Workshop 2: 4th and 5th of February, 2024	ورشة العمل الثانية: الرابع والخامس من فبراير، ٢٠٢٤
WORKSHOP 2. Day 1 Business Analysis in Construction Management	ورشة العمل (2). تحليل الأعمال من خلال إدارة المشروعات

Instructor	Mr. Hazem Ibrahim	حازم ابراهيم	المحاضر
Workshop Title	Business Analysis in Construction Management	تحليل الاعمال في إدارة الانشاءات	عنوان الورشة
Workshop Content & Objectives	1. Introduction to Business Analysis in 2. The Construction Industry Landscape 3. Business Analysis Framework for Construction Projects 4. Identifying and Engaging Stakeholders 5. Eliciting and Documenting Requirements 6. Analyzing and Prioritizing Requirements 7. Business Case Development for Construction Projects 8. Interactive Workshop. Developing a Business Case 9. Q&A and Discussion	١. مقدمة لتحليل الأعمال في إدارة الإنشاءات المفاهيم الأساسية. المعنيين، والمتطلبات، والقيمة ٢. صناعة البناء والتشييد ٣. إطار تحليل الأعمال لمشاريع البناء ٤. تحديد وإشراك المعنيين ٥. استنباط وتوثيق المتطلبات ٦. تحليل المتطلبات وتحديد أولوياتها ٧. تطوير حالة الأعمال لمشاريع البناء إنشاء حالة عمل لمشاريع البناء ٨. ورشة عمل تفاعلية. تطوير حالة العمل ٩. سؤال وجواب والمناقشة	محتوي الورشة
Workshop Materials and Resources	• Presentation slides • Handouts and reference materials	• شرائح العرض • ملخصات ومواد مرجعية	موارد الورشة التعليمية
Who Should Attend	1. **Construction Project Managers.** 2. **Construction Engineers.** 3. **Architects.** 4. **Contract Managers.** 5. **Cost Estimators.** 6. **Business Analysts** 7. **Owners and Clients.** 8. **Quality Assurance and Compliance Professionals.** 9. **IT Professionals.**	١. **مديري مشاريع البناء.** ٢. **مهندسو البناء.** ٣. **المهندسين المعماريين.** ٤. **مديري العقود.** ٥. **مقدر التكلفة.** ٦. **محللو الأعمال** ٧. **الملاك والعملاء.** ٨. **متخصصو ضمان الجودة والامتثال.** ٩. **متخصصو تكنولوجيا المعلومات.**	علي من يجب الحضور
Workshop Language	Arabic and English	عربي وانجليزي	اللغة المستخدمة بالشرح
Lecturer's Bio	Mr. Hazem Ibrahim, a 25-year veteran in IT, Business Analysis, and IT Project Management, holding esteemed certifications like PMP, PMI-PBA, PMI-ACP, CBAP, ICAgile, and IADT. His experience spans classic and modern technologies, including PowerBuilder, Java, Python, and R. With a track record in both public and private sectors, Mr. Hazem excels at Agile leadership, requirements analysis, and training. As a Distinguished Toastmaster (DTM), he merges technical expertise with exceptional communication skills. In this workshop, participants can expect transformative, interactive learning, guided by Mr. Hazem Ibrahim's commitment to empowering future Business Analysts.	السيد حازم إبراهيم، لديه خبرة 25 عامًا في مجال تكنولوجيا المعلومات وتحليل الأعمال وإدارة مشاريع تكنولوجيا المعلومات، ويحمل شهادات مرموقة مثل PMP وPMI-PBA وPMI-ACP وCBAP وICAgile وIADT. تشمل خبرته التقنيات الكلاسيكية والحديثة، بما في ذلك PowerBuilder وJava وPython وR. ومع سجل حافل في كل من القطاعين العام والخاص، يتفوق السيد حازم في القيادة الرشيقة وتحليل المتطلبات والتدريب. باعتباره توستماسترز متميزًا (DTM)، فهو يدمج الخبرة الفنية مع مهارات التواصل الاستثنائية.	تعريف المحاضر

