as: productivity, sales volume, profit and market value.



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Consequences of not using modern technology in the organization

Lack of investment in technological innovations, apart from bureaucracy and problems related to the structure of enterprises, is among the three biggest obstacles preventing the development of companies. The use of the latest technical innovations should be the basis of almost every business today. Whoever forgets this will quickly lose competitiveness, which is to be or not to be an organization on the market.



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Conclusion

Modern technologies are entering new spheres of life - including business. Their skillful use can contribute to many savings and increase work efficiency. Innovative programs support the functioning of most departments in companies - from human resources and accounting, through work with clients to production.

Most innovative devices and solutions are associated with considerable expenditure - much higher than in the case of traditional solutions. However, this is an investment that you should not hesitate. Expenses are one-off and can bring measurable and long-term benefits.



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