

تمكين
Tamkeen

Construction and Real Estate Sector

Skills Report 2024

مهارات البحرين
Skills Bahrain

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Content Disclaimer

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Executive Summary

The Construction and Real Estate sector, as of Q2 2023, employs over 166,000 professionals across the various subsectors. During that period, the Construction workforce comprised 127,405 professionals whilst the Real Estate sector consisted of 38,673 professionals. As a key economic pillar, the sector continues to grow with many large projects under development and many more in the pipeline to support the Kingdom's infrastructure, tourism, industry and housing. With the rise in inflation and land prices, companies are looking to take advantage of technology and modern construction methods to lower costs and increase affordability. In line with the global movement towards sustainability, the sector is seeing a rise in demand for green buildings as some clients become more environmental conscious and the economic viability of eco-friendly construction increases.

As regional economies continue to expand, the Construction and Real Estate sector workforce is also growing and the competition for talent has increased. Large regional employers are tapping into neighboring talent pools to plug workforce supply gaps, leading employers in Bahrain to focus on talent retention, with an emphasis on local talent. The Sector Working Group has highlighted a number of occupations within the sector that are facing such shortage in local talent. In construction, employers are looking to increase local hiring in specific roles such as CAD technicians, equipment and machinery operators/technicians, project managers and quantity surveyors to name a few. In Real Estate, increased regulations have created opportunities for roles such as owners' association managers that is now required for properties meeting specific criteria set by the regulators.

As the sector moves towards stricter regulations and standards, employers have emphasized the need for professionals to acquire a set of core and technical skills to fulfill their roles. Digital literacy appears to be the biggest core skill gap in the sector, particularly with adoption of technology across the entire sector. To increase the chances of being hired, employees across all job families are now required to have a certain level of digital skills outlined by employers that is necessary to perform their job. Technical skills and knowledge are also required depending on the job role. Construction companies are looking for Bahrainis with specialized trade skills such as plumbing or welding and professionals with the knowledge of modern construction techniques and health, safety and environment to increase the standard of safety in the workplace. Employers are also looking for professionals with technology skills and proficiencies in Geographic Information System (GIS) and Building Information Modelling (BIM) which are required to keep up with the digital age. The need for digital skills was also echoed by the real estate industry who are looking for professionals with data analytical skills and the ability to analyze and interpret the vast datasets that are now available in the sector.

Professionals looking to advance their careers must adopt a continuous learning mindset and upskill or specialize in areas where skill gaps exist. Whilst academia is an option to gain knowledge and skills, vocational institutes are focused on specialized skill development and can provide students with the skill set, certifications and knowledge required to gain employment in the sector. As the region continues to grow and evolve, the Construction and Real Estate sector provides many diverse and exciting opportunities for Bahrainis to enter the workforce today.

Introduction & Purpose

Purpose

This report serves as a resource for individuals, organizations, and professionals intending to or currently operating in the Construction and Real Estate sector. Its primary aim is to provide a clear understanding of both the current and future skills landscape within the sector, reflecting the views and insights from industry representatives alongside comprehensive secondary research. The report identifies emerging trends, highlights the evolving

nature of jobs and career opportunities in the sector, and outlines critical skills required to enhance the workforce's alignment with industry needs. Additionally, it provides an overview of the various educational pathways and training programs available to embark on or advance a career within the Construction and Real Estate sector. In this report, the Construction and Real Estate sectors will be combined and discussed as one sector.

Intended Audience

Individuals

Provides insights into sector trends, jobs and skills in demand, as well as relevant trainings and programs, aiding in informed career planning.



Employers

Provides insights into sector trends, current and emerging skills landscape, and relevant trainings to guide workforce planning.

Academia & Training Providers

Provides insights to support curriculum and training program development in alignment with industry needs.

Methodology

Research Methodology

A robust and systematic approach was followed with several key research activities, starting with an international benchmarking exercise to implement best practices in the development of a sector skills report. This initial step, in addition to guidelines from the International Labour Organization (ILO), informed the design of the engagement methodology outlined in the following section.

Extensive desktop research established an understanding of the current landscape within Bahrain's Construction and Real Estate sector, and a review of Government strategies – including the Economic Recovery Plan – ensured alignment of findings with national strategic priorities. Economic and labor market data were sourced from official Governmental sources.

Engagement with sector representatives (see 'Engagement Methodology') provided the core insights into the sector's specific dynamics and requirements embedded throughout the report. The findings from these research activities have been consolidated into the Sector Skills Report, which serves as a valuable resource for individuals, employers, academic institutions, and training providers.

Engagement Methodology

To gather critical insights, a Sector Working Group was formed, serving as a collaborative platform for engagement and knowledge exchange. The Sector Working Group aimed to uncover trends, opportunities, and challenges within the sector, and to identify the skills gaps in the workforce.

This group included a diverse array of stakeholders and experts from both local and regional contexts, encompassing representatives from small and medium-sized enterprises (SMEs), as well as large companies, academic institutions, and vocational training centers. This approach ensures the Sector Working Group is representative of the sector and captures a comprehensive view of the sector and their workforce needs.

Over a period of 6 weeks, from January to February 2024, a series of workshops were conducted with the active participation of over 20 representatives from 4 distinct subsectors covering the Construction and Real Estate sector value chain in Bahrain. These collaborative sessions were crucial in validating job demands and career pathways in the Construction and Real Estate sector, leveraging the collective insights of the Sector Working Group members.

The contributions of the Sector Working Group were instrumental in the development of a skills framework that is specifically tailored to Bahrain's Construction and Real Estate sector. The insights and findings from the Sector Working Group's engagement have been thoroughly integrated into this report, offering detailed guidance and strategic recommendations for the sector's development.

Sector Overview

This Sector Skills Report encompasses two sectors, Construction and Real Estate, referred to as “the sector” in this report. Together, these two sectors are critical pillars of the economy, with Construction contributing 7.2% and Real Estate 4.0% to Bahrain’s real GDP in 2022, as released by the Information and eGovernment Authority (IGA).

In terms of trade, real estate activities have increased reaching 26,121 transactions in 2023, representing a 20.9% increase compared to the previous year, according to Survey and Land Registration Bureau (SLRB) data. Despite the increase in activity, the value of annual real estate transactions fell by a marginal 1.2% from the previous year, reaching BHD 1.07bn in 2023.

