

Developing Entrepreneurial Competencies in Tourism Higher Education: A Design-Based Curriculum Innovation

Michal Lukáč, Ján Ganobčík, Stanislava Honzová and Peter Pisár

Institute of Management, University of Ss. Cyril and Methodius in Trnava, Slovakia

michal.lukac@ucm.sk

jan.ganobcik@ucm.sk

stanislava.honzova@ucm.sk

peter.pisar@ucm.sk

Abstract: The paper presents a design-based curriculum innovation framework developed for a bachelor's programme in Tourism and Hospitality Management at a public university in Slovakia. The innovation includes two newly introduced courses: Entrepreneurial Marketing and Branding in Tourism and Venture Ecosystem. The approach is based on project-based learning, real-world cases, and the use of digital tools. The study adopts a design-based conceptual approach to curriculum development and proposes a structured model for integrating entrepreneurial, digital, and innovation competencies. The paper also outlines implications for educators and policymakers. The paper represents the first phase of a broader research project, focusing on conceptual development, with empirical validation planned in subsequent stages.

Keywords: Entrepreneurship Education; Tourism; Venture Ecosystem; Branding; Innovation

1. Introduction

The tourism and hospitality sector has undergone significant transformation in recent years, driven by digitalisation, increasing competition, and changing customer behaviour. Technological progress, the development of online platforms, and a growing emphasis on customer experience have fundamentally reshaped how businesses operate in this sector (Buhalis and Law, 2008; Sigala, 2018). As a result, there is increasing demand for graduates who possess not only theoretical knowledge but also practical skills, entrepreneurial thinking, and the ability to adapt to dynamic market conditions.

Despite these developments, higher education in tourism often remains predominantly focused on the transmission of theoretical knowledge, with insufficient emphasis on the development of practical competencies (Hjalager, 2010). This misalignment creates a gap between educational outcomes and labour market needs, particularly in areas such as digital marketing, branding, customer engagement, and entrepreneurial problem-solving.

Contemporary approaches to entrepreneurship education emphasise a shift from transmissive teaching models to competency-based approaches grounded in active learning, experimentation, and real-world problem-solving (Fayolle and Gailly, 2008; Neck and Greene, 2011). In this context, the integration of project-based learning, digital tools, and collaboration with practice becomes essential.

The aim of this paper is to present a design-based approach to the innovation of a bachelor's study programme in Tourism and Hospitality Management at a Slovak public university, reflecting labour market needs and principles of smart specialisation. The paper focuses on the introduction of two new courses, Venture Ecosystem and Entrepreneurial Marketing and Branding in Tourism, and analyses their potential to support the development of entrepreneurial and digital competencies.

This paper contributes to the literature by proposing a structured design-based curriculum innovation model that integrates entrepreneurial, digital, and innovation competencies. Unlike existing studies that focus on isolated skills or general pedagogical approaches, the paper conceptualises curriculum design as a systemic process linking labour market needs, venture ecosystem logic, and experiential learning.

This study represents Phase 1 of a broader research project, focusing on conceptual development and theoretical grounding, while subsequent phases will address implementation and empirical validation.

2. Context and Background

Entrepreneurship education is increasingly shifting towards competency development and experiential learning (Fayolle and Gailly, 2008; Neck and Greene, 2011). In the context of tourism, this shift implies the ability to create value, build brands, and respond effectively to evolving customer needs.

At the same time, digitalisation is transforming marketing communication and customer relationship management (Chaffey and Ellis-Chadwick, 2019), requiring the integration of digital tools, branding, and entrepreneurial thinking into educational programmes. These developments highlight the need for curricula that go beyond theoretical instruction and actively develop practical and transferable competencies. Recent approaches to entrepreneurship education also distinguish between early-stage opportunity validation and the preparation of comprehensive business plans (Carvalho, 2025).

Despite these trends, the connection between higher education and real-world practice remains limited, reducing graduates' preparedness for entrepreneurial and innovation-driven environments. Moreover, existing research has paid relatively little attention to the structured design of curricula that systematically integrate entrepreneurial, digital, and innovation competencies, particularly in tourism education.

This gap underscores the need for a more systemic and design-oriented approach to curriculum innovation, which forms the basis of the model proposed in this paper.

3. Design-Based Conceptual Approach

The paper adopts a design-based conceptual approach to curriculum innovation, reflecting contemporary trends in entrepreneurship education that emphasise experimentation, iteration, and learning through practice (Ries, 2011; Blank, 2013). This approach is particularly suitable when the objective is not only to describe existing conditions but also to design, justify, and conceptually validate an educational solution responding to real-world needs.

The proposed model conceptualises curriculum design as a systemic process linking labour market requirements, innovation ecosystem logic, and experiential learning principles. It is grounded in an analysis of labour market needs, strategic documents related to smart specialisation (SK RIS3 2021+), and the specific requirements of the Tourism and Hospitality Management study programme.

