Ref. Ares(2025)3502037 - 30/04/2025

D2.3 Seminars with industry stakeholders

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Building BIM digital competences

101183239 – BIM4WB – ERASMUS- EDU-2024-CB-VET

PROJECT INFO

Project title	Building BIM digital competences
Project acronym	BIM4WB
Project reference number	101183239
Funding scheme	Lump sum grant - ERASMUS- EDU-2024-CB-VET
Web address	https://bim4wb-eu.org/
Coordination institution	IES RIBEIRA DO LOURO
Project duration	36 months

The project aims to design and develop a Building Information Modeling (BIM) curriculum and training materials, focusing on innovating teaching and learning through learner-centered and real problem-based approaches. It includes the training of teaching staff to acquire new practical skills and the establishment of the BIM4WB platform, a user-friendly online resource for sharing knowledge, resources, and best practices related to BIM. The project targets enrolling at least 40 students/professionals in the training course and involves at least 15 teaching staff in personal and professional development skills training. It seeks to align academic offerings with the labor market to enhance student employability, with curriculum content reviewed by stakeholders to ensure it meets industry standards. Bim4WB is co-funded by the Erasmus+ Programme of the European Union during the period January 2025 – December 2027

PROJECT PARTNERS:

1. **IES RIBEIRA DO LOURO**
2. **BALIKESIR UNIVERSITY**
3. **EUROPEAN UNIVERSITY OF TIRANA**
4. **QENDRA PROTIK**
5. **UNIVERSUM INTERNATIONAL COLLEGE**
6. **AGENCY FOR VOCATIONAL EDUCATION AND TRAINING AND ADULT EDUCATION**

DOCUMENT CONTROL SHEET

Work package	**WP2**
Ref. no and title of activity	D2.3 Seminars with industry stakeholders
Title of deliverable	Seminars with industry stakeholders
Lead institution	UNI-Universum International College
Author(s)	Albiona Sopi
Document status	Final document
Document version and date	25/04/2025

DELIVERABLE EXECUTIVE SUMMARY

This report is created as a continuation of the research with the industry stakeholders in Kosovo and Albania. The deliverable included conducting two online seminars regarding the BIM sector needs in both countries. This was accomplished by collecting data through online seminars addressed to stakeholders to understand existing skills and knowledge gaps in Kosovo and Albania.

VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Revision description	Revision description
v.01	18.04.2025	First draft	UNI
v.02	25.04.2025	Second draft	UNI
v.03	26.04.2025	Final	UNI

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1. Executive Summary

This research is the second component of the overall research being implemented as part of the WP2-Status Quo Analysis. As the first part (survey) has already been conducted and the findings have been received, the second part consists of the seminars with the industry stakeholders, as a continuation of the research. The focus of the seminars stands on identifying skill gaps, emerging trends, and opportunities for collaboration between academia and industry in Albania and Kosovo.

The purpose of organizing the seminars is to facilitate discussions among industry professionals, educators, and stakeholders, focusing on the research findings. These discussions are aimed at validating the research outcomes and ensuring alignment with industry needs, as well as gathering direct feedback from the industry.

Two seminars were organized per country, one in Kosovo and one in Albania in April 2025.

Participants shared their insights on the current state of BIM knowledge and use in their organizations, identified its challenges, and discussed potential strategies to overcome existing obstacles. The feedback collected during this session provided valuable input that will contribute to the project's next phases and deliverables.

2. METHODOLOGY

Both seminars with industry stakeholders in Albania and Kosovo were conducted online. The seminar in Kosovo was held on April 17th, The session in Kosovo took place on the Zoom platform and lasted around an hour and a half. The participants' consent was obtained verbally at the outset of the seminar, and it was mentioned that participation in the seminar is voluntary, and the data gathered will be used solely for research reasons.

The online seminar was organized with stakeholders from Albania, on April 22nd, 2025, bringing together key actors from academia, private sector, and public administration. Participants consent was taken in a written form when invitations were sent.

