

## Lam'On

***A case study of a real company, considering options to adopt Platform business models.***

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### **Management summary:**

LAM'ON LTD is a Bulgarian start-up company founded in 2018, committed to revolutionize the printing and packaging industries with its innovative bio-based and compostable laminating products. LAM'ON produces bio-based and biodegradable laminating film and biodegradable packaging foil. The company has traditional, pipe-line manufacturing business model, focusing on the B2B market. In 2024, the company has finalized its innovative products and is ready to launch its mass manufacturing process.

- Lam'On is a manufacturer of bio-based and compostable thermal laminating films for paper and cardboard application and packaging foils for garments, cosmetics, food etc.  
Lam'On main aim is to reduce the 1.2 M metric tones of laminated paper that gets wasted EACH year. Their bio-based and compostable thermal laminating film LAM'ON could be easily recycled with the paper without compromising its quality.
- Packaging is 1/2 of the global plastic waste. That's why is developed the PACK'ON clear packaging foil.
- Lam'On offers substitutes for the petroleum-based plastic solutions which are now widely used by the packaging and the printing industries: the materials look and feel the same, have great optical and mechanical properties, are used in the same way and applied on the standard production lines.
- All this makes the transition to using a more sustainable material very smooth and easy since no special machinery upgrades are required to use it. The end clients receive the same quality they are used to, at a low enough price and with the added value of causing less pollution.

*The case study aims to provoke students to investigate the following questions:*

1. *To identify limitations of the traditional manufacturing business model for LAM'ON?*
2. *To explain the main triggers for the company and its potential to realize its mission and vision?*
3. *To explore different strategies to transform Lam'On from a product-dominant to service-oriented company.*
4. *To set goals in the area of services, technology and business as a whole*
5. *To describe how Lam'On can transform to a Digital platform enterprise? Who are the key stakeholders and actors?*
6. *To explore Digital platform models to expand its activities on national/international markets?*
7. *To explain how platform business models can support and facilitate circular economy way of doing business?*

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# 1 Business view of the case

## 1.1 Background

LAM'ON LTD is a Bulgarian start-up committed to revolutionize the printing and packaging industries with its innovative products.

The European printing industry uses approximately 13.2 million tons of non-recyclable film annually. There are more than 110,000 printing companies in Europe, each of them consuming around 10 tons of non-recyclable laminate per month which leads to staggering annual waste figures. About 1.1 million tons of laminated paper and 1.2 million tons of packaging foil end up in landfills, soil, and oceans each year.

[The EU ban on single-use plastics](#) was enforced across member countries on July 3rd 2023. EU's key goal with this legislation is to minimize plastic pollution and especially marine litter, which is threatening our ecosystems. At least 5 out of 10 on the banned items lists are packaging products. That being said, it is expected to see packaging producers, distributors and FMCG players speed up and adopt green packaging innovations.

LAM'ON aims to tackle the significant issue of plastic waste generated by the printing and packaging sectors. Thus, LAM'ON's key advantage lies in its innovative products - compostable foil, which transforms potential waste into a useful product. The company produces biodegradable laminating film and packaging made from corn starch and polylactic acid, which decompose within 3 months to 5 years depending on environmental conditions. The main products are:

- LAM'ON, a 100% biodegradable laminating film, and
- PACK'ON, a packaging foil made from corn.

Laminating film is ubiquitously used across various industries, contributing to the proliferation of microplastics and rendering paper non-recyclable. This challenge inspired LAM'ON to develop a biodegradable alternative. Through extensive research, the company identified a market gap for an improved, eco-friendly product. Their offerings extend to packaging film for food and other products, addressing a critical need for sustainable solutions in everyday industrial applications.

### Questions and Tasks:

1. Please explain the company ambition, market potential and strategic efforts?
2. Please investigate the recent EU policy frameworks in relevant fields, where LAM'ON can support the EU goals and KPI in the field of Circular economy, packaging and Green Deal?

## 1.2 The Company

Since its inception in 2018, LAM'ON has been actively engaged in extensive RTD activities. Through numerous trials, the company successfully launched its products, composed of corn starch, supplemented with other renewable materials. Unlike traditional laminating films that rely on adhesive layers, LAM'ON discovered an eco-friendly and resource-efficient method to achieve the same purpose. Their process incorporates polylactic acid, which is both biocompatible and suitable for their manufacturing needs. The resulting product degrades within 3 months to 5 years, depending on environmental conditions.

LAM'ON is also exploring recycling options for bioplastics, representing a potential area for further innovation. Currently, the company produces films for vacuum sealing and packaging various products and foods. They emphasize the importance of true biodegradability, highlighting that many companies

engage in "greenwashing" by using biodegradability as a mere marketing tool without considering the long-term impact on organisms and the environment.

The company has already attracted a diverse customer base from various industries, eager to adopt sustainable alternatives. Over the years, LAM'ON has gathered valuable feedback from these customers, maintaining a waiting list of clients ready to integrate their products. Bulgarian companies from cosmetic and textile companies supported the company. These industries generate substantial packaging waste, making them ideal candidates for LAM'ON's offerings. The widespread need for packaging and laminating solutions across multiple sectors underscores the relevance and potential impact of LAM'ON's products in reducing industrial waste.