The sector is a key enabler for the Economic Recovery Plan (ERP) and as part of the plan, the Government Lands Investment Portal was launched in 2022. The initiative falls under the priority of facilitating commercial procedures and increasing their effectiveness within the ERP. It aims to strengthen the partnership between the government and private sectors, stimulate investment and land construction, and accelerate the implementation of development projects for citizens and residents in the Kingdom.



Multiple large projects, ranging from infrastructure projects, tourism, industrial and housing are also either currently being developed or are in the pipeline in coming years. In infrastructure, plans have begun to introduce a GCC railway and a light rail network to support public transportation. A second bridge linking the Kingdom of Saudi Arabia and Bahrain is also being built to support the existing King Fahad Causeway and expand economic activity between the two countries. Supporting the manufacturing sector, projects such as the 472,000 m² Aluminium Downstream Zone and the longer-term Fasht Al Adhm project are planned – a 100km² city available for industrial and logistics projects. On the residential side, the increased cost of credit and residential prices have resulted in a strong surge in demand for affordable housing. The Government continues to invest in housing projects and develop programs or schemes such as the Mazaya Social Housing Finance Program to increase access to affordable housing.

In addition to the planned projects, the Government also offers support to the sector through flexible and favorable legislation such as permitting foreign ownership, the creation of freehold zones, and, more recently, the introduction of the Golden Residency Visa, which grants long-term residents who own properties worth at least BHD 200,000 the opportunity to live and be employed in Bahrain. In 2023, the government also launched the Golden License to attract large-scale investment projects by providing incentives and streamlined services to foreign and local businesses. Government support has historically contributed towards sector growth and overall economic expansion. These initiatives further reinforce Bahrain's status as a global destination for investment.

Furthermore, the sector is governed by a regulatory body – the Real Estate Regulatory Authority (RERA) – which was formed to support real estate professionals' transition to the new regulatory standards in the Kingdom. RERA works closely with Government and industry stakeholders to oversee the development of a National Real Estate Policy

supported by a national 5-year sector strategy and plan to bolster the Real Estate sector, improve consumer protection, and streamline real estate services in Bahrain. RERA also provides a robust regulatory framework for buyers, developers, brokers, and sales agents and elevates the standards of real estate transactions.

This report focuses on a number of sub-sectors within the Construction and Real Estate sector. The subsectors were defined using international benchmarks and adjusted to fit the skills requirements within the context of Bahrain. The sub-sectors covered are construction, real estate brokerage & leasing, property management, architectural, engineering & other services; detailed further.



Figure 1: Bahrain's Construction and Real Estate subsectors**Construction**

Involves building or assembling infrastructure, including residential, commercial, and industrial buildings, as well as civil engineering projects like roads and bridges. It encompasses planning, design, and construction, requiring collaboration among architects, engineers, and contractors.

**Real Estate, Brokerage & Leasing**

Focuses on services related to buying, selling, and leasing properties. Brokers and agents facilitate property transactions and negotiations, while leasing activities involve managing lease agreements for various property types.

**Property Management**

Focuses on the upkeep and administration of real estate properties, such as apartments, houses, and commercial buildings. Key activities include maintaining the property, managing rent and tenants, handling repairs, and ensuring that the property meets legal standards.

**Architectural, Engineering & other services**

Includes professional services in planning, designing, and executing construction projects. Architects design buildings, engineers ensure technical soundness, and other services may include surveying and landscape design.

Employers in Bahrain's Construction and Real Estate Sectors

Key players in the Bahrain Construction and Real Estate sector include a wide range of firms, from large multinational corporations to local entities, all crucial for developing the kingdom's infrastructure and urban landscape. Their significant contributions to Bahrain's economic growth are matched by the high number of job opportunities they provide for professionals in the sector.

Large, international and regional construction firms and real estate developers (including local companies that have expanded regionally) introduce global best practices and the latest in technologies to uplift the standards of the sector. These companies usually participate in large-scale projects such as upscale residential complexes, commercial towers, and infrastructural landmarks. They allow employees the opportunity to be a part of exciting landmark projects and to engage in modern constructions methods and advanced technologies.

The industry also consists of many smaller local companies, from long-established family businesses to newly founded startups that serve the local market's needs. They play a critical role in smaller commercial projects and the development of houses and residential neighborhoods.

Supporting the development of the Construction and Real Estate subsectors, is a network of engineering and architectural consultancies. These entities provide essential support services, ranging from structural consultancy to architectural and landscape design and management, necessitating a broad spectrum of skills from technical engineering expertise to operational management and client communication.

Within the sector, there also exists an extensive number of real estate brokerage and leasing companies. These firms facilitate the buying, selling and leasing of properties, a core function of the real estate sector. The subsector's landscape comprises of both local and internationally recognized brands with employees possessing skills such as leasing strategy development, valuation methodologies and client advisory services among others.

Property management companies also play a crucial role within the sector. They serve the critical role of property upkeep, including maintenance and repair services as well as the management of rent and tenancies for both residential and commercial projects. Employees within the sector must be well versed in key technical skills including maintenance coordination, property inspection and adherence to regulatory standards to effectively serve in their roles.

The announcement of various large scale developmental projects such as the Tourist City in Bilaj Al Jazayer or the Sports City in Zallaq, has created momentum and ensures the continuous growth of the sector, resulting in the demand for talent. Competition for talent remains high domestically as well as regionally and employers across all subsectors attract and incentivize high caliber talent by offering unique career growth opportunities to professionals that demonstrate the right experience and possess the skills required.

The Sector in Numbers

GDP Contribution



Construction

In 2022, Construction sector contributed

7.2%

to the Kingdom's total real GDP

with a total GDP output of
BHD 957.50 Million

Real Estate

In 2022, Real Estate sector contributed

4.0%

to the Kingdom's total real GDP

with a total GDP output of
BHD 535.63 Million

Foreign Direct Investment



Construction

In 2022, the sector attracted a total of

BHD 120.36 Million

of foreign direct investment into the country

Real Estate Activities*

In 2022, the sector attracted a total of

BHD 406.95 Million

of foreign direct investment into the country

*Real Estate Activities used as a proxy to represent the Foreign Direct Investment of the sector

Trends in Bahrain's Construction and Real Estate Sector

The Construction and Real Estate industries worldwide face similar opportunities and challenges with varying degrees of intensity. The rising land and construction costs drives companies towards innovation, leveraging Construction Technology (ConTech) and Property Technology (PropTech) to enhance affordability and efficiency.