2.1 Profile of the participants

Regarding the number and type of participants attending the online seminar in Kosovo, the attendees were 13 in total and they belonged to different profiles which were also targets of the seminar, starting from the industry stakeholders, which included businesses such as representatives of:

- 2 representatives of private architectural offices (Zero Line)
- 4 private architects,
- 4 teachers of VET schools (Qendra te Kompetences)
- 1 director of VET school (“Shtjefen Gjeqovi”)
- 1 representative from the local authority
- 1 Project manager, UNI-Universum International College

Profile of the seminar participants from Albania:

- Project Manager, European University of Tirana
- Design Firm Founder, EDEN Studio
- Civil Structural Engineer, Freelance
- Executive Director, Albanian Commercial Union
- Director, Shkolla Industriale, Vlorë
- 4 Project Managers, Protik

3. KEY DISCUSSION POINTS

3.1 Kosovo

Seminar discussion

The online seminar commenced with a brief presentation of the BIM4WB project, outlining its objectives and overall purpose. The presentation provided an overview of Building Information Modelling (BIM), highlighting its benefits and effectiveness.

It also featured a summary of the survey results conducted as part of the project. The session concluded with an introduction to the key discussion questions that would guide the seminar.

Current knowledge and use of BIM in Kosovo

From the seminar it was highlighted that there is growing awareness for BIM but low maturity in using it, this being specifically in public institutions and VET schools. Quite mentioned was the cultural traditional use in all the field of construction. For this small number of private companies seemed to have more experience with BIM. Most of the participant stated that BIM software's are very expensive and there is insufficient state support, which leads to the lack of knowledge and use of BIM.

"BIM has already started to be used in Kosovo some areas of architectural and engineering design that are going to be used in the next few years, including architecture".

"Our knowledge of BIM is basic, meaning that it is more than welcomed for us to have better knowledge and to apply it".

Regarding the existing regulations there seems to be absence of centralized information:

"Before, we had some problems with installation. We need a bit of help to understand how things stand—whether there's a license or not, and how this all works."

Challenges and barriers to BIM adoption

The reflection on challenges and barriers comes right at the financial part, following with outdated tech and lack of institutional support. While private companies are experimenting with digital tools, the public sector seems to remain with outdated practices. The barriers to BIM adaptation come not only from access to training but also from traditional workflow.

"It is still the traditional culture of design, because people are still using these digital platforms that were introduced at the beginning of the 2000s, they don't have any doubt about the old methods, and they don't want to incorporate them in the digitalization that is happening at the moment"

"There is a lack of public subsidies or packages for professionals and students, and this is something that people should be guided by the public sector, because outside of Kosovo there is a public subsidy for these packages, whereas in Kosovo there is no such thing."

"A license for Autodesk Revit can cost over €2,000 per year. That's unaffordable for most small offices."

Training experiences and needs

The emphasis on this part is huge on the need for structured trainings. As mentioned in the challenges that companies and institutions face, there is critical need for training programs that are accessible. VET teachers and industry stakeholders reveal that they only had self-taught trainings and received licenses that were self-paid.

"The main challenge of BIM is the lack of structured training opportunities, especially from the public sector"

""Most people do not have access to proper training for using these software tools. So now, we're in a situation where whoever can manage to offer even a little bit of support—particularly for vocational school students—is doing so."

Not only the private companies, but the VET sector is also in need for structured trainings. This demonstrates a systemic shortage in formal training opportunities for BIM software. Without regular or structured support, particularly in vocational education, the duty frequently falls on people or organizations to devise limited solutions.

Integration of BIM in education and VET curricula

Regarding the integration of BIM in VET schools, according to the seminar, it was clear that BIM is mostly absent, meanwhile the most mentioned tool was Autocad, which is integrated in VET schools to some level. Teachers of VET schools reveal that students are very motivated to learn and have no problem in using programs but the conditions are limited.

"BIM is not integrated into VET curricula. The space is there, but it depends on the teacher's experience."

