

# Skills Framework for Design

A Guide to Occupations and Skills



skillsfuture.sg

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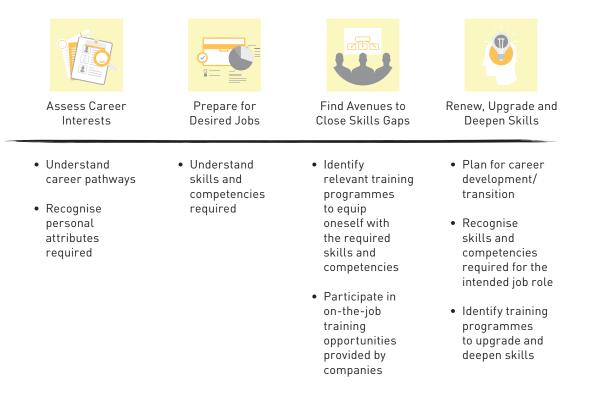
# About the Skills Framework

The Skills Framework is a SkillsFuture initiative developed for the Singapore workforce to promote skills mastery and lifelong learning. Jointly developed by SkillsFuture Singapore, Workforce Singapore and the DesignSingapore Council, together with employers, industry associations, education and training providers and unions, the Skills Framework for Design provides useful information on:



With the Skills Framework, individuals are equipped to make informed decisions about career choices, as well as take responsibility for skills upgrading and career planning.

Skills Upgrading and Mastery



# Charting Growth and Opportunities for Design



In an increasingly ideas-driven economy, those who can continually overcome existing paradigms to enable economic and social innovation will lead the way. Design is the driver of this process, sharpening economic competitiveness by creating new value and markets as well as offering a human-centred approach to tackling societal challenges. It also shapes our national identity, making Singapore both a liveable and loveable city.

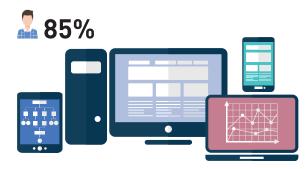
The city-state needs a workforce and citizens who are well-versed in design approaches and skills. A robust design education and training system is essential in equipping our people with the awareness and ability to use design to create a better future.

The role of a designer has changed drastically over the past decade. While previously hired to enhance the aesthetics of products and services, either in-house or as a design consultancy, design is now increasingly being sought by businesses to create strategic competitive advantages and respond faster to market opportunities. This is happening across industries ranging from technology companies to healthcare services, financial services, professional services and the public service.

Boundaries between disciplines are blurring as a result of industrial disruptions caused by the Fourth Industrial Revolution, fuelling demand for design across all sectors of the economy. This has opened up new opportunities and fields such as User Interface/User Experience (UI/UX) design, which is highly sought after as more services increasingly go digital.

# **Key Statistics**

In 2017, design services firms reported the three-year plans to...

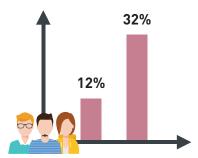


grow partnerships and diversify services (85% of respondents); targeting high growth areas in technology, analytics and digital transformation.

#### Between 2014 to 2016, non-design companies (with in-house design teams)...



had increased their revenue spend on design activities from 1.3% to 1.7%;



and had increased their placement of designers at the senior management level from 12% to 32%.

### Between 2017 to 2022, the number of design professionals...



is expected to grow from 44,400 to 57,400.

By 2022, for every 1 design job in design services firms...



there will be 1.8 design jobs in non-design companies. Technology companies, financial services and business consulting firms are key drivers of the demand for design talent.

### **Future Developments**



The fundamental value of a designer is to create solutions that connect with people rather than just the creation of images, products, or spaces alone. Today, more than ever before, design has expanded to the creation of services, systems, experiences and organisational transformation. It will continue to grow on this trajectory.

**Design As Catalyst:** Companies are embedding and integrating more designers together with engineers and developers to create value for the overall business, through processes that capitalise on their transdisciplinary expertise. As catalysts for value creation and to take on roles on a more strategic and managerial level, designers need to possess deep knowledge not only in design craft, but also in business and technology.