The curriculum innovation is operationalised through the introduction of two courses: Entrepreneurial Marketing and Branding in Tourism and Venture Ecosystem. Both courses are designed to develop entrepreneurial, digital, analytical, and communication competencies. The learning process is structured around project-based learning, case studies, teamwork, iterative feedback, and the development of practical outputs such as marketing strategies, business models, value propositions, and investment pitches.

The approach builds on three complementary theoretical foundations: experiential learning theory (Kolb, 1984), which emphasises learning through action and reflection; entrepreneurship education theory (Neck and Greene, 2011), which highlights practice-based and competency-oriented learning; and innovation ecosystem perspectives, which frame entrepreneurship as embedded in a broader network of actors and institutions.

The study is positioned as the first phase of a broader research project. In line with design-based research methodology, this phase focuses on conceptualisation and model development, while subsequent phases will involve implementation, iterative refinement, and empirical validation in real educational settings.

The proposed curriculum innovation is summarised in Figure 1, which presents a structured framework linking external drivers, learning processes, and competency outcomes.

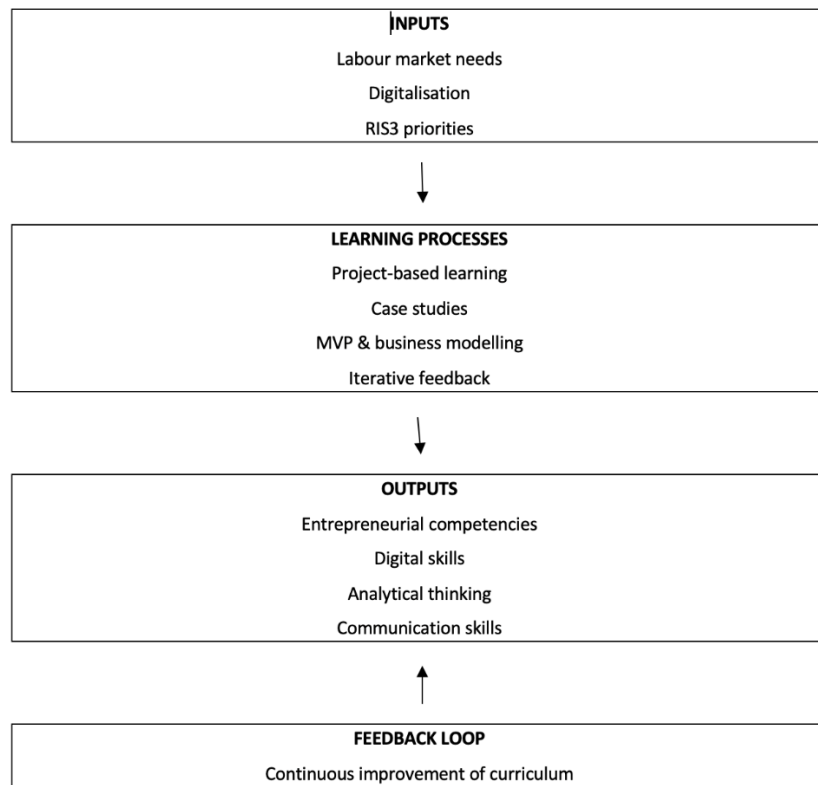


Figure 1: Design-based curriculum innovation framework linking external drivers, learning processes, and competency outcomes.

Source: Authors' research.

The model illustrates how external drivers are translated into structured learning processes, which in turn lead to the development of key competencies. The feedback loop reflects the iterative nature of curriculum design and continuous improvement. The framework reflects a systemic approach to curriculum design, ensuring alignment between educational objectives and labour market needs.

3.1 Evaluation Framework

To complement the design-based conceptual approach, the paper proposes a preliminary evaluation framework for assessing the effectiveness of the curriculum innovation.

The framework focuses on three dimensions:

- development of entrepreneurial competencies,
- acquisition of digital and marketing skills,
- student engagement and applied learning outcomes.

Entrepreneurial competencies can be assessed through students' ability to identify opportunities, develop business models, and present investment pitches. Digital competencies relate to the use of marketing tools such as social media, SEO, and CRM systems. Engagement can be measured through participation in project-based activities and the quality of outputs.

The framework provides a basis for future empirical validation and enables systematic evaluation of curriculum innovation in tourism education.

The study is positioned as the first phase of a multi-stage research design. In line with design-based research methodology, the initial phase focuses on conceptualisation and model development, followed by iterative implementation and empirical validation in real educational settings.