"It is worrying to have only one projector and one computer to explain the students that reaches to a minimal result"

"Schools need regeneration as they are pretty left behind"

All of these demonstrate the necessity for VET schools to be updated and equipped with new technology in order to prepare their graduates and students to use the skills they have acquired in the professional life.

Educator support and professional development

The highlight stands on the need for upskilling the educators and making BIM more teachable. Coming back to the financial barriers, the educators mentioned that the licenses are very pricey, and there is need for alternatives. Teachers face barriers in many aspects of their work which mostly are financial. They seem keen to develop their skills but lack the resources.

As there are no legal frameworks to direct them it falls into the teachers will and experience to teach and to adapt the programs used in classes. VET educators are having to install and manage software themselves.

"we do not have legal documents that guide us in the use of these programs, this has been done on a voluntary basis."

"Here it depends on the will of these teachers and it depends on the experience they have in using these programs"

Cross-sector collaboration using BIM

The need for structured interaction, in schools and in professional life as well is quite evident. Until now it was mentioned that there is not good coordination with other professionals in the field. This affects the whole process of a project:

"Civil engineering and architecture teams are not well coordinated. Some use Revit, others ArchiCAD, which creates problems."

"Until we have legal frameworks, collaboration is mostly voluntary and depends on individual initiative."

"There is cooperation between schools and companies for internships, but not for software integration."

Emerging skills and the future of BIM

Participants identified 3D/4D modeling, file coordination, and communication as essential skills. As mentioned by the participants of the seminar, students should first have a base on what is the space, give them the knowledge and then the tools.

"Perception of space and drawing culture are still weak in early architecture students."

"The public institutions are still not using BEM as a standard for new projects. Therefore, I think that public institutions should also look at the use of BIM as a licensed tool"

The emphasis stands on the growing need for advanced BIM skills including those of technical and design thinking related.

At the city level, we have managed to establish a regulation whereby, starting from January 1st of this year, all project submissions in Pristina must be exclusively in electronic format. Starting from January 1st of next year, the BIM model will also be a mandatory part of the submission process."

The statement demonstrates Kosovo's encouraging institutional transition to digitalization. If this momentum is maintained through investment, training, and policy enforcement, Kosovo

seems to be headed in the right direction toward digitalization in all the construction sector and towards BIM maturity. The discussion was closed with hopes for the better future in the architectural sector and specifically on BIM.

3.2 Albania

Seminar discussion

The online seminar started with a presentation on BIM (Building Information Modeling), by introducing it to the participants as the foundation of digital transformation in the architecture, engineering, and construction (AEC) industry. This holistic process that is used for a built asset, provides the creation and management of information by integrating structured, multi-disciplinary data based on an intelligent model and enabled by a cloud platform, to produce a digital representation of an asset across its lifecycle, from planning and design to construction and operations (2025, Autodesk. Available at: https://www.autodesk.com).

The presentation continued by listing the software's that BIM provides for professionals such as Autodesc Docs, Revit, AutoCAD, Autodesk Forma, Navisworks Manage, Insight, 3ds Max, ReCap Pro. A video was also presented to the participants, visualizing the power of BIM and its use in the industry.

After an overview of what is BIM and its software's, the presentation continued with a description of BIW4WB project, by describing main objectives, partners and project's outcomes. Furthermore, the seminar continued by presenting to the participants the questions that was divided in four main chapters based on the knowledge area: Knowledge and Expertise, Challenges and Trainings, VET Sector and Evolving Skills; followed by the questioned detailed below.

Current knowledge and use of BIM in Albania

The participants answered that the application of BIM is not mandatory by law in Albania, whether at the local or central level. As a result, private companies do not have the knowledge nor the obligation to use BIM in their work when drafting a project. The only part that they use are software's when drafting their projects such as AutoCAD or Revit. If there is knowledge on BIM in their companies, this is due to their personal will and self-taught experience.