**Cultural and Organisational Transformation:** Organisations are increasingly fostering a more collaborative work mode to businesses, based on empathetic value creation processes that require consistent communication, training and advocacy of new cultural values (e.g. amongst stakeholders, customers and internal staff). Today, designers play an important role in facilitating the deployment of human-centred problem-solving approaches in shaping new organisation cultures and reflexes.

**System Approach to Complexities:** Businesses now recognise the value of design in optimising performance and experience, as technology becomes a greater enabler to navigate increasingly complex socio-political and business environments. This calls for designers to better understand cultural nuances, human psyches and relationships to be able to systematically deliver simple, thoughtful and useful experiences within complex systems and interfaces.

**Design for New Technological Platforms:** There is an increasing trend around delivering human-centric and immersive end-to-end experiences, as machines become more ubiquitous in our lives. Designers are expected to design for omni-channels and cross-platforms. This entails agility in acquiring knowledge, skills and experience and the capability to empathise, understand and create seamless, end-to-end solutions in a constantly changing technological landscape and new media.

**Sustainability and Ethics:** The discussion of ethics and the impact of design in a fast-paced, massive-outreach environment today have both user and business implications. As gatekeepers of ethical practices for people and the environment, designers must be critical and proficient in regulations governing data privacy, intellectual property, sustainability, diversity, inclusivity and accessibility.

### **Desired Attributes**

A career in the design sector provides diverse opportunities to individuals seeking rewarding and enriching careers. If you consider yourself an empathetic and creative thinker, doer and story-teller; possess the ability to deal with ambiguity, have an insatiable curiosity to understand how things work across industries; are active in side-gigs; and have a desire to transform people's lives, the design sector offers opportunities to develop your passion and abilities into a fulfilling and rewarding career.



#### Analytical

Enjoy analysing different data points and connect patterns to provide insights to solve problems.



#### Empathetic

Enjoy connecting with human values and the environment we are in, to inform and inspire design that is useful and user-friendly.



#### **Story-teller** Communicate and inspire audience to expand their mindsets on the value of design.



#### Transformative

Embrace uncertainty and prototypes possibilities to innovate businesses, organisations and communities.



#### Trans-disciplinary

Enjoy acquiring knowledge beyond one's area of study and synthesising knowledge from these multiple disciplines to guide decisions and solve problems.

### Skills in Demand

As the sector continues to transform, these are some examples of specific skills in demand now and in the near future. Those seeking successful careers in the design sector can set themselves apart by acquiring these skills.



**Business Model Innovation** 

Identify and capitalise on untapped areas of business opportunities by proposing and instituting innovative changes to existing business models.



**Content Development and Strategy** Brainstorm, ideate and utilise writing strategies and plans to maximise user engagement.



**Creative Entrepreneurship** Develop and inspire the creation of creative or intellectual capital to generate activities for business success.



#### Design Sustainability and Ethics Management

Create designs that consider the limitations, regulations and guidelines on intellectual property, sustainability, diversity, inclusivity and accessibility, aligning to behaviours and actions which are generally accepted in the profession.



#### **Empathetic Design**

Apply and drive empathetic-centred design thinking to better understand users' feelings and perceptions towards products and services, as well as the emotional tone of creative design work.



#### Interaction Design Practice

Develop digital and/or physical interactions across technology, products, space and services media to enhance relationships and engagement with users.



#### Systems Thinking

Identify, analyse and evaluate relationships among systems' parts, with the use of simulation tools and systems thinking techniques and frameworks to understand situations and drive change for improvements.



#### User Experience Design

Conceptualise and enhance the users' interactions and engagement with products and services by integrating elements of interaction design, information architecture, information design, visual interface design, user assistance design and user-centered design.