### 1.2.1 Basic facts



LAM'ON specializes in producing biodegradable and compostable laminating films that match the performance of traditional films and can be processed using existing machinery. The unique composting properties of both the film and the glue set LAM'ON apart from conventional laminating solutions.

In addition to LAM'ON, the company developed PACK'ON, a clear packaging foil. This product expands their eco-friendly offerings, providing sustainable packaging solutions for a variety of industries.

LAM'ON is a biodegradable and suitable for composting laminating film. It offers the same results as the currently used ones and even using the same machinery. What makes it stand out is its composting properties of both film and glue.

### 1.2.2 Mission

«Print it, shrink it, wrap it, and then compost it!»

This slogan encapsulates LAM'ON's mission to facilitate the transition from traditional plastics to more sustainable materials in the printing industry. By offering biodegradable alternatives, LAM'ON aims to replace petroleum-based plastics with eco-friendly solutions that maintain the same high quality and affordability.

LAM'ON's products provide a seamless switch for end clients, requiring no special machinery upgrades. The materials not only look and feel like conventional plastics but also possess excellent optical and mechanical properties. These sustainable substitutes can be used in the same way and applied on standard production lines, making the shift to greener practices smooth and easy for businesses.

### 1.2.3 Vision

The vision of LAM'ON is to significantly reduce plastic waste and its harmful environmental impact, providing high-quality, sustainable products that meet the needs of the printing and packaging industries.

#### Questions and Tasks:

1. Please explain the main goals and ambitions of the company, incorporated in its mission and vision?
2. Please evaluate the business potential of the company market?

### 1.2.4 Start-up and organization of the company

Founded by Angela Ivanova, Gergana Stancheva, and Assoc. Dr. Filip Ublekov, the company LAM'ON aims to replace non-recyclable packaging with a biodegradable alternative made from polylactic acid derived from corn.

Both co-founders, Gergana and Angela, who worked in the print industry, were motivated to use more eco-friendly paper and cardboard coatings in their work. Unable to find suitable options in the market, their research naturally evolved into a business dedicated to developing and providing biodegradable and compostable alternatives.

Since its inception in 2018, LAM'ON has benefited from both financial and business support from various European and Bulgarian entities. Over the years, LAM'ON's innovative concept has been appreciated on numerous international and local entrepreneurial competitions.

## 1.3 Business model

LAM'ON manufactures bio-based and compostable thermal laminating films for paper and cardboard applications, as well as packaging foils for garments, cosmetics, food, and other products. The core product, LAM'ON, is a bio-based and compostable thermal laminating film that can be easily recycled with paper without compromising its quality. This feature is crucial in reducing plastic waste, as packaging materials constitute half of the global plastic waste.

By providing an eco-friendly alternative to traditional laminating films, LAM'ON's business model aligns with global sustainability goals, offering businesses a way to reduce their environmental footprint while maintaining high-quality standards.

### 1.3.1 Description of the business model

After six years of research and development, LAM'ON is now offering its biodegradable packaging film products to the market. All LAM'ON products are manufactured by a dedicated team of 9 people in their Sofia facility, designed to operate 24/7 to meet production demands. LAM'ON plans to ramp up production by the end of the summer, aiming to maximize their facility's capacity of 100-150 kg of granules per hour, translating to about 20 tons of foil per week with continuous operation. By September 2024, the team plans to expand by eight more people to support continuous production.

The company is now focused on positioning itself in the European market, leveraging established contacts and a strong reputation built during their development phase. To optimize production forecasting, LAM'ON seeks customers with predictable volumes, offering competitive pricing that varies based on order size, ranging from €6 to €10 per kilogram depending on the type of foil. This pricing strategy aims to attract bulk orders by offering more favorable rates for larger quantities.

The company's immediate focus is on solidifying its market position and preparing for significant growth next spring. They recognize the industry's readiness and the substantial potential for their eco-friendly solutions, emphasizing the importance of capitalizing on the current momentum to drive aggressive growth and market penetration. Looking ahead, LAM'ON plans to expand its product portfolio, with several new recipes already under development. The company envisions ongoing development activities as a core part of its future operations. International distribution will be pursued through licensing, distribution agreements, and strategic partnerships.

### 1.3.2 Business Model Canvas

*Questions and Tasks:*

1. Consider the following information to complete the basic elements of the LAM'ON business model in the framework of a linear business model, following the BMC Business Model Canvas:
  - . Customer segments: For whom do company creates value, who are their customers?
  - a. Value proposition: What values do they deliver to a specific customer or segment of customers (goods, services and other needs)?
  - b. Customer relations: What kind of relationship does each customer segment expect to establish and maintain? What have the company established so far, at what cost and problems?
  - c. Channels: Which channels do LAM'ON use to reach a certain segment?
  - d. Key partners (suppliers): Who are they? What goods and services do LAM'ON purchase from them?
  - e. Key activities: What activities do we use to provide value to individual customer segments? What methods do the company use?
  - f. Key resources: What key resources does LAM'ON value proposition require (service delivery system, people...)?
  - g. Cost structure: What are the most important costs and what are they related to?
  - h. Sources of income: What values are the customers willing to pay? What are the sources of income?
2. Explore what are the main limitations in the linear Business model, considering the vision and the mission of the company?