Other participant answered that

"based on the current legislation construction and its regulations, in the field of planning, architecture and energy efficiency, BIM is not elaborated, and there is no obligation to use any of the software that it offers. Albania lacks the legal framework that defines the use of the programs and software when drafting a project in the field of architecture and engineering"

What the last participant emphasized is with the recent legal changes in the field of public procurement it's a chapter dedicated to the green energy, by favoring the public procurement that are made under this area, following the directive of United Nation in 2014 for the application of BIM, the main aim was to include this part in public procurement law, by rising transparency and efficiency. Starting by this directive, the participant suggests that there should be at list a minimum law obligation for the use of software's in at least one area, such as construction, energy efficiency or buildings safety. She added that in large companies, there are professionals that bring their knowledge on BIM by their personal training outside the country. Even large projects, such as infrastructure ones financed by the European Union, World Bank or EBRD do now have requests for companies in Albania to use BIM or its software.

The presenter continued the discussion by mentioning that even when a private architecture / engineering studio applies with a project for the construction of a building, there is no law or regulation that asks that the project should be drafted in a certain software, because the e-permits system only accept online application in .pdf format. The participant approved it, by adding that

"Albania has only laws and regulations regarding the development and building conditions and costs that a company should comply with, that are only based on papers and other supporting documents"

Other participant mentioned that in their universities the students use AutoCAD 2d, 3D and REVIT, to draft and model their projects. REVIT is part of their curricula since three years ago and it is added because there is a growing need in the market for professionals in the field of architecture and engineering that know how to use it.

Challenges and barriers to BIM adoption and Training experiences and needs

Participant representing a VET institution (Industriale Vlore) mentioned that

"there is no construction department in their institution and he had no knowledge on BIM, that is why he could not give any feedback"

Other participant mentioned that BIM is something new for Albania, and there may be space for integration in law and private sector. For example, foreign studios with branches in Albania require it for their internal staff, according to the regulations of their home countries that it is a legal obligation. In Albania, it is still not a requirement. Private studios, if they are interested, use BIM in their work to reduce costs, improve their projects, and reduce project time span. The participant states that

"if rules are not set from the beginning by the government, studios cannot take the initiative to incorporate BIM in their projects. Most studios in Albania are used to draft their project with AutoCAD and recently Revit and the switch to BIM it is not easy taking into consideration the costs and time provided to do so"

The government should identify the market need and the profits that BIM may bring to private companies and universities and then the latter can follow by incorporating it to their staff trainings and curricula.

Integration of BIM in education and VET curricula

This question is not developed further due to the fact that the representative from the VET Sector (Industriale Vlore) has no knowledge on BIM.

Emerging skills and the future of BIM

The participants see the BIM evolvement in Albanian legislation as like the case of energy efficiency law, that took a lot of time and effort to be drafted and implemented by both public and private sector. This is followed with an increase in the standard of projection of building and infrastructure and building environment. As such, BIM is a process that needs to be initiated by the government and followed by the private sector, market and universities. Maybe in the future there may be an institution dedicated to BIM, that will require trained staff, the involvement of public institutions and trainings.

The participant closed the discussion by stating that the organization that she works together with Protik has the potential to take an initiative by making a pilot project to a private company that is affirmed in the market in the field of architecture and engineering, together with the students and the companies that are certified in the use of BIM software's. She proposed to make a survey to see these needs and then lows can follow up to set the legal framework in place.

4. RESEARCH FINDINGS

According to the seminar findings, the participants feedback aligned with the research findings from the survey. Specific suggestions or confirmations were made by the stakeholders, mostly relying on the state support which directly influences the work of all the stakeholders.

The knowledge of BIM (Building Information Modeling) in Albania and Kosovo seems to be at an early stage of development, with a general understanding of its potential but limited practical application. While some individuals, especially in larger firms or academia, are familiar with BIM, its use has not yet been fully integrated into daily project workflows. In fact, few private studios are actively using BIM in their projects.