### FOR INDIVIDUALS

#### **Education and Career Guidance**

Education and Career Guidance (ECG) is about equipping students, as well as adults, with the necessary knowledge, skills and values to make informed education and career decisions. With the help of trained ECG counsellors, students will be exposed to a wide range of education and career options, and given the opportunities to make informed post-secondary education choices. Singaporeans in the workforce can benefit from career coaching, employability skills workshops and networking sessions through the Workforce Singapore (WSG) Career Centres and the Employment and Employability Institute (e2i).

#### **Enhanced Internships**

The Enhanced Internships are designed to provide students with a more meaningful internship experience through more structured learning and support at the workplace. Participating companies will work closely with the Institute of Technical Education (ITE) and polytechnics to deliver a positive and meaningful internship experience for their interns. The features of the Enhanced Internships include a baseline allowance of \$600 a month, structured training plan with clear learning outcomes, assigned mentors to provide guidance to interns and rotation to at least two departments per internship period.

#### SkillsFuture Credit

This initiative aims to encourage individuals to take ownership of skills development and lifelong learning. All Singaporeans aged 25 years and above will receive an opening credit of \$500 which will not expire.

#### SkillsFuture for Digital Workplace

SkillsFuture for Digital Workplace is structured as a two-day training programme that will equip Singaporeans with basic digital skills required at the workplace and in their daily lives.

#### **SkillsFuture Fellowships**

Monetary award of \$10,000 to recognise Singapore Citizens with deep skills, who are champions of lifelong learning, and committed to contributing to the skills development of others.

#### **SkillsFuture Study Awards**

A monetary award of \$5,000 for adults in their early and mid-career to develop and deepen their skills in future growth clusters. To stay ahead of the competition, designers need to deepen existing design skills and/or broaden complementary skills.

#### Initiatives and Schemes by:

SkillsFuture Singapore



### FOR INDIVIDUALS

#### SkillsFuture Mid-Career Enhanced Subsidy

Singaporeans aged 40 years and above will receive higher subsidies of up to 90% of course fees for over 8,000 SkillsFuture Singapore-supported courses and at least 90% of programme cost for Ministry of Education (MOE)-subsidised full-time and part-time courses.

#### **SkillsFuture Qualification Award**

This award recognises the efforts of Singapore Citizens in attaining Workforce Skills Qualifications (WSQ) full qualifications, which equip them with comprehensive and robust sets of skills to perform their jobs competently, pursue career progression and explore new job opportunities.

#### **SkillsFuture Series**

Targeted at Singaporeans who are keen to either gain a basic understanding or deepen their skills in eight emerging areas\*, the SkillsFuture Series comprises training programmes across three proficiency levels, namely Basic, Intermediate and Advanced. Adult learners of different skills proficiency and industry background can therefore benefit from the SkillsFuture Series. Individuals will receive 70-90% course fee subsidy depending on eligibility.

\*Eight emerging areas are: Data Analytics, Cyber Security, Advanced Manufacturing, Urban Solutions, Finance, Tech-enabled Services, Digital Media, Entrepreneurship.

#### DesignSingapore Scholarship

The DesignSingapore Scholarship is a full-service individual study grant aimed at grooming creative talent with the drive to push boundaries and a heart to serve Singapore, to become design leaders of the future. Scholarship holders also gain valuable industry exposure through mentorship and networking opportunities, as part of the DesignSingapore Associates Network.

#### Initiatives and Schemes by:

- SkillsFuture Singapore
- DesignSingapore Council



### FOR BOTH INDIVIDUALS AND EMPLOYERS

#### MySkillsFuture

MySkillsFuture is a one-stop online portal that enables Singaporeans to chart their own career and lifelong learning pathways, through access to industry information and tools to search for training programmes to broaden and deepen skills. It incorporates an integrated platform for users to access resources related to jobs, education and skills training.

#### SkillsFuture Earn and Learn Programme

A work-learn programme designed to give graduates from the Institute of Technical Education and polytechnics a head-start in careers related to their discipline of study. Suitable candidates will be matched with a job related to their field of study and undergo structured on-the-job training and mentorship in participating companies, allowing them to gain industry experience and attain an industry recognised certification concurrently.