Instructors:	Shiyas Shafi Prashant Shinde
Day	TBD
Duration	3 Hrs.
Workshop Contents & Objectives	**Introduction to Digital Twin and its Significance** Overview of Digital Twin • Definition and concept • Historical context and evolution in the construction industry Importance and Benefits • Enhancing project visualization • Improving decision-making processes • Optimizing construction and operation phases Role of Digital Twin in BIM (Building Information Modeling) • Relationship between BIM and Digital Twin • Synergies and complementary aspects **Foundations of Digital Twin Technologies** IoT (Internet of Things) Integration • Internet of Things (IoT) in the Digital Twin framework • The deployment of sensors for data collection • Real-time monitoring and feedback Data Processing and Analytics • Handling massive data sets • Predictive analytics for construction and operation • Tools and methods for effective data processing. **Building Information Modeling (BIM) and Digital Twin Integration** BIM Data Utilization • Extracting and integrating BIM data • Ensuring consistency and accuracy Connecting BIM and Digital Twin Workflows • Collaborative tools and platforms • Interoperability challenges and solutions **Digital Twin in Design and Planning** Virtual Design and Construction (VDC) • 3D modeling and simulation • Process Automation • Clash detection and resolution • Asset Classification Strategy Simulation for Optimization • Predictive modeling for project outcomes • Resource optimization using Digital Twin **Digital Twin During Construction** • Bi-directional Information exchanges during Construction & Handover

	• Project Information Model (PIM) to Asset Information Model (AIM) **Real-world Implementation and Case Studies** Successful Digital Twin Projects • Showcase real-world examples. • Lessons learned and best practices. Challenges and Solutions • Addressing common hurdles in Digital Twin adoption • Strategies for overcoming resistance. **Future Trends and Interactive Session** Emerging Technologies • AI, Machine Learning, and Digital Twins • Blockchain and secure data sharing Interactive Q&A and Discussions • Participants share their experiences and challenges. • Group discussions on potential applications in the Gulf region • Conclusion and Next Steps
Workshop Materials and Resources	1. Presentation slides 2. Handouts and reference materials 3. BIM software and tools for practical exercises
Who Should Attend	▪ **Architects:** To understand how to better begin with end in mind. ▪ **Engineers:** To understand how early decisions can impact the later operational stages. ▪ **Construction Managers:** To improve quality and reduce changes during construction. ▪ **Project Managers:** To know how to collaboratively work with all project stakeholders. ▪ **BIM Managers:** How to manage asset information throughout the project life cycle. ▪ **Contractors and Subcontractors:** To understand how to deliver assets as per requirements with less ambiguity. ▪ **Information Managers:** To understand the process of Digital twin enabling smooth PIM to AIM transition. ▪ **Educators and Researchers:** To improve their learning curve in one of the futuristic technologies in Engineering and Construction. ▪ **Government Officials:** For regulating standards to bring overall quality in asset lifecycle. ▪ **Building Owners and Facility Managers:** To understand the benefits of enabling a streamlined process which improves asset quality and maintenance. ▪ **Students and Recent Graduates:** Who wants to know new technologies and applications.
Workshop Language	English Only
Lecturer's Bio	**Shiyas Shafi** Shiyas is an MME licensed Civil Engineer with strenuous passion for digitizing construction industry and processes. His journey in the AEC

industry has been marked by a commitment to innovation, collaboration, and delivering tangible value to clients. His expert areas are Building Information modeling, Virtual Design and Construction and Digital Delivery Practices. For him, this is supported by a plethora of standards and practices, remarkably the ISO 19650, UK Level 02 and driven by versatile technology and infrastructure, notably Autodesk Construction Cloud (ACC), Autodesk Industry Collection, Open BIM, Process Automation, Reality Capture, AR/VR/MR and Digital Twin. With 12 Years of experience, he had the privilege of collaborating with diverse customers and serving their assorted project requirements in the form of training, consultation, implementation and more.

Prashant Shinde
A seasoned BIM Professional, a mechanical engineer with an 8+ years specialized trajectory in Building Information Modeling (BIM), Prashant's expertise stretches across a plethora of project domains. Prashant has a strong work experience with Digital Twin Solutions such as Twinit while during his tenure with Invicara, an organization which upholds strong foundation in digital twin technology. Professionally certified in Revit and BIM 360/ACC, Prashant's proficiency extends to other integral BIM software like Navisworks, Recap, and Enscape. Prashant is also a Certified Information Management Practitioner compliant with ISO 19650 standards. As an experienced team leader, Prashant has coordinated onshore/offshore resources for live Projects with BIM mandates or BIM intent. Presently Prashant is the BIM Implementation Consultant for GIC Qatar focused on Autodesk Construction Cloud Implementation.