### Raw materials and partners:

The primary raw material for LAM'ON's film, polylactic acid, is sourced from the USA, with additional supplements of European origin. LAM'ON has patented the recipe and production technology of their laminating film. According to Angela Ivanova, there are currently no competing products in Europe and Asia. LAM'ON's adhesive layer is integrated during the production process, making it part of the finished product, which reduces production costs and environmental impact. The biopolymer used in their film degrades through standard composting and decomposes within about a year if discarded in nature. The price of LAM'ON's product is competitive with high-quality plastic films.

### Customers:

LAM'ON already has established various B2B customers from various industries, mainly from the cosmetic and textile industries. The B2B customer receives an alternative green product at a low enough price and with the added value of causing less pollution, very smooth and easy since no special machinery upgrades are required. The end clients/customers receive the same quality they are used to. Now the company aims to grow in the European markets, and the product would give a competitive advantage to their customers, as the end user prefers companies that have green productions or initiatives.

### Price

The company' price is competitive, but is slightly over the average market prices. This makes it difficult to compete, as market for packaging is strongly price-oriented.

### Value Offering - Products and services

The company is offering the following products:

- Thermal laminating film LAM'ON in Soft Gloss;
- PACK'ON -Classic wrapping film for wrapping everything from napkins to fruits and vegetables;

- PACK'ON -Oxygen packaging film for everything to be protected from external influence or to vacuum;
- PACK'ON -Shrink shrinkable packaging film for multipacks, boxes that can remain closed during transport, or anything else the customers can think of;

## 3. 2. Process view of the case

**The Process view** describes requirements for business processes and business processes to the level that is relevant for a particular case. If it is a case that is process or workflow oriented, then the business process model is created in several levels and with more details. If it is a transaction platform that is event driven and does not have a clear process structure, the process view is poorer.

### 1. 2.1. Business process requirements

LAM'ON plans to start its main manufacturing activities, and in parallel with that, to establish and develop a new web platform, along with the provision of the necessary financial, human and technical resources.

#### Questions and Tasks:

1. Please explore which are the business functions and how company can support Digital Platform business model development?

### 2. 2.2. Business process model

#### Questions and Tasks:

1. Explore the basic business processes, data classes and application architecture proposals that would support them should be determined for the above functions (P-K matrix).
2. For the selected function, determine the processes of which it consists (decomposition)
3. Create a selected business process model (BPMN)

## 4. 3. Service view of the case

**The Service view** describes user requirements for services provided by the platform and its applications, the design of the services provided with the help of the platform, whose outlines are defined in the business view. Models and other specifications describe the structure of services, their users, the way they use services, user and system interaction scenarios, user experience (UX), service delivery system, etc.

#### Questions and Tasks:

1. Could you generate and suggest different strategies to transform Lam'On Business model from a product-dominant to service-oriented company?
2. How LAM'ON can benefit to adopt a Digital platform enterprise business model?

3. Who are the potential key stakeholders, end-users and relevant actors?

1. 3.1. User requirements for the platform

Questions and Tasks:

1. Please identify relevant users of the platform and their goals in the area of services, technology and business platform.
2. Develop **Persona, Value Proposition Canvas, Pains & Gains and Customer Journey Map.**
3. Propose analysis of the functional and non-functional requirements of the platform.

In order to develop and implement the digital platform for LAM'ON, a requirements specification and basic models should be made, covering among other things, a use case model (specification and diagrams) and a logical data model (entity-connection model).

2. 3.2. Design of services

Questions and Tasks:

1. Explore a portfolio of services that matches the description of the LAM'ON business goals and can be supported through the digital platform.
2. Propose revenue models and design relevant business processes which will help the company to expand its activities to cover different national/international markets?
3. Explore strategies for customer engagement, enhancing customer experience, knowledge sharing and gamification approaches.
4. How LAM'ON can use platform business models can support and facilitate circular economy way of doing business?

## 5. 4. Technical view of the case

The company installed production equipment in production facilities in Sofia, Bulgaria. They are now ready to start mass production process in 24/7 manner since September 2024. The equipment facilities are standardized with small modifications and other companies can use similar equipment with slight changes to produce biodegradable folio or packaging.

### 1. 4.1. Future Vision

Looking ahead, the three founders dream of transforming LAM'ON into a global giant, with an R&D centre in the Netherlands and manufacturing facilities in Asia and the USA. They envision their company playing a pivotal role in significantly reducing the vast amounts of plastic waste generated by industries such as printing. The founders of LAM'ON emphasize the importance of resilience and the right support network in achieving ambitious goals.

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