4. Curriculum Innovation

The introduction of new courses responds to the need to align the curriculum with labour market requirements, employer expectations, and developments in tourism, digital marketing, innovation, and entrepreneurship. The course Entrepreneurial Marketing and Branding in Tourism strengthens competencies in marketing strategy, customer engagement, branding, and digital communication. The course Venture Ecosystem reflects the growing importance of startup environments, entrepreneurial thinking, and opportunity recognition. Both courses are also linked to a national project aimed at supporting students' entrepreneurial innovation potential. Project-based learning and real-world cases are recognised in the literature as key tools for developing entrepreneurial competencies (Kolb, 1984; Pittaway and Cope, 2007).

4.1 Venture Ecosystem

This course focuses on developing entrepreneurial thinking and understanding the functioning of entrepreneurial ecosystems. It aims to equip students with the ability to identify opportunities, design business models, and test them in simulated or real environments.

Course content includes:

- analysis of the business environment,
- generation of entrepreneurial ideas,
- development of a value proposition,
- fundamentals of the startup ecosystem,
- application of the MVP concept, opportunity validation, and iterative development before preparing a complete business plan.

Learning outcomes are structured in terms of knowledge, skills, and competencies. Upon completion of the course, students understand the functioning of the venture ecosystem and the roles of startups, investors, incubators, accelerators, and public institutions. They can identify entrepreneurial opportunities, assess their market and innovation potential, design a business model, and prepare a basic investment pitch. At the same time, they develop analytical, systemic, and communication competencies necessary for operating in a dynamic and uncertain entrepreneurial environment.

The course builds foundational courses in economics, management, and marketing, extending them towards practical application in the context of innovative entrepreneurship and startup ecosystems.

4.2 Entrepreneurial Marketing and Branding in Tourism

This course focuses on developing competencies in marketing strategy, brand building, and digital communication. It responds to the need for a systematic development of skills related to customer engagement and customer experience management.

Course content includes:

- brand identity development,
- definition of the value proposition,
- brand positioning,
- digital marketing (SEO, content marketing, social media),
- email marketing and CRM tools,
- customer journey management.

4.3 Teaching Methods

The proposed teaching model is based on active and participatory learning approaches that support the development of practical competencies (Pittaway and Cope, 2007; Neck et al., 2021).

Key methods include:

- project-based learning (development of real solutions),
- case studies,
- teamwork,
- iterative feedback,
- presentation and defence of solutions.

The teaching methods are grounded in active learning, encouraging student engagement in solving real or simulated entrepreneurial situations. Project-based learning enables students to progressively move through the entire problem-solving process from problem identification, through the design of a value proposition and business model, to the presentation and defence of their solutions. Case studies enhance the ability to apply theoretical knowledge to specific situations in tourism, while teamwork fosters communication, collaboration, and role distribution. Students are encouraged to validate business ideas through iterative testing and customer feedback before developing comprehensive business plans.

Iterative feedback is a crucial element of the teaching process, as it allows students to refine their solutions based on continuous evaluation, instructor feedback, and group discussion. This approach is consistent with the principles of experiential learning and entrepreneurship education, which emphasise learning through action, experimentation, and reflection.

Table 1:

Course	Entrepreneurial Competencies	Digital Skills	Key Outputs
Venture Ecosystem	Opportunity recognition, business modelling	Basic analytics	Pitch, business model
Marketing & Branding	Strategy, positioning	SEO, social media, CRM	Marketing strategy

Source: Own research.

5. Expected Contributions and Insights

The proposed curriculum innovation is expected to bring a significant shift in the development of students' entrepreneurial competencies. Based on the analysis of current trends in education and business, the implementation of the proposed courses and teaching methods is anticipated to strengthen students' ability to apply theoretical knowledge in practical contexts.

Project-based learning and the use of real-world cases are expected to enhance students' understanding of entrepreneurial processes and develop their ability to solve complex problems. At the same time, an increase in student engagement and motivation is anticipated, which is consistent with findings on the effectiveness of experiential learning (Kolb, 1984; Neck and Greene, 2011).

The proposed approach is also expected to support the development of digital competencies, particularly in marketing communication and customer engagement. The integration of tools such as social media, content marketing, and CRM systems will better prepare students for labour market requirements.

From a programme design perspective, a key insight is the importance of linking theoretical knowledge with practical application through systematically designed learning activities. Feedback, an iterative approach to problem-solving, and flexibility in teaching play a crucial role in this process.

The implementation of the redesigned courses in practice is expected to improve students' ability to apply knowledge, increase their engagement, and strengthen their understanding of entrepreneurial processes.

As the project is currently in its initial phase, the proposed curriculum innovation has not yet been empirically implemented and evaluated. Therefore, the paper focuses on the conceptual design and theoretical justification of the model. At the same time, a structured evaluation framework is being developed to enable future assessment of the curriculum's effectiveness in terms of entrepreneurial competencies, digital skills, and student engagement. Empirical validation of the proposed model will be conducted in subsequent phases of the project using quantitative and mixed-method approaches.