The regulatory landscape for BIM is still underdeveloped in both Albania and Kosovo. BIM is not yet a mandatory requirement in any legal or regulatory framework, either at the local or central government level, and our participants confirmed this is the case. This lack of legal foundation is evident, as there are no established laws or rules guiding the use of BIM in architectural or engineering projects, energy efficiency, urban planning, or construction in general. Despite this, in Albania there has been some movement in the right direction, particularly with the introduction of EU-driven initiatives like green laws, which advocate for more efficient and transparent public procurement processes, where BIM could play a role. However, in practice, very large projects funded by international bodies like the World Bank or the EU have not explicitly mandated the use of BIM in the context of Albania. The focus in both countries remains on traditional construction conditions and written documentation during

the permitting process, without any requirement for digital submissions in a specific format (e.g., BIM files).

The lack of trainings to use BIM is one significant barrier to its adoption. Most of the organizations/ companies in Kosovo and Albania do not offer training in the BIM sector, but there is a growing demand for it. Most of the professionals are either self-learning or relying on private/company-sponsored training. In Albania, large infrastructure projects may involve engineers trained abroad who bring their personal knowledge of BIM, but the general industry remains largely unstructured in terms of technological integration.

The educational sector is somehow catching up, usually in the application if BIM software's, with universities beginning to incorporate Revit into their curricula. Still, the transition to a BIM-driven environment in both education and practice is slow and dependent on market demand and international influence. The VET sector seems to be behind in steps with BIM and needs special attention with the teachers and schools facing multiple challenges. Cross-collaboration is also seen as very valuable from professionals and VET teachers. But as for now, due to usage of different software's there seems to be a hurdle to the overall work which also calls for regulations.

Factors influencing the use of BIM in relation to the existing legal gap

The choice to use BIM in Albania and Kosovo is influenced by a variety of factors, and yes, the legal gap plays a major role in its limited adoption. At its core, BIM is recognized as a valuable and forward-looking tool that can significantly improve project efficiency, reduce costs, and facilitate better coordination across disciplines—architecture, structural, mechanical, and electrical. However, currently there is no centralized push—either from municipalities or national authorities—to require BIM models or digital project submissions. As a result, most design and construction projects are still handled traditionally which limits the scope and incentive for studios and professionals to invest the time and resources into fully integrating BIM into their workflows.

Without regulation, the initiative to implement BIM falls on individual studios or professionals, which creates inconsistency and slows down widespread adoption. The same happens with VET schools, it all depends on the will and self-preparation of the teachers.

As mentioned, some momentum is being driven by external factors—particularly foreign firms operating in Albania. These firms often adhere to the BIM regulations of their home countries (such as in the EU), and thus require BIM implementation even when operating locally. This cross-border influence creates movement of BIM use, usually where there's international collaboration, funding, or export of design services.

There is also a cultural and educational challenge: many professionals in Albania and Kosovo have been using AutoCAD for years and are very familiar with it, which makes them hesitant to switch to something new. While BIM software like Revit offers benefits, such as automatic updates across all views, better cost estimation, and more accurate modeling, learning and getting used to it takes time and effort. This can feel overwhelming, especially since there is no clear legal or market pressure to make the change.

Ultimately, until Albania and Kosovo introduce regulations that demand BIM formats, its use will continue to depend on private initiative, foreign influence, and individual training efforts—rather than being a standardized industry norm.

5. CONCLUSIONS

This report is a complementary side of the research done through the survey regarding BIM implementation in Kosovo and Albania. The report highlights different areas of BIM: knowledge and expertise, challenges and training needed, VET sector, cross-collaboration and future developments.

The adoption of Building Information Modeling (BIM) in Albania and Kosovo is still in its early stages, primarily hindered by the lack of a legal framework or regulatory requirements. While BIM offers significant advantages in terms of efficiency, cost reduction, and improved project coordination, its implementation remains largely voluntary. Currently, the use of BIM is mostly driven by the needs of foreign studios with branches in Albania, which adhere to BIM standards required in their home countries. In Kosovo, BIM is used primarily by private firms.