#### P-Max

This is a Place-and-Train programme which matches job-seeking professionals, managers, executives and technicians (PMETs) to suitable positions in small and medium enterprises (SMEs), and assists SMEs to better recruit, train, manage and retain their newly-hired PMETs.

#### Professional Conversion Programmes (PCPs)

The PCP is a career conversion programme targeted at PMETs, including mid-career switchers, to undergo skills conversion and move into new occupations or sectors that have good prospects and opportunities for progression.

For the Creative sector, the PCPs include Digital Designer, Furniture/Industrial Designer, In-house Digital Communications, Digital Advertising and Programmatic Advertising.

#### Initiatives and Schemes by:

- SkillsFuture Singapore
- Workforce Singapore



### FOR BOTH INDIVIDUALS AND EMPLOYERS

#### **Career Matching Services**

WSG's Careers Connect and NTUC's e2i centres offer an expanded suite of career matching services tailored to jobseekers' needs.

Jobseekers can seek advice from professionals to guide them in their job search, as well as in their career planning and development.

Employers can receive recruitment advice to uncover new talent and find the right people for their business needs.

#### MyCareersFuture.sg

MyCareersFuture.sg is a portal which aims to provide Singaporean jobseekers with a fast and smart search service to match them with relevant jobs, based on the jobseekers' skills and competencies.

The portal enables Singaporeans to be more aware of the skills they possess, and connect them to relevant jobs based on their current skills and competencies. It also highlights jobs which are eligible for Government support through WSG's Adapt and Grow programmes.

#### **Career Support Programme (CSP)**

The Career Support Programme helps experienced Singapore Citizen Professionals, Managers, Executives and Technicians (PMETs), who have been unemployed or made redundant for six months or more, take on new jobs paying at least \$4,000 (\$3,600 in SMEs).

Companies can receive up to \$42,000 in salary support for up to 18 months when they hire eligible PMETs who are retrenched and/or unemployed for six months or more, in jobs that pay gross monthly salary of at least \$3,600 (for SMEs)/ \$4,000 (Non-SMEs).

#### **Career Trial**

Jobseekers can gain experience and confidence through a short-term career trial to be assessed for employment paying \$1,500 or more and receive training allowance and retention incentives.

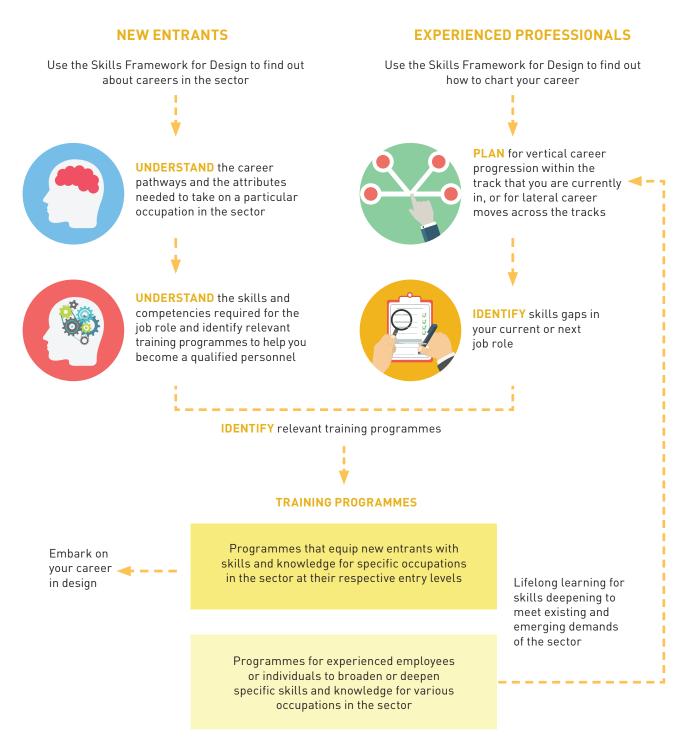
Employers can assess a jobseeker's job fit via a short-term career trial before offering formal employment for jobs paying \$1,500 or more. Companies can receive up to \$5,400 of salary support to hire eligible Singapore Citizens who have been unemployed for 6 months or more.