Technology provides companies with a viable solution to streamline the duration of projects and lower overall costs to sustain the growth in the sector and meet customer demand. Simultaneously, adopting virtual reality and data analytics is transforming property sales and management, enhancing market transparency.

Bahrain has also demonstrated a dedication towards sustainable development through initiatives like the Green Building Manual, aligning with global movements towards eco-friendly construction practices. The success of these initiatives hinges on the availability of talent with the right skills and knowledge to implement these practices. As a result of strong regional demand for talent – intensified by booming regional markets– Bahrain has been incentivized to concentrate on skill development and provide attractive career opportunities within the sector to retain the workforce.

Technological innovation

A key trend in Construction and Real Estate are the technological advancements – also known as 'ConTech and PropTech' – which present a unique opportunity for disruption in the market to address the problem. Various technologies in the sector, such as digital twins, BIM, and Modern Methods of Construction (MMC), often referred to as 'smart construction', is a fast way of delivering new buildings, by maximizing the efficiency of material and human resources and involves employing innovative

practices such as pre-cast, 3D printing, and tunnel form, leading to a 50% reduction in construction time and significant cost savings for the developer. These technologies are being researched and used by developers to enhance the sector's efficiency.

Similarly, 'PropTech' is shaping the future of real estate sales and management and is a key component in the RERA National Real Estate Plan. Developers and real estate agents are adopting virtual reality (VR) technologies to showcase properties, providing potential buyers with the ability to conduct multiple views of properties in the comfort of an office or home. Moreover, data is becoming an important enabler in the real estate industry, allowing market participants to gauge valuations almost in real time and increasing the competitiveness of the industry. In Bahrain, the enhanced availability of transactional data and the widespread use of online real estate portals have significantly increased the transparency of what has historically been an opaque and illiquid market.

Baity – Bahrain's Pioneering Housing Platform

In 2021, the Government launched Baity, a platform for Bahraini citizens seeking to purchase an affordable home. In line with RERA's commitment towards PropTech and powered by the Ministry of Housing and Eskan Bank, Baity provides Bahraini citizens with a full spectrum of housing services. Baity offers a comprehensive real estate directory for users to choose their ideal property, integrated access to various housing services and financing solutions, and state-of-the-art features and solutions that streamline the home-buying process.

Baity harnesses the power of digital innovation and governance to reimagine the entire home buying journey and provide a seamless experience that is tailored exclusively for Bahraini citizens.

Sustainable development in a green world

Sustainable construction is on the rise locally and around the globe. It has been propelled by the advent of ConTech and PropTech, which have introduced new materials designed to reduce the ecological impact of buildings. This trend is further fueled by shifting consumer preferences, the introduction of more stringent legislation, and the increased emphasis on Environmental, Social and Corporate Governance (ESG) practices. Green building certifications such as LEED (Leadership in Energy and Environmental Design) from the US and BREEAM (Building Research Establishment Environmental Assessment Method) from the UK are being implemented worldwide, dictating the use of eco-friendly materials and promoting energy efficiency.

To keep up with this trend, Ministry of Works, Municipalities Affairs & Urban Planning has introduced the Green Building Manual in 2019 to improve the performance of buildings by reducing the consumption of energy, water and materials, and greenhouse gas emissions. The manual is part of a more comprehensive green building and sustainability program that aims to enforce sustainable solutions in the construction sector, in line with Bahrain Vision 2030 and the Ministry of Works strategic plan. The program is designed to optimize energy use throughout the project's life cycle, reducing operation and maintenance costs and improving Bahrain's overall quality of life. According to a study conducted by the Ministry of Works in 2019, green buildings consume 25% less energy and 11% less water compared to the average commercial building. The study also revealed that green buildings have 19% lower maintenance costs with 34% lower greenhouse emissions than traditional buildings. This results in the consumption of fewer resources and 27% higher occupant satisfaction.

Increased competition and demand for talent

Following the short-lived pandemic, the regional real estate market has gathered pace again. Multi-billion-dollar giga projects such as the Red Sea Project and Diriyah have dramatically increased the workforce capacity requirements, increasing competition for skilled professionals across the region. Moreover, companies are looking to take advantage of the advancement of technology, particularly in MMC and automation, to reduce the reliance on low technology based skilled workers who are currently assigned to manual jobs.

Bahrain's response to the regional talent crunch involves enhancing the attractiveness of its Construction and Real Estate sector as a career destination. Companies must focus on training and development to offer differentiated and competitive career opportunities to attract professionals and increase workforce retention. Moreover, investing in technological advancements will create higher-value jobs for the local workforce and lessen the impact of talent migration on the sector.

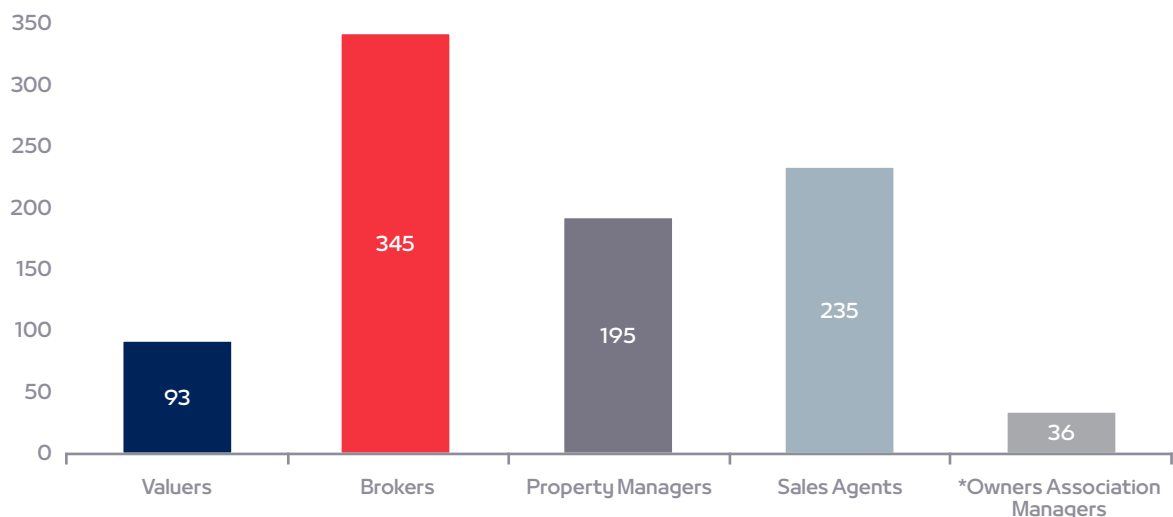
¹ Source: Ministry of Works. (2019, March). Sustainable Green Buildings. Retrieved from <https://www2.works.gov.bh/English/ourstrategy/Documents/Fourth%20Industrial%20Revolution/Green%20Implementation%20Reports.pdf>

Career Opportunities

Professionals who aspire to become a valuer, broker, sales agent, property manager or owners' association manager, as shown in Figure 2, must be licensed by the Real Estate Regulatory Authority (RERA). The Sector Working Group has highlighted the rise in the number of professionally managed communities in Bahrain, justifying the demand for more licensed Owners' Association Managers. Professionals

employed in these roles oversee the daily operations and management of residential communities, ensuring the community runs smoothly and meets the needs of its residents. Licensed Property Managers who are experienced and qualified can apply to become a licensed Owners Association Manager.

