

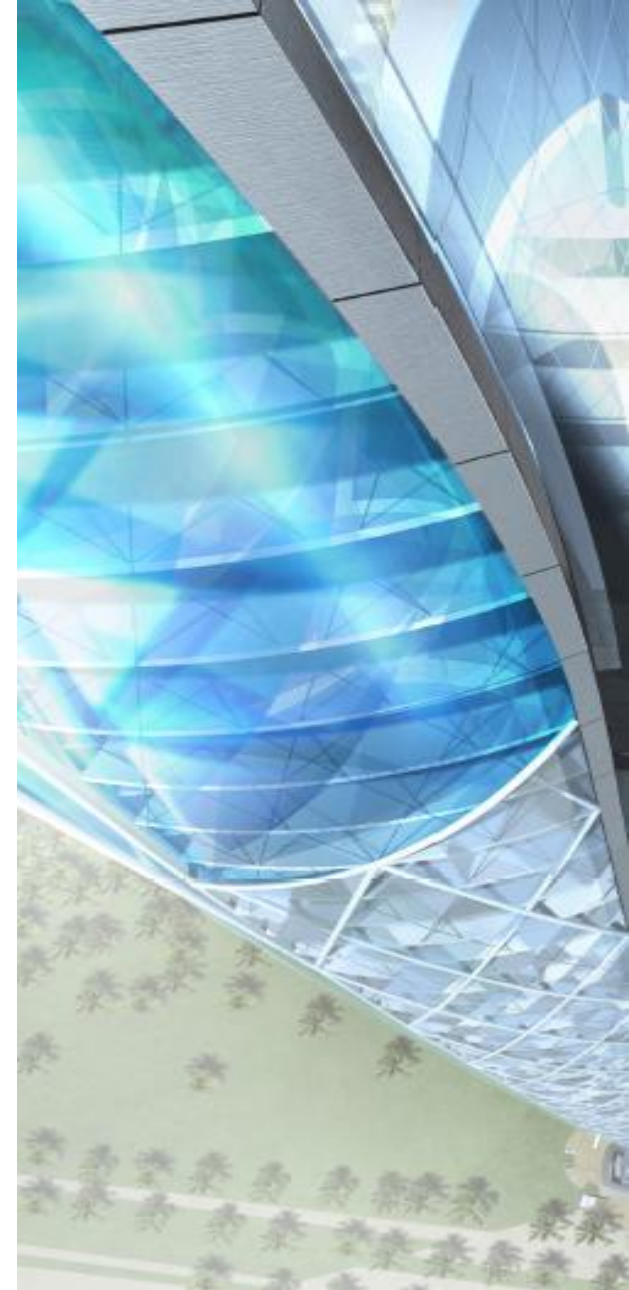
BIM Professionals - Availability vs. Demand

