



LUMENTILE

BUSINESS PLAN

LUMENTILE

Project Manager: Prof. Guido Giuliani; Prof. Tullio Facchinetti

Università degli studi di Pavia - MIBE

UNIVENTURE Project Coordinator: Prof. Stefano Denicolai

Authors:

Enliang Qin

Karoline Ströhlein

Erika Mantegazza

Flavia Munelli

Ilaria Valagussa

Date: 13th December 2018

EXECUTIVE SUMMARY

LUMENTILE (Luminous Electronic Tile) is a technology-driven project with its focus on the luminous tile design and development. The idea of LUMENTILE originates from a disruptive innovation, which is the joint use of new functionalities (the luminous technology) for traditional materials (tiles). The outcome of this combination is a solution to existing needs (e.g. construction industry and design) and therefore can bring great value to the market. From September 2018 to December 2018, LUMENTILE participates in UniVenture, a project of University of Pavia, in order to gain deep insights of the market and design a comprehensive business plan.

Following the instructions from the LUMENTILE project team, the UniVenture team analysed two different scenarios (small and large scale). After the analysis and comparisons, there is strong evidence that the small scale is more promising than the large scale. According to the financial result for the first five years, the small scale is estimated to generate approximately 6.000.000 € for LUMENTILE, while the large scale will bring 19.000.000 euro to LUMENTILE. However, the small scale is more flexible since it allows LUMENTILE to make deep-dive analysis about the local market before expanding the business to a larger market. From the marketing point of view, LUMENTILE has the freedom to decide on the market and further develop the product and the technology.

In the small scale, there are some milestones that LUMENTILE needs to achieve in order to reach the final goal:

- get patents approved and ready to use
- have a commercial product ready for the market
- acquire the funding to start the commercial production
- have all parties ready for the commercial production
- bring products to the market
- keep and grow customers and become an ambidextrous company

The small scale generates the revenue by selling a complete project which includes not only the tiles but also the designing and planning of the project, the transportation and installation of the tiles. In the first to third operating year, LUMENTILE will focus on the Lombardy region. Starting from the fourth year, LUMENTILE will expand the business to whole Italy.

LUMENTILE will set a basic price of 800€/sqm in the pilot phase and 625€/sqm in the commercial sales, the final price for luminous tiles is open to negotiation between the seller and customers. The production is the biggest cost (442,90€/sqm). It is estimated that LUMENTILE will sell 1.500 projects in the first financial year. With the expansion of the business, the total cost in the fourth year will decline. Especially the production costs will decrease, namely to 325 €/sqm. In year five, LUMENTILE will reach 39.440 projects and this will bring 4.686.612€ profit. The business is scalable, because the costs, and therefore the price of the product, can be decreased when production is moved from manual manufacturing to mechanical manufacturing.