#### Initiatives and Schemes by:

Workforce Singapore

# Realise Your Potential -Take the Next Step Forward

Now that you have some idea of what a career in the design sector can offer and the available government initiatives and schemes to support your career goals, you are ready to take the next step!



For a list of training programmes available for the design sector, please visit: skillsfuture.sg/skills-framework/design

# Design Career Tracks





### Business

Roles within the design function that employ design principles and practices or propagate key design principles to help achieve organisational or business objectives

#### **Design Production**

Focus on the production stage of design output, ensuring design integrity is kept while managing production efficiency and economy

#### Design Project Management

Responsible for the resource management in the design development process

#### **Design Product Management**

Manage the planning, development and delivery of the design output, to ensure product success in the marketplace

#### **Transformation Design**

Facilitate the transformation of organisational culture through the adoption of design thinking and practices (relatively new track in the design sector)



### Roles that are focused on design craft mastery and propagation

#### **Design Craft**

Develop design and creative solutions across different sub-sectors (e.g. architecture, advertising, product design, etc.)

#### **Design Communication**

Focus on the crafting of creative and innovative communication materials across media and channels for different audiences

# Design Career Tracks





### Innovation

Roles that contribute at a strategic level, from the intersection of business, technology and design perspectives

#### **Design Research**

Collect and analyse data from users, community and culture to inform the design creation process, whether through qualitative or quantitative means

#### Service Design/Experience Design

Design products, services and processes for omni-channel engagement with users, to create culturally-relevant solutions, with a focus on the quality of user experience across all touch points

#### Strategy/Business Design

Apply the principles and practices of design (such as empathy and experience design) to help organisations strategise, innovate business models, as well as create new value and new forms of competitive advantage

### Technology

### Roles that integrate technology in exploring new design possibilities

#### Technology Application in Design

Study and apply new technologies in order to experiment and explore new possibilities in various areas of design

# Skills Map



BUSINESS

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DESIGN

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INNOVATION PAGE 53 - 70



TECHNOLOGY

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# Notes

# Business

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Head of Projects/Head of Products	31
Head of Transformation	33



### Design Coach/ Accelerator

#### Christian Teo OCBC Bank

#### INTEGRATING DESIGN SOLUTIONS TO INNOVATE BUSINESS

Christian's interest in 'design thinking' first started during his polytechnic days, when he was intrigued as to how the design process could impact businesses. This spurred him to further his studies - earning a Bachelor of Arts, with a double major in Sociology and Media & Communications - to complement his skillset in Graphic Design. After completing his studies, Christian jumped into the industry and has not looked back since.

Having worked in innovation consulting for close to four years, Christian now leads innovation projects with OCBC Bank's fintech and innovation unit, The Open Vault at OCBC, from start to finish – from defining problem statements and generating new ideas, to rapidly producing and testing prototypes of different solution designs, and eventually, commercialising new products and services. He says, "In my current role, I practise a customercentric approach to leveraging on technology, with a view to creating what we call the "Bank of the Future". As designers, we've been hardwired to balance form and function with print and digital media. In the realm of corporate innovation, this philosophy shifts to encompass new services, strategies and process designs."

Christian hopes to become a 'conceptual designer' of sorts - someone who is able to innovate out of any medium. Critical thinking, logical reasoning and environmental awareness are key skills which he felt are important to achieve this goal. He also believes that these skills are "A key part of my role is playing the integrator and harnessing that ability to engage people across teams and roles to believe in the innovation vision."

crucial to helping any young professional grow. Christian is positive that the Skills Framework will provide guidance on how different learnings and experiences may fit together, and offer new ideas on how he can take his career further.

