

## R29: SUSTAINABLE EXPLOITATION PLAN

**CAD** COMPUTER-AIDED  
MATERIAL HANDLING  
MODELING ENGINEERING SYSTEMS  
COMPUTER TOOLS GEOMETRY DRAUGHTING  
ANIMATION LOGISTICS SOLIDS  
SOFTWARE

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## Introduction

*This exploitation plan takes into consideration those project results/products/deliverables that have a potential for sustainability even after the project's life-time. The plan reflects joint activities where the consortium plans to seek for future funding as well as potential clients and income projection for each of the partners.*

*In order to get this data, we have focused the plan on the tangible results of the project.*

## 1. General Information

### 1.1 Explanation of terms

Exploitation means “making use of and deriving benefit from (a result)”. In the context of project results it primarily involves the two processes of 'mainstreaming' and 'multiplication', where:

- Mainstreaming is the planned process of transferring the successful results of programmes and initiatives to appropriate decision-makers in regulated local, regional, national or European systems; and
- Multiplication is the planned process of convincing individual end-users to adopt and/or apply the results of programmes and initiatives.

Sustainability is the capacity of the project to continue and use its results beyond the end of the funding period. The project results can then be used and exploited in the longer-term, perhaps via commercialization, accreditation or mainstreaming. Not all parts of the project or results may be sustainable and it is important to view dissemination and exploitation as a progression that extends beyond the duration of the project, and into the future.

## 1. 2. What can be exploited?

The next step is to identify what to exploit. The results of the project may be of diverse nature and consist of both concrete (tangible) results as well as of skills and personal experiences that both project organizers and participants to the activities have acquired (intangible results).

Tangible results may include for example:

- A framework for CAD Certification in terms of logistics,
- an approach or a model to solve a problem;
- a practical tool or product, such as handbooks, e-learning tools; research reports or studies;
- good practice guides or case studies;
- evaluation reports;
- Newsletters or information leaflets.

In this document we are going to focus on tangible results that may be interesting for Logistics sector and can be exploited through future business opportunities or future calls/programmes in order to improve the obtained results.

## 2. Exploitation opportunities

All the partners have made the exercise of thinking about future/further opportunities. In this sense, they were asked about exploitation and business model issues.

- Future calls or programmes where progress in the results of the LogiCAD project
  - MECB: Erasmus plus and in particular Sector Skills Alliance that cover Advanced Manufacturing topics.
  - HLA: EU ICT for Factories of the future PPP research programme; Experiences and objectives of the future of PLM European research programme.
  - ITA: Erasmus +, Horizon 2020.
  - CAMIS: Erasmus +, European Structural Funds- Human Resources Development (ESF-HRD; POSDRU)

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- Daugavpils University: Horizon 2020, LATLIT – Latvia-Lithuania Programme 2014-2020, ENPI - Latvia, Lithuania and Belarus Cross-border Cooperation Programme
  - Tecnalia: Erasmus + (Sector Skills Alliance)
  - More relevant results of the LogiCAD project for your organization
    - MECB: The case-studies describing how CAD can help the logistics sector and the generated e-Learning content specifically providing knowledge transfer on how CAD can be used by logistics stakeholders.
    - HLA: Through dissemination and mentoring activity 2 companies plan to make usage of CAD technologies. Providing permanent information for the logistics sector and the society enhance their effectiveness.
    - ITA: New technologies applied for logistics, new training materials, and new solutions for companies around 2D and 3D.
    - CAMIS: New solutions for logistics problems and new training materials, new CAD content for the logistics field and the case studies for the logistics stakeholders
    - Daugavpils University: New training materials in SolidWorks, Collaborative Design, 3D Animation and Autodesk Inventor, which can be used in the future work with students and partners from Logistics sector; new contacts and cooperation ties with Logistics stakeholders in Latvia
    - Tecnalia: CAD Knowledge for logistics sector evaluation framework and collaborative design materials.
  - Opportunities to assist with training in CAD in other sectors/areas apart from Logistics
    - MECB: With an increasing ageing European population, I believe CAD should be targeting projects related to Assisted Living sectors.
    - HLA: In the areas of acquisition, production, marketing and trade.
    - ITA: Yes, of course, any industrial and no industrial sector for designing, testing products or processes.
    - CAMIS: Any activity that has a design component can be fit in. For example CAD in engineering, CAD in architecture, CAD in archeology. The LOGICAD framework can be applied in all these fields, where design is used.
    - Daugavpils University: Yes, sure, any industrial producers for designing, testing products or processes, as well as in educational sector which deals with industry, ICT, and logistics.