This staged approach reflects the logic of design-based research, where conceptual development precedes iterative testing and refinement.

6. Implications

The findings highlight the need for systematic innovation of study programmes in line with labour market requirements and the principles of smart specialisation. The proposed approach is consistent with the priorities of SK RIS3 2021+, which emphasise the importance of developing innovation and entrepreneurial competencies.

From an educational policy perspective, it is essential to:

- strengthen the link between education and practice,
- develop digital and entrepreneurial skills,
- implement flexible and innovative teaching methods (European Commission, 2020).

The contribution of the paper lies in proposing a structured curriculum innovation model that integrates entrepreneurship, digital marketing, and venture ecosystem thinking in tourism education.

7. Conclusions

This paper presented a design-based approach to curriculum innovation in tourism and hospitality education. The proposed model responds to the growing need to develop entrepreneurial, digital, and marketing competencies among students, while effectively linking theoretical knowledge with practical application. The introduction of the courses Venture Ecosystem and Entrepreneurial Marketing and Branding in Tourism creates a structured framework for developing key competencies required in a dynamic and innovation-driven tourism sector.

The main contribution of the paper lies in conceptualising curriculum design as a systemic process that integrates labour market needs, venture ecosystem logic, and experiential learning principles. The proposed framework offers a practical and transferable model for aligning higher education outcomes with evolving industry requirements.

This study represents the first phase of a broader research project and focuses on the conceptual development and theoretical grounding of the proposed model. In line with design-based research methodology, subsequent phases will involve implementation, iterative refinement, and empirical validation in real educational settings.

The study is limited by its conceptual and design-based nature, without empirical validation at this stage. Future research will focus on testing the proposed model and evaluating its impact on student competencies, learning outcomes, and employability.

Acknowledgments

This work was supported by the national project Support for the Entrepreneurial and Innovation Potential of Students (Project No. 401101C937). The project is co-funded by the Ministry of Education, Science, Research and Sport of the Slovak Republic and the European Regional Development Fund.

Ethics Declaration

This study was conducted in accordance with the ethical guidelines of the authors' institution. Ethical approval was obtained prior to data collection. All participants provided informed consent before participation.

AI Declaration

No AI tools were used in the preparation of this paper.

References

- Blank, S. (2013) *The Four Steps to the Epiphany*, 2nd edn., K&S Ranch, Pescadero.
- Buhalis, D. and Law, R. (2008) "Progress in information technology and tourism management: 20 years on and 10 years after the Internet", *Tourism Management*, Vol. 29, No. 4, pp. 609–623. doi:10.1016/j.tourman.2008.01.005.
- Carvalho, J.M.S. (2025) *Homo Sapiens Entrepreneurensis: The Base Business Creation Model*. Generis Publishing.
- Chaffey, D. and Ellis-Chadwick, F. (2019) *Digital Marketing*, 7th edn., Pearson, Harlow.
- European Commission (2020) *Digital Education Action Plan 2021–2027*, European Commission, Brussels.
- Fayolle, A. and Gailly, B. (2008) "From craft to science: Teaching models and learning processes in entrepreneurship education", *Journal of European Industrial Training*, Vol. 32, No. 7, pp. 569–593. doi:10.1108/03090590810899838.
- Hjalager, A.-M. (2010) "A review of innovation research in tourism", *Tourism Management*, Vol. 31, No. 1, pp. 1–12. doi:10.1016/j.tourman.2009.08.012.
- Kolb, D.A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*, Prentice Hall, Englewood Cliffs.
- Neck, H.M., Greene, P.G. and Brush, C.G. (2021) *Teaching Entrepreneurship: A Practice-Based Approach*, 2nd edn., Edward Elgar, Cheltenham.
- Neck, H.M. and Greene, P.G. (2011) "Entrepreneurship education: Known worlds and new frontiers", *Journal of Small Business Management*, Vol. 49, No. 1, pp. 55–70. doi:10.1111/j.1540-627X.2010.00314.x.

- OECD (2021) *Entrepreneurship Education in the Digital Age*, OECD Publishing, Paris.
- Pittaway, L. and Cope, J. (2007) "Entrepreneurship education: A systematic review of the evidence", *International Small Business Journal*, Vol. 25, No. 5, pp. 479–510. doi:10.1177/0266242607080656.
- Ries, E. (2011) *The Lean Startup*, Crown Business, New York.
- Sigala, M. (2018) "New technologies in tourism: From multi-disciplinary to anti-disciplinary advances and trajectories", *Tourism Management Perspectives*, Vol. 25, pp. 151–155. doi:10.1016/j.tmp.2017.12.003.