René Schumann
Managing Director
HOCHTIEF ViCon



Agenda

1. Current Market Demand
2. Required Expertise and Skills
3. International Accreditation programs



1. Current market demand

Surveys conducted in the Middle East - Conclusions

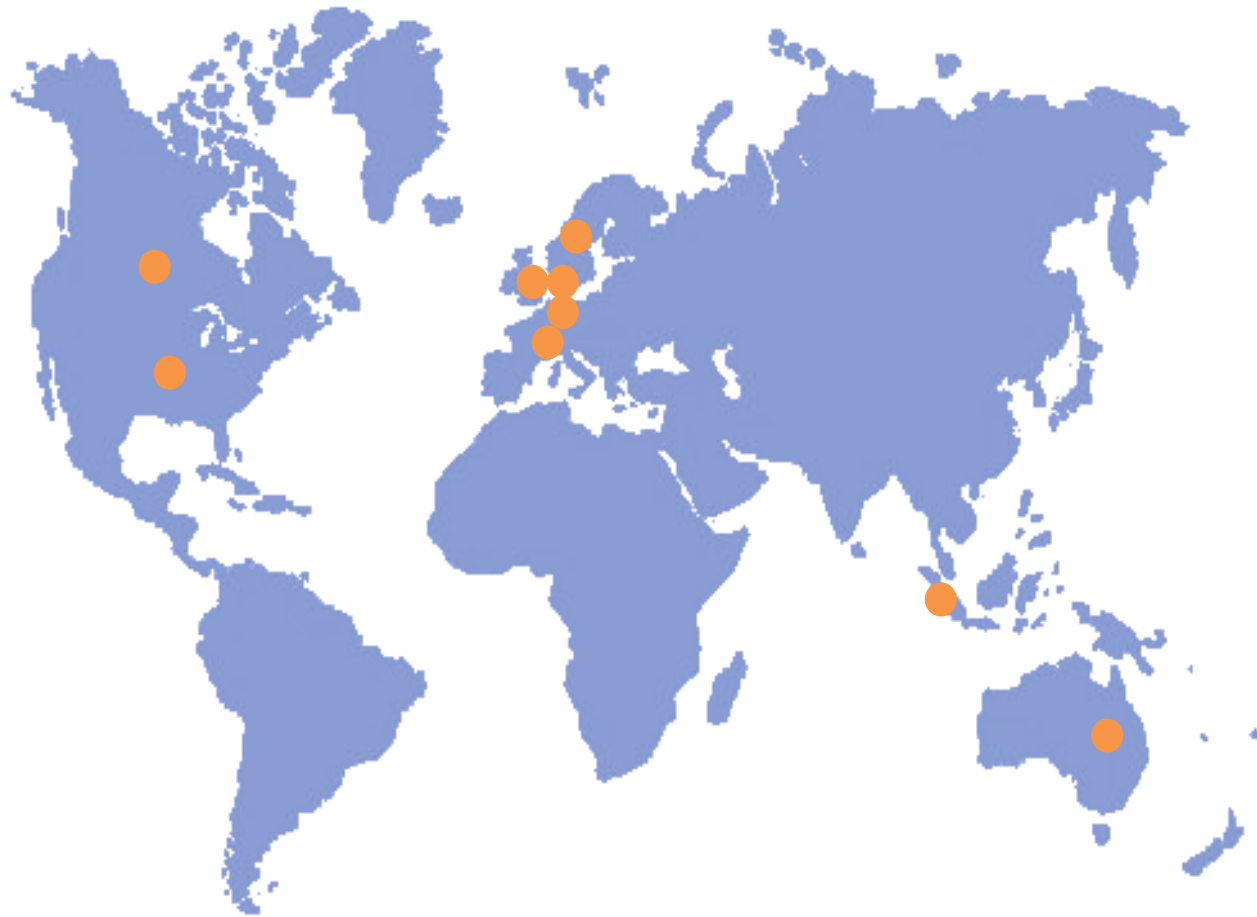
- **Government endorsement** will enable the industry to benefit from the global BIM revolution
- Industry professionals do not know where to get **BIM training**
- Recruiting industry professionals with relevant **BIM skills** is problematic
- Industry wide **standards and accreditation** will raise levels of confidence in BIM
- The Middle East is behind Americas and Europe but will **adopt soon**



1. Current market demand

Countries with renown BIM Standards or Education Programs

- Scandinavia
- UK
- Singapore
- Australia
- Americas
- Germany
- ...



1. Current market demand

Major Projects in Qatar requiring BIM

- Qatar Rail - Doha Metro Project
- Q22 - FIFA 2022 Worldcup Stadiums
- Ashghal - Doha Expressways
- Lusail REDC - Lusail City Project
- QMA - National Museum of Qatar
- ...

Qatar's major clients are asking for BIM based design, construction and operation.