- Tecnalía: In those areas where the design has a critical importance, such as, aeronautics, engineering or architecture.
- Type of potential clients of your organization related to LogiCAD project Results.
  - MECB: Medium –to-large organizations working in the manufacturing sector and Transportation /Shipping Service Providers.
  - HLA: software operators, storage companies, organizers of the supply chain, such as: Fraunhofer, MTA Sztaki, Enterprise Group, CAD Art Ltd., Graphit Ltd., Future Operate Co.
  - ITA: Educational centres; trainers, Sme’s, Logistics Associations and clusters, Industrial Sector and companies and Public Institutions.
  - CAMIS: SMEs, NGOs, Universities, Longlife learning establishments, Adult learning organisations, CAD training companies, Logistic Companies, Design companies and Advertising companies
  - Daugavpils University: High schools and universities in their ICT and Logistics study programmes – for instance, Transport and Telecommunication Institute, Ventspils University College, Rezekne University of Applied Sciences, ICT and Logistics trainers, Employees of industrial and logistics companies, Latvian Logistics Associations, Latvian Supply Chain Cluster, Industrial companies, Public Institutions – for instance, Latvian Investment and Development Agency, Daugavpils City Council.
  - Tecnalía: Centre for innovation in Basque Vocational Training ([www.tknika.net](http://www.tknika.net)), Basque mobility and logistics sector (<http://www.mlcluster.com/>)

### 3. Foreseen LogiCAD Business Model

A business model describes the rationale of how an organization/company creates, delivers, and captures value through a specific asset.

In this sense and thinking in the future LogiCAD business model, all the LogiCAD partners were asked to identify partners for LogiCAD, activities, resources, value proposal, type of relationship with customers, cost structure and revenues/incomes in their region according to the very well-known Osterwalder’s Business Model Canvas.

The business model canvas is a strategic management and lean startup template for developing new business models, so in terms of sustainability of the project (and developed products) is a god exercise to think about the future foreseen LogiCAD business model to exploit.

### 3. 1. MECB Limited

**Partners:** what can partners do better than you or at a lower cost (and thus leverage your business model)?

Reach out to a bigger market as the market in Malta is relatively small; **118n partnerships**.

**Key Activities:** what are your key activities and how difficult are they to perform (by others)?

Our key competence and activities concerns **both CAD skills and also creating e-Learning courseware**. Some of these activities are not easy to perform by others.

**Key resources:** what are your key resources and how difficult are they to copy (by others)?

The key resources we have include a **team of highly skilled engineers and computer scientists** that collectively able us to have a unique place in this market.

**Value proposition:** which one of your customers' problems are you solving and why will he work with you rather than with a competitor?

**Applying CAD e-Learning technology to health & safety issues from a technical perspective.** They prefer to work with us as we collectively have **expertise on e-Learning and also on technical/engineering issues**. Hence we provide a sort of one stop shop.

**Relationships:** what type of relationship does your customer expect you to establish and maintain with him?

We are normally expected to establish a **long-term working relationship** that is based on win-win principles.

**Distribution and Acquisition channels:** through which means does your customer want to be reached and addressed by you?

We are normally expected to reach out to customers initially by **our on-line presence** but **later by more one-to-one relationship** meetings.

**Customers:** who are your customers? what are your customers' needs, desires and ambitions?

Our clients mainly come from the following sectors:

- Public entities
- Small private entities from a range of sectors
- Medium-large private entities from the manufacturing sector

**Cost structure:** what is the cost structure of your business model and is it in harmony with the core idea of your business model?

We have two main cost structures:

- **Services are sold on a time-based rate** eg. cost per day or cost per month, depending on the nature of the service
- Products e.g. e-Learning courses are sold on a quantity mechanism. ie selling a client one course is treated different from selling a client a range of courses for say 3 years.

**Revenues streams/Pricing:** what value are your customers really willing to pay for and how will they pay for it?

This depends on the type of client and the size (eg SME vs multi-national) type of client.