Without clear regulations or incentives, there is a fragmented approach, where only some projects, particularly those involving international collaborations, use BIM tools. In large infrastructure projects, BIM is sometimes used voluntarily when requested by clients, but there is no policy suggesting its mandatory use. Nonetheless, adopting BIM tools is limited due to financial barriers, high costs of licensed software for schools, small firms and businesses. Many professionals in the region have become accustomed to traditional project drafting methods and are resistant in adopting new technologies. This highlights the need for targeted training programs and change management strategies to ease the transition to BIM.

In the VET sector, updates on the curricula are urgently needed. BIM is not formally integrated and the use of all programs depends on the initiative of individual teachers. These teachers are limited in the support and equipment, which due to not having institutional assistance limits the depth of BIM instruction they could provide. However, there are some emerging opportunities for BIM's integration through higher education. Universities in Albania and Kosovo are beginning to incorporate BIM software like Revit into their curricula, which could play a pivotal role in shaping the future of the industry. There is motivation and optimism to work toward the new developments and even in the evolution of BIM, but in need of coordinated strategy for education providers, students and industry.

In conclusion, while BIM offers great potential for the Albanian and Kosovar construction industry, its growth is currently stunted by a lack of legal support, industry-wide coordination, and a reliance on traditional tools. The key to unlocking its full potential lies in both regulatory action and educational advancements that equip the next generation of professionals with the skills needed to thrive in a BIM-driven world.

6. RECOMMENDATIONS

These circumstances emphasize the critical need for regulations and reforms, focused training initiatives, particularly within governmental institutions, to enable digital transformation in the construction industry. Main recommendations include:

- Introduce regulations that require BIM for large or public projects to create consistency and encourage widespread adoption.
- Implement a formal BIM curriculum to equip future professionals with the necessary skills for modern construction practices.
- Organize workshops and seminars to demonstrate the long-term benefits of BIM, such as cost savings and efficiency improvements.
- Promote collaboration among architects, engineers, contractors, and municipalities to ensure a unified approach to BIM adoption across the industry.

7. APPENDICES

7.1 Appendix 1

Seminar questions:

Knowledge and expertise

1. What is your current level of knowledge about BIM-Building Information Modelling, its application and existing regulations in your country?
2. Are you currently using BIM in your company/organization? If yes,
    - Are you part of a private, public or VET organization?
    - Which BIM tools/software are you using in your work? (e.g., Revit, ArchiCAD, Navisworks)
    - How often is BIM used in your projects (design, construction, or FM phases)?

Challenges and Trainings

3. In your opinion, what factors influence whether companies/organizations choose to adopt BIM and how can we encourage companies/organizations/institutions that have not yet adopted BIM to begin the transition?
4. What specific challenges does your organization—or the wider industry—face in integrating BIM into workflows and how much is this linked to gaps in education and professional training?
5. Have you or your colleagues participated in any formal BIM training? What was the format, and how effective was it? (online, in-person, workshops)?

VET Sector

6. Can you provide an overview of how BIM is currently integrated into VET and university curricula in Albania/Kosovo, and to what extent are graduates able to apply this knowledge effectively in their professional practice?
7. What challenges do VET teachers face when teaching BIM-related skills and what kind of training or support would help integrate BIM more effectively into vocational education and make educators more prepared in delivering BIM?
8. What do you think about the potential for interdisciplinary collaboration using BIM in vocational education (e.g., architecture, civil engineering, mechanical engineering, etc.)?
9. How can VET institutions better collaborate with industry to ensure BIM training aligns with workforce needs and with legal frameworks of each country?

Skills evolving

10. What are the most essential technical and soft skills professionals need to work effectively with BIM in your organization? (e.g., 3D modeling, 4D scheduling, 5D cost estimation, collaboration)
11. How do you see BIM evolving over the next five years, and what steps should be taken to ensure its adoption benefits professionals, companies, and educators?