1. Current market demand

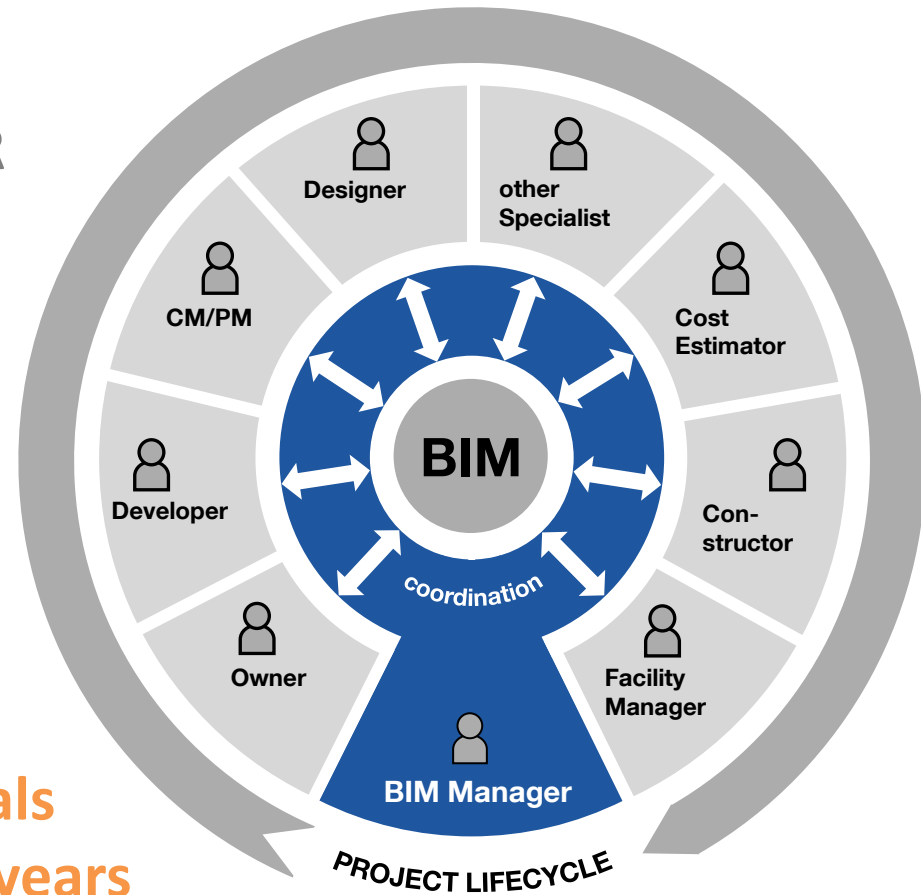
Estimated Number of BIM Professionals in Qatar

Assumptions

- Project larger than 500 Mio QAR
- Infrastructure and Buildings
- Life-cycle approach -> all involved companies need expertise



More than 1000 BIM professionals are required within the next 3 to 5 years



2. Required Expertise and Skills

Current Job Descriptions

- Managing BIM on projects
- Work closely with project team
- Expert knowledge in IT/CAD/BIM
- Support implementing BIM standards
- Develop in-house capabilities to meet client requirements
- Setup, initiate and monitor BIM systems
- Improve and ensure data quality



2. Required Expertise and Skills

Currently Requested Skills

- Solid Engineering background
- Comprehensive Knowledge in CAD and BIM
- Knowledge in specific standards
- >5 years of BIM experience
- >10 years of Engineering experience
- Middle East experience
- Experiences in leading multi cultural teams



2. Required Expertise and Skills

Commonly used Job Titles

Undefined job titles and responsibilities, e.g.:

- BIM Coordinator
- BIM Modeler
- BIM Manager
- CAD/ BIM Manager
- Eng. with BIM Knowledge
- VDC Expert



Employers: Difficult to measure the real quality of BIM professionals

Employees: Difficult to identify suitable jobs



3. International Accreditation Programs

Universities

RWTH Aachen - Germany

Helsinki University of Technology Stanford University - USA

New South Wales California State University - USA

Queensland University of Technology

Bauhaus University - Germany Copenhagen University

Georgia Tech University

Northumbria University - UK University of Salford

National University of Singapore



3. International Accreditation Programs

BIM Education Opportunities

- Various and different Curricula for BIM certifications -> but no internationally valid accreditation program
- Professional technology training through software vendors
- Limited opportunities for industry professionals for skill enhancement
- No training program established in Qatar for students or professionals



General Conclusion

- **High market demand** for BIM professionals expected
- No **internationally** accepted **BIM education** standard available -> limited availability of BIM Professionals
- No common understanding of **BIM Role Definitions**
- No **BIM Standard** and **Training** established in the **Middle East**



What is Qatar's strategy to feed the BIM demand?





Thank you for your attention!

René Schumann
Managing Director
HOCHTIEF ViCon

3rd BIM User Day
30th April 2013

Doha, Qatar

**One step ahead.
Build digitally first.**

