

# Digital transformation of eco-innovative solutions

Recommendation to Bulgarian eco-innovators on how to digitalize and digitally transform their solutions through ERASMUS+ project implemented by Chamber of Commerce and Industry Vratsa.

**Keywords:** digital transformation, digitalization, SME's, self-learning-tool, Events, consultations and interactions

## Aims of this recommendation

The aim of this recommendation package is to give consultation to Bulgarian eco-innovators on how to digitalize and digitally transform their solutions through ERASMUS+ project implemented by Chamber of Commerce and Industry Vratsa.

## Target group of this recommendation package

- Small and medium sized enterprises (SMEs)

## Background to this recommendation package

The era of digital transformation is changing our world – business models that have been established over several decades are simply disappearing. Any company that doesn't act now is threatening its own existence. The purpose of this type of recommendation through consultation is to give an example how Bulgarian eco-innovators can make a digital transformation on their products and solutions by the help of ERASMUS+ project called – Strategy Development Tool for the Digitalisation of SME (Digitalisation), taking into consideration the nowadays digital era.

Recommendation packages are part from the Ecolnn Danube project deliverables and play main role as an output of the project. The general objective of the Ecolnn Danube project is to increase the cooperation of innovation actors in

## Quick read

- The recommendation focus on the new digital era;
- Information is related to EU Erasmus + project which main goal is to give detailed information about digitalization of products and activities in SME's;
- The difference between digitalization and digital transformation is described and the benefits of the new digital products.

the field of eco-innovations with special emphasis on development and application of eco-technologies in the Danube Region.

Eco-innovation is the introduction of any new or significantly improved product (good or service), process, organisational change or marketing solution that reduces the use of natural resources (including materials, energy, water and land) and/or decreases the release of harmful substances across the whole life-cycle.

Audience of this recommendation package are SME's and eco-innovators who want to digitally transform their products, services and solutions.

## Summary description

This type of consultation is considered helpful by CCI-Vratsa Ecolnn Danube team for eco-innovators and SME's who want to take a further step into the digital era. CCI-Vratsa experts work on an ERASMUS + project which focus on tools for digitalisation of SME's products and services through online learning tool. This corresponds with the innovative approach of Ecolnn Danube project and the given recommendations will be handy for the relevant stakeholders.

## Summary of eco-knowledge, eco-solution or eco-technology featured in recommendation package

The project "Digitalisation" is implemented under the ERASMUS +, Key Action: Cooperation for Innovation and the exchange of good practices, Action: Strategic Partnerships.

The main objective of the project is to develop innovative "Self-learning Tool", available online, used directly at the workplace to prepare the strategic setting of the digitalisation process within the company and to initiate its implementation in the company's operational processes. There are 7 project partners, having also associated partners who support the dissemination of project contents and results : online survey, test phase, support multiplier,

events, advertise products, spread information on local, regional, national and European levels.

Specific objectives are:

- Sensitize target group to opportunities and risks of digitalization;
- guiding target group throughout the process of developing and implementing digitalisation strategy in their business;
- increase knowledge and competences of professional associations;
- increase competitiveness of target group.

The digital transformation of the economy entails new challenges for staff. Globalization, ICT developments, new technological products and services, are some of the drivers of the new trend that is leading the global market: Digital Transformation. The project "Digitalisation" develops a "Self-learning Tool", which will be used in the workplace in order to prepare European SMEs for the strategic setting of the digitalisation. For the trainee, the self-learning tool is an opportunity to improve and expand skills for particularly relevant field of activity in the labor market.

## Summary of status of knowledge transfer

A Bulgarian design eco-innovators and SME's want to digitally transform their products, services and solutions. This can be achieved by taking part in one ERASMUS + project, implemented by CCI-Vratsa experts. The main goal of the project is to give the opportunity to SME's to prepare the strategic setting of the digitalization process and to initiate the implementation of the "Self-learning Tool" into the operational processes.

## Summary of recommendation(s)

Many companies simply try to modernise existing processes or areas of business with the help of digital technologies. With this approach they lose sight of interesting new business possibilities and also of still unidentified risks for their business. The successful digital transformation requires



### About the Ecolnn Danube project

The objective of the Ecolnn Danube project is to increase the cooperation of innovation actors in the field of eco-innovations with special emphasis on development and application of eco-technologies in the Danube Region.

digitalisation, but is necessary not to lose sight of the foundational process of digital transformation by becoming fixated on digitalisation.

What is digitalisation? Example: an existing process is depicted digitally in order to arrange the steps as efficiently as possible so that an offer is sent by the system in direct response to a custom enquiry, the delivery of an object is automatically initiated after an order and the corresponding receipt is also immediately submitted and simultaneously forwarded to the internal accounting department or the interface to the tax advisor. To put it simply: what used to be in done in an analogue form, e.g. on paper, is converted into bits in bytes. This has already been happening in companies for several years and yet there is still further room for improvement in almost all SME. Digitalisation is often equated with automation.