Figure 2: Real Estate sector licensed workforce breakdown by job role



*Note: All Owners Association Managers are Property Managers with Owners Association Activities

Source: Real Estate Regulatory Authority (RERA); Bahrain.bh

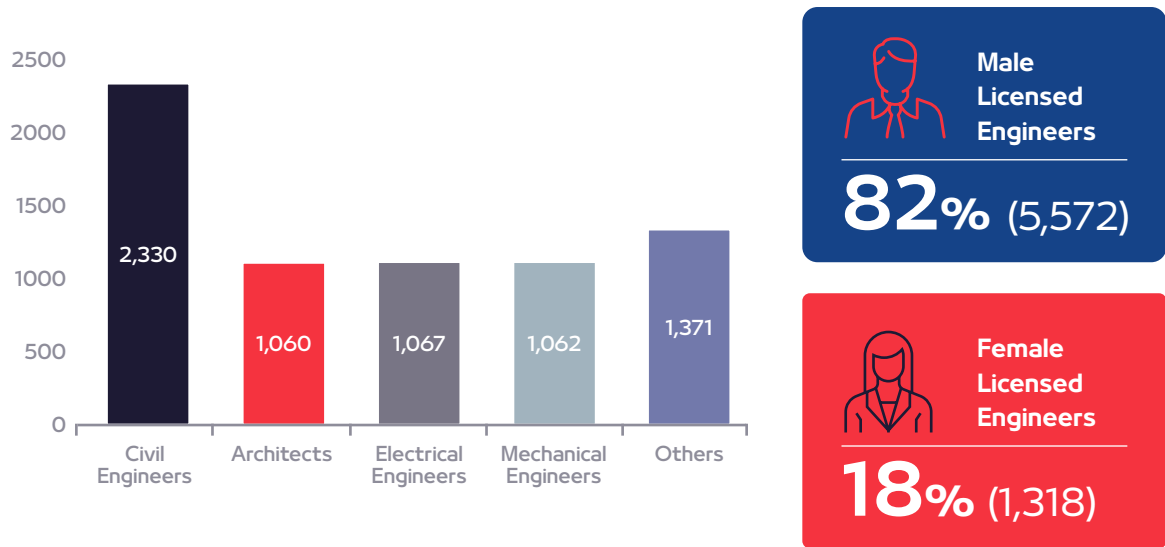
Although the workforce primarily relies on intensive manual labor and is predominantly male dominated, there is a comparatively higher percentage of women in certain subsectors or specialized fields within the sector. For example, out of the almost 6,500 licensed engineers in Bahrain (as of the end of 2022), 18% are female, working across various disciplines such as architecture or civil engineering. In comparison,

only around 16.7% of engineers in the USA are women as of 2023.² The UK has similar statistics, with females comprising around 16.5% of the engineering workforce 2022.³ While the Kingdom is on a continuous journey towards gender inclusivity with room for improvement, Bahrain is already ahead of globally developed markets and can serve as a role model in promoting women in engineering.

² United States Census Bureau. (2021, January). Women Making Gains in STEM Occupations but Still Underrepresented. Retrieved from <https://www.census.gov/library/stories/2021/01/women-making-gains-in-stem-occupations-but-still-underrepresented.html>

³ EngineeringUK. (2022, March). New Analysis Shows Increase of Women Working in Engineering. Retrieved from <https://www.engineeringuk.com/media-centre/press-releases/new-analysis-shows-increase-of-women-working-in-engineering/>

Figure 3: Number of Licensed Engineers by Discipline (2023)

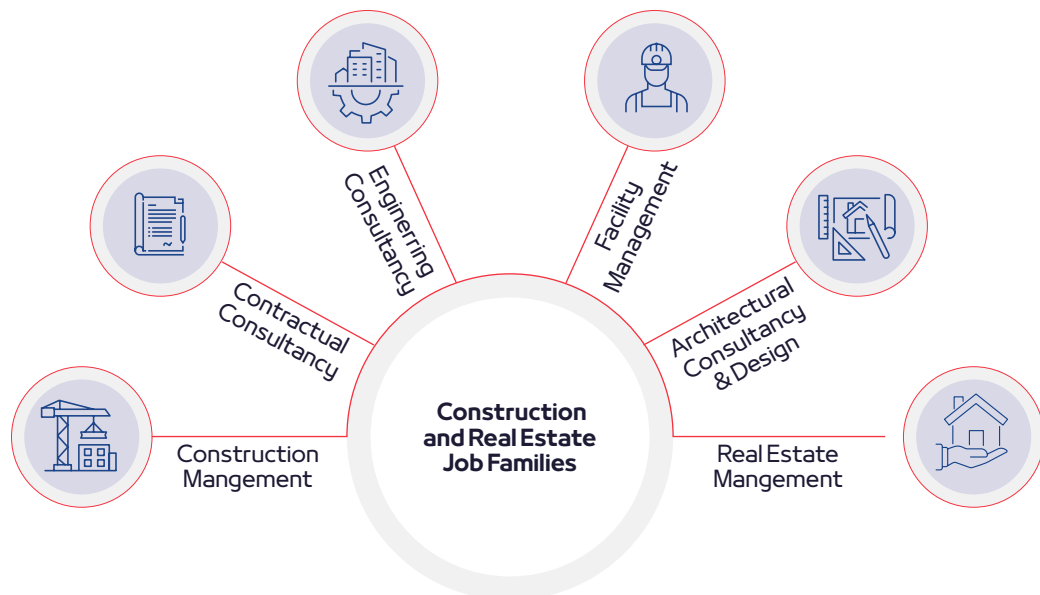


Source: The Council for Regulating the Practice of Engineering Professions (CRPEP)

In collaboration with the Sector Working Group, six job families were defined that capture critical roles that currently exist in Bahrain’s Construction and Real Estate sector, presenting opportunities for

career growth and progression (see supplementary document “Construction and Real Estate Career Pathway Map”)

Figure 4: Construction and Real Estate Job families



The Sector Working Group underscored the importance of harnessing local talent in the Construction and Real Estate industry. While the sector is currently dominated by non-Bahrainis, there are ample employment opportunities for locals with the right skills. In particular, Bahraini **CAD Technicians** proficient in AutoCAD software are in high demand as the sector aims to localize its workforce. The market values local talent with the necessary digital skills required to translate client concepts into detailed drawings and plans.