**LogiCAD Service Provide:** Developing ad-hoc training materials (mooc, videos, guides...), evaluation framework.

### 3. 2. Hungarian Logistics Association

**Partners:** what can partners do better than you or at a lower cost (and thus leverage your business model)?

They can better programming have more extended resources and **IT experience**.

**Key Activities:** what are your key activities and how difficult are they to perform (by others)?

For LogiCAD project, **Education of logistics**, organization of professional events and conferences, support of partners in the logistics developments, cohesion of the institutions participating in the logistics activities, providing information contributed to their scientific and practical activities, elaboration of national and international projects.

**Key resources:** what are your key resources and how difficult are they to copy (by others)?

**Logistics knowledge, scientific experiences**, extended contacts in the logistics field.  
To copy these competences would need similar backgrounds.

**Value proposition:** which one of your customers' problems are you solving and why will he work with you rather than with a competitor?

For LogiCAD project, **Logistics Consultation**, providing information, ensuring direct and indirect economical § social results.  
Customers work with the more experienced partners.

**Relationships:** what type of relationship does your customer expect you to establish and maintain with him?

Organization of professional partner contacts, providing logistics services, consultation and education as well as **organization of conferences**.

**Distribution and Acquisition channels:** through which means does your customer want to be reached and addressed by you?

Through **scientific consulting**, logistics information supply, dissemination activity.

**Customers:** who are your customers? What are your customers' needs, desires and ambitions?

Partner **companies acting in the logistics field**, forwarders, storage companies, organizers of the supply chain.  
The key activities of the association are in accordance with their needs and ambitions.

**Cost structure:** what is the cost structure of your business model and is it in harmony with the core idea of your business model?

It is logistics development, **low costs**, partnership synergy. It is in harmony with the core idea of the business model.

**Revenues streams/Pricing:** what value are your customers really willing to pay for and how will they pay for it?

Low consulting costs, affordable participation on the logistics events, free dissemination of the relevant topics.  
Mutual information flow, common logistics developments can accomplish good partnerships.

### 3. 3. Instituto Tecnológico de Aragón

**Partners:** what can partners do better than you or at a lower cost (and thus leverage your business model)?

To design and to do the **programming of training material in 2D and 3D using Solidworks, Autodesk or StudioMax**. They are institutions specializing in this matter and for them, it's easier to do this activity and in a cheaper way.

**Key Activities:** what are your key activities and how difficult are they to perform (by others)?

We are a leader and reference centre in logistics and we have more easily than other partners to **bring the technology solutions to companies**.  
Our strength is the **training methodology under elearning** and in face to face format, our facilities and teaching resources.

**Key resources:** what are your key resources and how difficult are they to copy (by others)?

Our previous experience  
Our more than 9000 customers  
Our **international projects and partners**  
Our technological and innovative activities  
Our **resources and installations**  
Our know-how and knowledge (the human and technical capital)

**Value proposition:** which one of your customers' problems are you solving and why will he work with you rather than with a competitor?

We are solving logistics difficulties through **the continuous training and thanks to LogiCAD project**, and by other hand, we're **implementing technological and multimedia solutions in their process, design in their solutions and products**. They will work with us due to the previous experience in other innovative projects, and other positive results.

**Relationships:** what type of relationship does your customer expect you to establish and maintain with him?

A relationship of **full confidence and trust in our technological impartiality and business support**, considering that ITA gives nonprofit solutions. We guarantee absolute confidentiality in all R & D projects

**Distribution and Acquisition channels:** through which means does your customer want to be reached and addressed by you?

They prefer **the face to face meetings**. In other case, we do virtual meeting (videoconference or audio conference) and for other quickly communication: email and virtual communication.

**Customers:** who are your customers? What are your customers' needs, desires and ambitions?

We have a great partnership and several collaborations to constantly improve the services we provide to businesses, technology leaders, social organisations, professionals, entrepreneurs and the **educational world**, so we have a wide network of organisations with which we actively collaborate to our customers: enterprises, educative sector, professionals, and entrepreneurs.

**They need to be innovative but sometimes they have difficulties to get it.**

**Cost structure:** what is the cost structure of your business model and is it in harmony with the core idea of your business model?