One of the biggest challenges in his career is in understanding the intricacies of a new innovation landscape. When he first joined the bank, he had to quickly grasp fundamental finance concepts, understand the business and deepen his knowledge of technologies, which he originally thought he had a hold on. Fortunately, a close-knit team was there to help, along with opportunities to learn from a variety of different projects and interactions with people from all walks of the business.

He says, "As designers, we learn early on the value of concept and mind-mapping to unravel complexity and seek connections. While this was taxing considering the vast amount of new information, the approach proved to be especially useful and I started to get the hang of picking up new concepts faster."

Christian sees a demand for innovative skills in job roles that did not exist years ago, such as Artificial Intelligence Designers and Virtual Reality Designers. Also, because of the availability and comprehensiveness of the Skills Framework career map, he feels that "the Skills Framework is able to provide me with a macro view of the landscape where my skills can best be plugged."

### **Design Facilitator**

#### **JOB ROLE DESCRIPTION**

The Design Facilitator assists in imparting design thinking concepts to internal stakeholders in the organisation. He/She implements change management processes and assists stakeholders in executing design thinking within teams and departments. He engages leaders regarding requirements for delivering design thinking strategies and works cross-functionally with internal stakeholders and external partners.

The Design Facilitator demonstrates strong stakeholder management and interpersonal skills when engaging with different individuals in the organisation. He is a creative idealist who is able to imagine various innovative methods and processes for improving the status quo. Lastly, he is logical in analysing the needs of users and can recommend suitable improvements to current methods and processes.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Deliver design thinking solutions	<ul> <li>Assess the current state of root causes of organisational problems</li> <li>Organise workshops with agendas that promote design thinking</li> <li>Lead teams in design thinking ideation across the organisation</li> <li>Assist stakeholders in executing design thinking within teams and departments</li> </ul>
CRITICAL WORK FUNCTIONS AND KEY TASKS	Ű	<ul> <li>Implement change management processes</li> <li>Investigate new solutions and innovative ways for enhancing organisational practices</li> <li>Identify levers for accelerating organisational changes and transformation</li> </ul>
	Deepen relationships with stakeholders	<ul> <li>Work cross-functionally with internal stakeholders and external partners</li> <li>Engage leaders regarding requirements for delivering design thinking strategies</li> <li>Assist the implementation of transformational initiatives for the organisation</li> </ul>

### **Design Facilitator**

TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETE	NCIES (TOP 5)	
	Aesthetic and Design Sensibility	Level 3	Communication	Intermediate
	Business Model Innovation	Level 3	Problem Solving	Intermediate
	Business Negotiation	Level 3	Interpersonal Skills	Advanced
	Business Presentation Delivery	Level 3	Creative Thinking	Intermediate
	Conceptual Thinking	Level 3	Resource Management	Intermediate
	Creative Entrepreneurship	Level 4		
	Critical Thinking	Level 3		
	Cultural Sensitivity for Design	Level 3		
SKILLS & COMPETENCIES	Data and Information Visualisation	Level 3		
	Design Thinking Practice	Level 4		
	Digital and Physical Prototyping	Level 2		
	Emerging Technology Synthesis	Level 3		
	Empathetic Design	Level 3		
	Facilitation	Level 4		
	Imagination and Exploration	Level 3		
	Narrative Design	Level 3		
	Stakeholder Management	Level 3		
	Systems Thinking	Level 3		

### **Design Production Manager**

#### **JOB ROLE DESCRIPTION**

The Design Production Manager is accountable for managing design production projects. He/She supervises project partners, teams and other relevant stakeholders during the development of design prototypes and recommends adjustments to enhance the design of production prototypes. He builds business relationships with stakeholders to determine design project needs, and works to mitigate design production risks for stakeholders. As the team lead, he sets goals and directions for the staff under his charge.

The Design Production Manager possesses strong legal and compliance knowledge for guiding project teams to meet the design needs of each product. He may work long hours to execute projects, which includes extensive collaboration with stakeholders, reviewing work done, and providing guidance to the team. He has excellent time management skills and is able to prioritise tasks. He also oversees quality assurance processes in order to ensure maximum functionality of the product. He keeps abreast of the latest developments in the design industry, and understands how the industry is evolving creatively and technically.