Local qualified and certified **Equipment and Machinery Operators** and skilled **Technicians** are also in demand as the Sector Working Group expects to see a higher degree of regulation imposed on these roles. These roles are crucial to ensuring structures are built and maintained correctly and can also be quite dangerous if not executed properly. For these reasons, there is a high degree of importance placed by companies and enforced by regulators on having skilled talent to minimize health and safety risks. Similarly, Bahraini **Land Surveyors** are in demand by the construction industry. Land Surveyors ensure that buildings stand on solid ground, gathering data about the land for civil engineers and construction projects to support the drawings of site plans.

Behind the scenes, **Planning Managers** and **Project Managers** orchestrate the construction process, meticulously planning and executing each step. Planning managers set and monitor timelines, while project managers ensure the symphony of construction plays out flawlessly, harmonizing with budgets, schedules, and quality standards. They are supported by **Quantity Surveyors** who oversee the financial aspects of construction projects. Their expertise in cost estimation and budget management ensures projects are financially viable and cost-efficient. Universities in Bahrain now offer quantity surveying as a standalone major to meet the growing demand for locals in the industry.

In real estate, RERA now regulates **Owners Association Managers**, and any professional seeking this role must have a license and comply with the RERA code of conduct. The same applies to sales and/or leasing brokerage managers and other roles within the sector. More and more people are now living in shared spaces like apartment complexes and gated communities, which has caused a rise in demand by property managers to looking to assign owners' associations managers to represent the interest of the owners and ensure standards within the community are maintained.



Figure 5: Jobs anticipated by the Sector Working Group to be in demand

Job in demand	Job overview
 CAD Technicians	CAD Technicians use computer-aided design software to create detailed architectural and engineering drawings, supporting the planning and execution of construction projects.
 Equipment and Machinery Operators	Operators are essential for handling the heavy machinery and equipment used on construction sites, requiring precision and safety awareness.
 Land Surveyors	Land Surveyors play a crucial role in measuring and mapping land, ensuring accurate site analysis for construction and development projects.
 Owners Association Managers	These managers oversee the operations of property owners' associations, ensuring the maintenance and management of communal real estate assets.
 Planning Managers	Planning Managers are responsible for the strategic planning and coordination of construction projects, overseeing timelines, resources, and regulatory compliance.

Job in demand**Job overview****Project Managers**

Lead construction projects from conception through completion, coordinating teams, and ensuring adherence to budget and schedule.

**Quantity Surveyors**

Quantity Surveyors specialize in cost and contract management, working to minimize expenses and ensure financial viability of construction projects.

**Technicians**

Technicians in the Construction and Real Estate sector provide specialized support in various areas, including electrical, mechanical, and civil works, contributing to the overall success of projects.

**Contracts Managers**

Contracts Managers are responsible for the strategic implementation of procurement strategies, tender evaluations, and contract recommendations in construction projects.



Career Spotlight

Career Spotlight: CAD TECHNICIANS

Role Overview

A Computer Aided Design (CAD) Technician was identified as a role highly in demand by the Sector Working Group. A CAD Technician is responsible for the planning and drawing phases of a project. These individuals review the calculations and drawings for a particular project, usually having a background in either Architecture, Engineering, or Design. Checking for discrepancies and conflicts in design is also within the domain of this job role.

Career Pathway and Progression

CAD Technicians typically obtain a certificate or associate degree in CAD technology, engineering technology or a related field from a higher education institution or a vocational program. Practical experience, through internships, can also be highly beneficial at strengthening an individual's proficiency within digital and software technologies. By acquiring an engineering degree and securing the required qualifications, CAD Technicians will possess the right academic qualifications, experience and technical skills to progress into an engineering role.



Career Spotlight: HEAD OF PROJECTS / PROJECT DIRECTOR

Role Overview

A Project Director is a key component of any construction project as they are responsible for the planning, organization, management, of the entirety of a project. This includes advising on site, managing staff, and ensuring the project is completed within the allocated budget and timeline. A job as a Project Director provides individuals with exposure to a variety of individuals and practical experience on site. The role heavily involves liaising with a variety of people such as clients, contracts, and other stakeholders to ensure risk management, and compliance with regulatory requirements.

Career Pathway and Progression

To become a Project Director, you will initially need a bachelor's degree in a relevant field such as construction management or civil engineering. This is followed with gaining experience in roles like project assistant, or junior manager which will provide hands-on experience within the construction field. Industry-specific certifications such as PMP or CCM can be advantageous at helping individuals progress to the role of Project Director. Individuals within the role of Project Director can continue to progress within their career to positions such as Vice President of Project Management. Alternatively, individuals can pursue other pathways within the Construction and Real Estate sector such as Head of Engineering.



Career Spotlight: QUANTITY SURVEYOR

Role Overview

A Quantity Surveyor in the Construction and Real Estate sector is responsible for ensuring a project adheres to all regulatory requirements while remaining in the allocated budget. Quantity Surveyors prepare feasibility studies to estimate materials, time and labor costs. They also negotiate contracts, draft documents, and keep detailed reports of the projects. This role was highlighted as an in-demand job by the Sector Working Group, due to the essential role Quantity Surveyors play within the construction landscape.

Career Pathway and Progression

Individuals wishing to pursue a career as a Quantity Surveyor typically obtain a degree in quantity surveying or a related field, such as construction management or civil engineering. Gaining practical experience as an intern, trainee, or assistant quantity surveyor is highly encouraged as it allows individuals to develop expertise in the varied components of the role. Career progression as a Quantity Surveyor can be achieved through a mix of practical experience and professional certification, facilitating a shift to roles such as Senior Quantity Surveyor, Commercial Manager, or Contracts Manager. Alternatively, Quantity Surveyors are capable of shifting into Engineering as a Site Engineer, for example.