Yes, of course... Totally; **staff costs and indirect costs**

**Revenues streams/Pricing:** what value are your customers really willing to pay for and how will they pay for it?

It's difficult to know how they would like to pay. **They pay only for good solutions applied to their enterprise and their needs. Ad-hoc solutions**

### 3. 4. CAMIS Centre

**Partners:** what can partners do better than you or at a lower cost (and thus leverage your business model)?

In **the logistics field, there are specialized companies dealing with CAD**. Hence, these companies can acquire the same tasks, but faster and more cheaper than our services.

**Key Activities:** what are your key activities and how difficult are they to perform (by others)?

Our key activities are **teaching CAD to adult stakeholder, including in the area of logistics**. Training and teaching in CAD in any field is our day to day routine and hence it is quite easier and cheaper for us to do it as compared to our competitors. Furthermore, we have fully equipped CAD laboratories, where training can take place in optimum conditions.

**Key resources:** what are your key resources and how difficult are they to copy (by others)?

1. **Human resources** – experts in CAD, IT&C, elearning, teaching
2. Teaching and **research expertise**
3. **Managing international and national funded innovation, research and development projects**
4. Expertise in implementing international and national funded projects, as a member of a consortium
5. **Excellent infrastructure**

**Value proposition:** which one of your customers' problems are you solving and why will he work with you rather than with a competitor?

We do teaching for various organization staff members and also research in various fields for various SMEs, NGOs and other organisations. Since we have an **extensive experience in teaching and research**, coupled with the fact that we are the largest and most important university in Romania, our customers trust us to solve their problems.

**Relationships:** what type of relationship does your customer expect you to establish and maintain with him?

**Confidence, trust, reliability, seriousness, delivery on time** are the key issues that our customers expect from us.

**Distribution and Acquisition channels:** through which means does your customer want to be reached and addressed by you?

We use both **face to face meetings and virtual communication** methods, including social media instruments.

**Customers:** who are your customers? What are your customers' needs, desires and ambitions?

Our customers are our students, adults, but we also have a great relationship with engineering and design businesses, other universities, SMEs, NGOs and a large network of organizations from the research and development area. **Our customers need fast and effective training methods and cost effective solutions to their problems.**

**Cost structure:** what is the cost structure of your business model and is it in harmony with the core idea of your business model?

The cost structure is in total harmony with our business model and it is based on direct costs (**Staff costs, infrastructure costs**) and indirect costs.

**Revenues streams/Pricing:** what value are your customers really willing to pay for and how will they pay for it?

Most of our customers are looking for cost effective solutions, hence they are primarily looking for the **best possible cost on the market**. The methods of paying are various and are determined with each customer.

### 3. 5. Daugavpils University

**Partners:** what can partners do better than you or at a lower cost (and thus leverage your business model)?

To fill training materials with concrete tasks and examples from **daily industrial and logistics practice**. Business companies are **dealing with real situations every day**, and for them, it's easier to implement academic training materials with examples from real life.

**Key Activities:** what are your key activities and how difficult are they to perform (by others)?

We are a leader in higher education in Latgale region, and we have more easily than other partners to **create and apply the ICT solutions to companies**.  
DU strength is **CAD laboratory and equipment, the training methodology under e-learning** and in face-to-face format, and high-educated and experienced academic resources.

**Key resources:** what are your key resources and how difficult are they to copy (by others)?

Our previous experience in **international projects** – for instance, within FP7 programme, ERAF and ESF co-funded programmes, Marie-Curie co-funded programme, TACIS, COST Actions etc. Our contacts and work experience with Latvian Logistics Association and Latvian Supply Chain Cluster, Our international partners – The Institute of Competitiveness, partners from LogiCAD project Our **technological facilities** - CAD/CAM/CAE/PLM laboratories, Cisco laboratory Our competence in Industrial controlling, Our high-educated and **experienced academic staff**

**Value proposition:** which one of your customers' problems are you solving and why will he work with you rather than with a competitor?

We are solving packing construction's problem (constructive design), and working out of optimal allocation of products according with economic and **technological requirements** for our partner and customer – local company BM Industrial Ltd. **DU help and unique experience allows the company to create such kinds of packing for non-standard metal constructions** of different size, which help to use a space of containers and vessels of trucks in more optimal

way during transportation of products for long distances.