What is digital transformation? To put it simply: digital transformation is never “driven” by technology. Just because a digital solution exists doesn’t mean that this is simply digitalised straight away. In a process of digital transformation your customer is always at the centre of your analysis. It is all about finding new or different ways to solve your customers’ problems. Your goal is to solve known and also new customer problems with the best technological possibilities. Technology is only a means to an end. This is why it’s important for you to spend time looking at the driving forces that are changing your business world. This still applies, even if you’re sure that artificial intelligence (AI), for example, doesn’t have any consequences for your business at the moment. Let yourself be inspired and look ahead to tomorrow’s world. Your process of digital transformation that is definitely still to be done will already profit from this.

Through the Online-learning Tool SMEs and eco-innovators can go through 3 steps toward their digitalisation path:

- Quick check tool – check in few minutes to what extent the company is prepared for the digital transformation;

- Driving force that Change the World – blockchain, big data and much more – a short and understandable explanation;

- Digital Transformation: Step by step instructions – materials for working, learning and planning regarding the development and implementation of SME individual strategy.

## In-depth details / explanations of recommendations

In depth details about the Self-learning tool, which is the main instrument for the relevant SMEs and eco-innovators on how to get introduced in to the digital era by 3 main steps.

### 1. Quick check tool:

- The idea of the quick check is to give information to the relevant stakeholder about his level of knowledge regarding the digitalisation and digital transformation. The quick check tool will give initial idea of the stakeholder current position. With the help of short learning units, stakeholders will learn on this basis about the most important technologies developments.

The questions asked are in the area of: Big data, Cloud services, 3D printing and Custom manufacturing, Internet of Things and Wearables, Artificial intelligence, Augmented reality and Virtual reality, Robotics & Drones, Customer digital experience and Social media, Blockchain technology, Cyber security, Change management, Project management, Risk management, Analysis of external factors of influence, Analysis of strengths and weaknesses.

### 2. Digital technologies and management course

#### 2.1 Strategic management:

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### About EcoInn Danube recommendation packages

Recommendations in the context of the EcoInn Danube project are useful suggestions and proposals on how to bring eco-solutions into commercial value, particularly through forms of knowledge transfer.

Recommendation packages relate to specific eco-solutions, specific problems or specific areas within technology transfer.

**Partnership guidance** recommendations aim to aid successful interaction between 2 or more specific demand and supply side stakeholders.

**Pitch** recommendations aim to aid successful knowledge transfer and/or commercialisation for a type of stakeholder.

**Events, consultations and interactions** recommendations aim to aid successful eco-knowledge transfer by focusing on a given issue, area or topic related to knowledge transfer.

- The course cover the topics of: Strategic management, project management (manage your project before it starts managing you!), risk management (manage risks effectively on your digital transformation projects), change management (the key to successful digital transformation), knowledge management, PESTLE analysis, extended GAP analysis, SWOT analysis, Business model CANVAS, prioritisation tool.

### 2.2 Digital technologies:

- The course cover the topics of: Big data and real time analytics, Cloud services, Apps and Mobile Solutions, Custom manufacturing and 3D printing, Internet of things and Wearables, Augmented reality and Virtual reality, Robotics and Drones, Customer digital experience and Social media, Blockchain technology, Cyber security.

### 3. Digital transformation: Step-by-step Instructions

- Digital transformation is – even when it involves using the most modern technology – first and foremost a managerial risk. No one should blindly follow trends simply because everyone is talking about them. So how can you master this process of digital transformation? The best way is just to take one step at a time. To do this you need the right tools. These are know-how in project management, knowledge management, change management and risk management. You also need good methods that work well, such as e.g. the SWOT analysis. This isn't new, but it is useful. By the way, this doesn't just apply to your process of digital transformation, but to all challenges that you come across in your daily business.

If you systematically follow the step-by-step instructions you will end up with a planning list at the end to tell you what you should do next. You will have dealt in detail with the opportunities and risks of digital transformation for your

company and will be able to start the implementation – so that your company will still be a successful operator in the market in five or ten years' time.

## Conclusions of recommendations

Restate main points of Recommendation package:

- SMEs and eco-innovators have to make e further step into to digital era;
- “Digitalisation” project overview provide information about the initial steps for digitalisation of products and services;
- Explanation for digitalisation and digital transformation;
- Quick check tool, Digital technologies and management course, Step-by-step instructions.

## List of useful links

List of documents supporting the recommendation.

Chamber of Commerce and Industry – Vratsa website:  
<http://cci-vratsa.org/en/home/>

Digitalisation project - <http://www.cci-vratsa.org/en/strategy-development-tool-for-the-digitalisation-of-sme/>

## Date of recommendation package

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### About the Ecolnn Danube project

The objective of the Ecolnn Danube project is to increase the cooperation of innovation actors in the field of eco-innovations with special emphasis on development and application of eco-technologies in the Danube Region.

[www.interreg-danube.eu/approved-projects/ecoinn-danube](http://www.interreg-danube.eu/approved-projects/ecoinn-danube)