Career Spotlight:

OWNERS ASSOCIATION MANAGER

Role Overview

Owners Association Managers oversee the day-to-day operations of a residential or commercial property association. They provide a link between property owners and other governing entities to oversee the maintenance, service, financial, and regulatory aspects of a property. An Owners Association Manager serves to maintain the value of properties while ensuring residents are taken care of by undertaking conflict resolution and maintenance of safety standards.

Career Pathway and Progression

A degree in business administration, real estate, or property management serves as a starting point to becoming an Owners Association Manager. After obtaining the relevant academic degree, individuals should gain practical experience to hone their skills in handling property operations, tenant relations, and basic financial management. Career progression opportunities include senior management roles such as regional property manager or director of property management, which involve overseeing a larger portfolio of properties and leading a team of property managers.



PREPARING A FUTURE-READY CONSTRUCTION AND REAL ESTATE WORKFORCE

While technology and innovation constantly threaten jobs, it is becoming clear that industries are constantly changing, and a shift or evolution in mindset is crucial for professionals to succeed. A skill-centric approach is replacing the traditional focus on tenure and job titles. Individuals must adapt to the changing job landscape and constantly develop or refine their skill sets, adopting a continuous learning approach to apply new learnings to grow personally and professionally.

Recognizing this need, Tamkeen, in collaboration with the Sector Working Group, has developed National Occupational Standards and Career Pathway Maps specifically for the Construction and Real Estate sector. These resources can be used to identify the skills the sector requires and illustrate career trajectories available within the industry, both vertically and laterally. They provide a clear framework for the skills and competencies needed at different stages and roles, giving direction to those who wish to progress or pivot in the sector. By doing so, this approach supports employees in making well-informed decisions about their career paths and professional development, focusing on the acquisition and perfection of those skills that are most sought after and needed in the Construction and Real Estate sector.

Skills can be categorized as either core or technical skills, critical to building a successful and competent workforce. Core skills—generic or soft skills — are essential for performing well in any environment or organization and are becoming increasingly important to employers. These core skills have been captured in a well-defined core skills framework that can be used across all industries. On the other hand, technical skills are the abilities, knowledge, or expertise required to perform specific, job-related tasks. These skills can be acquired through vocational training, learning programs, or on-the-job experience.





Bahrain's Core Skills Framework

Tamkeen has developed and pioneered a Core Skills Framework as part of the country's wider skills taxonomy. The framework has been developed and aligned against a comprehensive list of international benchmarks and best practices, whilst reflecting the specific needs and aspirations of Bahrain as a progressive country.

Core skills underpin, promote and provide the foundation of the skills required to carry out specific job roles and functions. They are usually gained through life and work experience or through structured learning and training programs. Core skills are essential for any job or profession and provide a strong basis for lifelong learning and for building the technical skills required to support specific job roles.

The core skills framework is structured around three key pillars: Social Intelligence, Self-Management, and Analytical Skills, each playing a vital role in shaping a proficient and adaptive workforce. Under each of the key pillars, four core skills are defined forming a complete framework of twelve core skills.

Core Skills Framework



SOCIAL INTELLIGENCE

The ability to be self-aware, inclusive, communicative and form relationships with others with empathy, compassion and assertiveness

Building Inclusivity

The ability to create an environment and manage relationships across diverse groups in a range of different contexts by seeking to establish common ground regardless of race, ethnicity, religion, gender, age, ability, education, or socio-economic status.

Communication

The ability to listen effectively and understand, articulate thoughts and ideas effectively, exchange information, employ negotiation skills and use oral, written and non-verbal skills across a range of different environments.

Empathy

The ability to demonstrate emotional intelligence by demonstrating awareness of the feelings and emotions of others and being able to act accordingly within that context.

Collaboration and Teamwork

The ability to work collectively and effectively with one or more people in order to achieve a common goal, bringing together a range of experience and skills based on exchanging ideas, sharing experience and developing creative solutions.



SELF MANAGEMENT

The ability to manage behaviors, thoughts and emotions in a conscious and productive way

Adaptability

The ability to easily adapt to new situations and changing circumstances in life and work and change actions as required.

Initiative

The ability to think independently, identify opportunities, think innovatively and take action when necessary and without direction.

Planning and Organizing

The ability to plan and organize tasks in order to fulfill requirements within a given time.

Literacy

The ability to understand and have the confidence and skills to work with language to identify, interpret, create and communicate effectively in written and oral formats.



ANALYTICAL SKILLS

The ability to collect, organize, visualize and assimilate data using a range of tools and skills

Digital Literacy

The ability to find, evaluate, analyze, use, share and create content using digital devices, use software applications and troubleshoot common problems.

Critical Thinking

The ability to analyze, interpret, evaluate, infer, explain, synthesize and self-reflect in the context of making reasoned judgements based on a logical sequence of independent thought.

Problem Solving

The ability to identify and assess issues and problems and make use of available resources to evaluate and generate potential solutions in personal, social and work contexts.

Numeracy

The ability to understand and have the confidence and skills to work with numbers using numerical skills to process, interpret and communicate information to help understand, predict and solve problems.

Core Skills to Enable Your Success in the Sector

Core skills provide a foundation for continuous learning and development and play a crucial role in achieving success in a dynamic workplace. As professionals progress in their careers, there is greater emphasis on an advanced level of core skills

that make up the key characteristics of a successful leader. The Sector Working Group have highlighted six overarching core skills that are required across most job roles in the sector:

Figure 6: Core skills in-demand identified by the Sector Working Group

Planning & Organizing	Planning & Organizing allows operations and projects to run smoothly taking into account all factors and preparing accordingly. This is vital in the Construction & Real Estate sector due to the multi-project nature of the industry and the need to have all points covered .
Communication	Effective communication ensures seamless coordination among diverse teams involved in various parts of the projects. Clear communication enhances safety protocols, mitigates risks, and facilitates timely decision-making, contributing to the overall operational efficiency of the industry.
Digital Literacy	Acquiring digital skills increases efficiency whilst ensuring global competitiveness. Digital Literacy is crucial to permit a wider range of operations, allowing the sector to develop and keep up with the new technologies.
Problem Solving	Problem Solving in the Construction & Real Estate sector is essential in solving issues that arise on any given project. This is crucial in this industry as it tackles many unexpected problems throughout the given timeline of a project.
Critical Thinking	The ability to think critically is essential in ensuring that issues and certain problems are carefully thought out either in managerial or operational roles. The skill is lacking in the industry and is important to have when looking at progression to higher level careers.
Collaboration & Teamwork	The ability to work collaboratively within a team is crucial for a workforce within the Construction and Real Estate industry. This sector runs with highest efficiency when working collaboratively, it is important to strengthen this skill for better execution and outcomes of projects.