**Relationships:** what type of relationship does your customer expect you to establish and maintain with him?

A mutually benefit relationships with trust, based on general business ethics. **Our customers need from DU scientific and research support, fundamental ICT solutions** for their problems, platform for discussions, as well as systematical training of suitable specialists for their purposes.

**Distribution and Acquisition channels:** through which means does your customer want to be reached and addressed by you?

Our customers definitely prefer the **face-to-face meetings and consultations**. For other quickly communication we use e-mails and phone/Skype communication.

**Customers:** who are your customers? What are your customers' needs, desires and ambitions?

Our main customers – **industrial, transport and logistics companies** in Latvia, which are waiting from us, first of all, well-educated specialists with relevant competence and skills, as well as current educational support in improving qualification of companies' employees, ICT solutions for their daily tasks.

Second target group of our customers are **public institutions and those stakeholders who need us as the research/scientific partners for international projects**. They need our research & scientific competence and experience, our international contacts, as well as our technological and technical facilities, our academic staff's knowledge and experience.

**Cost structure:** what is the cost structure of your business model and is it in harmony with the core idea of your business model?

In general, **staff costs and indirect costs** Yes, it is in harmony with the core idea of our business model: in all activities to be based generally on **our human resources as our main capital**.

**Revenues streams/Pricing:** what value are your customers really willing to pay for and how will they pay for it?

Our customers' purchasing capability is not high – just hundreds of EUR; they usually pay through temporary contracts, searching us **via tenders (incl. under the projects) or mutual negotiations**.

### 3. 6. Tecnia

**Partners:** what can partners do better than you or at a lower cost (and thus leverage your business model)?

Partners to design **training material in 2D and 3D using Solidworks, Autodesk or StudioMax and those who have more knowledge on the market (e-learning providers).**

**Key Activities:** what are your key activities and how difficult are they to perform (by others)?

The LogiCAD consortium itself fulfills almost all the value chain of the project: industrial knowledge, CAD knowledge, e-learning and competence evaluation research and innovation processes.

**Key resources:** what are your key resources and how difficult are they to copy (by others)?

E-learning researchers, CAD designers, Logistics sector knowledge, innovation and international experience.

**Value proposition:** which one of your customers' problems are you solving and why will he work with you rather than with a competitor?

**The value proposal is an innovative e-learning and competence evaluation framework to make logistical companies acquire CAD knowledge in a simple and intuitive way.**

**Relationships:** what type of relationship does your customer expect you to establish and maintain with him?

A relationship of **full confidence and trust in our technological impartiality and business support.** We guarantee excellence in innovation and research and **tailored and bespoke solutions.**

**Distribution and Acquisition channels:** through which means does your customer want to be reached and addressed by you?

**Direct relation based on a service contract.** The quality assurance to guarantee an excellent relation with the customers is critical.

**Customers:** who are your customers? What are your customers' needs, desires and ambitions?

Public Administrations, **vocational training centers and Logistics Clusters.**

**Cost structure:** what is the cost structure of your business model and is it in harmony with the core idea of your business model?

**staff costs and indirect costs** and infrastructure hiring

**Revenues streams/Pricing:** what value are your customers really willing to pay for and how will they pay for it?

**Service providing** usually leveraged on public administrations **through competitive and innovation programmes.**

### 3. 7. The LogiCAD Business Model Canvas

	<b><u>Key activities</u></b>		<b><u>Client relationship</u></b>	
	CAD Skills and e-learning, training methodology, Industrial and logistics knowledge		Full confidence and trust in our technological impartiality and business support	
<b><u>Partner networks</u></b>		<b><u>Value proposition</u></b>		<b><u>Client segments</u></b>
118n partnerships, IT sector (sw developers and designers), specialists in Logistics + CAD,		An innovative e-learning and competence evaluation framework to help logistics companies acquire CAD knowledge in a simple and intuitive way		Public Administrations, vocational training centers and Logistics Clusters, moreover industrial clusters.
	<b><u>Key resources</u></b>		<b><u>Distribution channels</u></b>	
	highly skilled engineers and computer scientists, infrastructure and facilities, research expertise		Direct relation based on a service contract. The quality assurance to guarantee an excellent relation with the customers is critical.	
	<b><u>Cost structure</u></b>		<b><u>Revenue flow</u></b>	
	Human resources and indirect costs		Service providing usually leveraged on public administrations through competitive and innovation programmes	