Digital literacy is no longer a luxury – it's a necessity!

Digital literacy is becoming a key talent employers seek in Bahrain's Construction and Real Estate sectors. This trend reflects a broader industry move towards embracing innovative technologies that dramatically transform projects' delivery and management. Digital literacy is now a crucial skill set, enabling professionals to effectively use tools like Building Information Modeling (BIM), Geographic Information Systems (GIS), and Augmented and Virtual Reality (AR/VR). These technologies bring numerous benefits, including enhanced efficiency, improved accuracy in design and planning, and the ability to offer immersive client experiences.

Employers recognize that a workforce skilled in digital technologies can propel projects toward greater innovation, sustainability, and customer satisfaction. Thus, digital literacy is not just a desired attribute but a necessary component for the industry's journey toward modernization and competitiveness. This emphasis on digital skills underlines the sector's commitment to adopting advanced practices, aligning with Bahrain's vision for a technologically advanced industry.

Critical Technical Skills for an Agile Workforce

Whilst core skills are important, the nature of the industry, particularly in construction, requires a workforce with specific technical skills, tailored to the job at hand. The Sector Working Group has outlined a set of skills ranging from specialized trade skills to integrating new technologies and methodologies to deliver projects effectively and sustainably.

The Construction industry has outlined a lack of Bahrainis with project management skills and specific and specialized trade skills, normally acquired through vocational training, resulting in the need to rely on foreign talent. Welding in particular was highlighted as a skill in demand, including welding inspection as well as Non-Destructive Testing (NDT). Moreover, the industry requires professionals with a skillset to operate heavy machinery and equipment such as crane operations.

Aqari Platform: Revolutionizing real estate transparency in Bahrain

Real Estate Regulatory Authority (RERA) in Bahrain, is a regulator that can provide guidance for enhancing transparency and efficiency in the Real Estate sector. Aqari is a national centralized platform that constitutes the primary source of real estate information in the Kingdom of Bahrain. Subscribed users have access to a range of dashboards showing real estate transactions, development projects, and zoning, amongst other information. This provides real estate companies with real-time access to reliable data that supports the decision-making process.

The availability of data has prompted the sector to seek employees with a data analytical skill set to produce high-quality reports and effectively address client needs, leading to overall sector growth.

The sector also requires professionals with the knowledge of modern construction techniques, including practices such as prefabrication, modular construction, and 3D printing. Innovative construction methods offer the potential for higher efficiency by minimizing waste and significantly reducing construction times and, in turn, lowering construction costs. Individuals who have acquired this knowledge will introduce global practices to Bahrain and support the sector's progression toward efficient and sustainable structures.

Technological advancements in the sector have also introduced the need for expertise and knowledge in a wide range of digital tools, transforming the industry. Proficiencies in Computer-Aided Design (CAD), Building Information Modeling (BIM), and Geographic Information Systems (GIS) have become increasingly crucial. CAD and BIM enable precise pre-planning and project visualization, fostering effective design, collaboration, and documentation throughout construction. GIS technology aids site analysis and land use planning, providing vital environmental and project feasibility insights.

In the real estate industry, Augmented Reality (AR) and Virtual Reality (VR) are becoming more prevalent. Individuals who have these capabilities can support sales professionals to deliver immersive project presentations and conduct virtual walkthroughs with clients. Developers, agents, and contractors with a trained workforce in AR and VR today have a competitive edge, allowing them to provide customers with a differentiated offering.

Data analysis has also become pivotal, with strategic decision-making, resource optimization, and project outcome enhancement relying heavily on data analytics. The real estate industry is becoming more transparent, and companies are relying on increased data availability to optimize sales and leases, offering clients detailed market information. Professionals with data analytical skill sets can leverage information to provide management with the support required to make an informed decision and provide clients with a differentiated offering.

Lastly, as seen with other industries such as Energy and Manufacturing, Health, Safety and Environment knowledge is being sought to remain compliant with regulatory requirements.

Figure 6: Technical skills in-demand identified by the Sector Working Group



Training Programs and Initiatives

The Construction and Real Estate sector encompasses various jobs with varying training requirements. Certain fields within the industry are regulated and require specific qualifications or certifications to operate. For example, a Civil Engineer requires an engineering degree and to be registered with the Council for Regulating the Practice of Engineering Professions (CRPEP). Similarly, a Real Estate Broker is also a licensed profession that should be registered with RERA.

Bahrain's education and training landscape provides a comprehensive foundation for addressing many of the Construction and Real Estate sector's immediate requirements through a wide range of undergraduate, postgraduate, diploma, and vocational training programs. These programs offer individuals various pathways to embark on, transition into, or grow within diverse and rewarding fields in the sector.

Developing the ideal mix of core and technical skills is, therefore, essential to pursuing a career within the Construction and Real Estate sector. The industry offers various programs to bridge skill gaps and promote a culture of continuous learning and adaptability. These programs aim to equip individuals with the necessary skills to address industry needs and foster personal and professional growth.

For those looking to delve into the Construction and Real Estate sector through higher education, there are a number of BSc programs available in many engineering disciplines (mechanical, electrical, civil, etc.) at various academic institutions within Bahrain, which will provide a solid foundation for a career path in engineering. There are also specialized degrees available in fields like quantity surveying, which opens career opportunities outside the engineering realm.

An alternative route to traditional higher education is vocational training. Diplomas and vocational training programs offer a streamlined, industry-

relevant education for those eager to enter the Construction and Real Estate sector by mastering a practical and focused skillset. Vocational training allows students to gain "hands-on" experience and get an expedited feel for the industry without the commitment of a longer-term academic degree. For example, engineering diplomas offered through many vocational training institutions cover electrical and mechanical engineering disciplines. Vocational institutes also provide the necessary training and certifications required for various technical and multidisciplinary professions that are in demand, such as nondestructive testing or inspection. Local institutes provide candidates from global institutes, such as the Certification Scheme for Weldment Inspection Personnel (CSWIP) for welding or the National Examination Board in Occupational Safety and Health (NEBOSH) for HSE-related qualifications.

The Sector Working Group has called for greater collaboration between the industry and the academic and vocational institutes to identify the specific technical roles companies require to educate students on the opportunities available for those with the right skill set. Whilst Bahrain's vocational training institutes offer a wide range of training and certifications for skills that are highly sought after by the industries, greater commitment is needed from companies to hire local talent to fill these positions.

Tamkeen is dedicated to supporting the enhancement of individuals' and businesses' skills and competencies. Tamkeen offers a range of programs that help bridge skill gaps and foster a culture of continuous learning and adaptation. It also provides businesses financial support to promote the upskilling and employment of Bahrainis in the Construction and Real Estate sector and reduce the reliance on foreign talent. A range of programs are available to contribute to individual career growth and support the overall competitiveness and sustainability of the Bahraini economy.



Tamkeen: Employment Support Programs

National Employment Program

The program encourages private sector enterprises to employ nationals through wage support for up to three years. This helps Bahraini graduates and jobseekers to enter the labor market, while also supporting enterprises to employ the talent they need to drive their productivity and success.

Jobseeker Training Program

The program provides training and upskilling opportunities for jobseekers nominated by the Ministry of Labour to increase their competitiveness and facilitate their entry to the labor market.

Train and Place Program

The program offers training support for jobseekers to gain essential skills and requirements for the labor market through creating sustainable employment opportunities and matching the requirements of the private sector with available talent.

On-the-Job Training Program

The program provides opportunities for jobseekers to gain practical work experiences that can equip them with the required skills to enter the labor market.

Apprenticeship Program

The program, in collaboration with academic and vocational training institutes, provides enterprises with the opportunity to employ Bahrainis as apprentices, giving them the chance to obtain in-demand vocational skills across different trades as well as specialize in the fields of information technology, cybersecurity, and other future jobs.



Tamkeen: Career Development Support Programs

Wage Increment Support

The program allows enterprises to obtain wage increment support for existing employees, facilitating the career progression of Bahrainis in the private sector and encouraging employers to retain and reward their workforce. As part of Tamkeen's commitment to supporting this progression, enterprises are encouraged to hire new talent at higher wages by fully covering the difference between the new and previous wages.

Leadership Employment Program

The program aims to empower Bahrainis to advance in their careers by providing wage support/increment for enterprises looking to employ Bahrainis in mid and executive jobs in the private sector. This enables enterprises to employ and promote talented individuals to assume leadership roles, thus helping Bahrainis progress in their careers.

Enterprise Training Support Program

The program offers enterprises support with their training costs to upskill and develop their human capital with the aim of improving their competencies and capabilities to become more productive, and help enterprises grow, remain competitive, and retain talented employees.

Professional Certification Program

The program offers individuals an opportunity to enhance their skills and build their competencies through attaining internationally accredited professional certificates related to their area of expertise.

Global Ready Talent Program

The program supports overseas placement and work opportunities for Bahrainis to help them gain valuable work experience, develop their skills and gain exposure to international work environments.

Key Takeaways

▶ **Specialization and upskilling can unlock career opportunities within the sector**

The Bahraini Construction & Real Estate sector is filled with vast employment opportunities in niche areas of focus, particularly in the technical jobs. Local vocational institutions have the capacity to deliver the necessary training and provide employees with globally recognized certifications. This will help increase their employability value and create an overall competitive job market.

▶ **Specialized technical skills are highly sought after by the sector**

Similar to other sectors such as Energy and Manufacturing, the Construction and Real Estate sector also faces a shortage in CAD software operation and specialized trade skills such as heavy equipment/machinery operation and welding. These technical skills can be developed through vocational training and on the job, training slowing individuals the opportunity for career progression and lateral movements into other roles if desired.

▶ **Skilled project managers – particularly in construction – are in high demand**

Projects are getting more complex and competition in the market is increasing, placing importance on the delivery of projects on schedule and within budget. Talented managers who have the skillset to effectively manage these factors and have the right core skills to manage a large, diverse team are highly valued by the market.

▶ **Digital literacy is a critical core skill that is now required across most job roles in the sector**

Employers are looking to hire a team with the right digital skills to navigate the various technologies that are being introduced across all functions. Modern construction methods have introduced many automations that require a digitally savvy workforce in operations whilst 'PropTech' has also revolutionized the real estate industry and changed the way client interactions take place.

▶ **Technological advancements will likely create high value jobs in the near future**

Whilst automation normally creates redundancy across low-skilled jobs, technological advancements are also expected to create new, high-value job opportunities, emphasizing the need for professionals to adapt and upskill in these emerging areas. Industry professionals who can augment technological knowledge and skills on top of their traditional sector-related skill set will be able to add value to organizations and contribute to the advancement of the sector.

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Glossary of Terms

Term	Definition
Core Skills	The combination of essential skills required to be fully prepared for life and work in a global economy
Digitalization	The use of digital technologies, digitized information and data to change business operations and introduce efficiencies and opportunities
Emerging Jobs	A job/occupation that currently has small numbers but is expected to grow in the future
Job	A paid position of employment held by an individual
Job Family	A group of jobs/positions that involve work in the same functional occupation and share related core knowledge and background requirements. The job family structure is based on function rather than organizational structure.
Job Role	A specific set of responsibilities and duties assigned to an employee within an organization
National Occupational Standards (NOS)	A set of skills, knowledge and performance criteria required for key job roles in the sector. NOS provide a standardized framework for defining skills and competencies, ensuring that all individuals in the same sector or profession meet a certain minimum standard set by the sector
Sector Skills Report	A concise report which outlines an overview of an industry sector by identifying trends, presenting macro-economic data, outlining current and future job roles and associated skills gaps and making recommendations for the future
Skills Framework	Provides information such as key sector information, occupations and job roles, and the required existing and emerging skills to fulfil roles within that sector
Skills Gap	The difference between the identified skills (core and technical) that an employer expects their employees to have and the actual skills that employees possess
Skills Mismatch	An overarching term which can be used to describe various instances of imbalance in skills e.g. skill shortage which is where the demand for a particular type of skills exceeds the supply of the workforce with these skills; skill surplus which is where the supply of the workforce with a particular type of skills exceeds demand in the job market; over-skilling occurs where the workforce has more skills than required to perform a job adequately; under-skilling occurs where the workforce has less skills than required to perform a job adequately
Stakeholder Engagement	The process by which an organization involves others who may be affected by the decisions it makes or can influence the impact and implementation of its decisions
Technical Skills	The specialized knowledge and expertise required to perform specific tasks and use specific tools and programs associated with a particular job role