CRITICAL WORK FUNCTIONS Administer design production projects	KEYTASKS	
	3 1	<ul> <li>Ascertain the needs of project partners and project team members in collaboration with relevant stakeholders</li> </ul>
		Communicate updates and project status to stakeholders
		<ul> <li>Recommend changes to design production specifications and contracts when discrepancies in products arise</li> </ul>
		<ul> <li>Supervise project partners, teams and other stakeholders during prototype design</li> </ul>
CRITICAL WORK FUNCTIONS AND		<ul> <li>Finalise production specifications with accurate and complete documentation</li> </ul>
KEY TASKS Main		<ul> <li>Confirm protocols, data formats, templates and standards for design prototypes between relevant project stakeholders</li> </ul>
		• Provide stakeholders with information for design production review
		<ul> <li>Provide stakeholders with information for design production review</li> <li>Analyse prototypes to identify further adjustments to production</li> </ul>
		• Analyse prototypes to identify further adjustments to production
	Influence organisational development	<ul> <li>Analyse prototypes to identify further adjustments to production</li> <li>Assess design production risks for stakeholders</li> <li>Implement editing and design decisions to enhance the quality of design</li> </ul>

### **Design Production Manager**

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETEN	ICIES (TOP 5)
	Aesthetic and Design Sensibility	Level 3	Leadership	Advanced
	Business Negotiation	Level 3	Communication	Advanced
	Business Risk Management	Level 4	Decision Making	Advanced
	Conceptual Thinking	Level 3	Managing Diversity	Advanced
	Contract Development and Management	Level 4	Interpersonal Skills	Advanced
	Critical Thinking	Level 4		
	Data Analysis and Interpretation	Level 3		
	Design Creation and Development	Level 4		
	Design Standards and Specification	Level 4		
SKILLS &	Design Sustainability and Ethics Management	Level 3		
COMPETENCIES	Design Thinking Practice	Level 4		
	Digital and Physical Prototyping	Level 4		
	Emerging Technology Synthesis	Level 3		
	Form Giving	Level 3		
	Imagination and Exploration	Level 3		
	Material Studies and Production Processes	Level 4		
	Product and Production Engineering	Level 4		
	Project Management	Level 4		
	Stakeholder Management	Level 4		
	Systems Thinking	Level 3		
	Technical Drawing	Level 3		
	User Testing and Usability Testing	Level 4		

### **Design Project Manager**

#### **JOB ROLE DESCRIPTION**

The Design Project Manager plans and implements design projects. He/She defines project timelines and activities in collaboration with stakeholders, and resolves changes in scope, issues and risks that may impede project implementation. As a manager, he is responsible for assigning talent and resources to the most appropriate projects. He also provides coaching to improve the performance of his team members.

The Design Project Manager guides a team to meet the overall objectives of projects. He may work long hours to execute projects, which includes extensive collaboration with stakeholders, reviewing work done, and providing guidance to the team. He possesses excellent time management skills and is able to prioritise tasks. Lastly, he is also familiar with quality assurance practices to ensure maximum functionality of the product.

	CRITICAL WORK FUNCTIONS	KEYTASKS
Develop project plans	Develop project plans	<ul> <li>Establish project timelines, activities, resource plans and cost estimates</li> <li>Clarify project scopes and deliverables with stakeholders</li> </ul>
	<ul> <li>Establish project requirements to determine human resources, information, materials and technology needed</li> </ul>	
	Implement design projects	<ul> <li>Track projects against established schedules, budget, manpower and technical quality targets</li> </ul>
CRITICAL WORK FUNCTIONS AND		<ul> <li>Document changes in scope, and issues and risks that affect project implementation</li> </ul>
KEY TASKS		• Recommend schedule changes and adjustments to cost and resources
	Manage project resources	<ul> <li>Assign talent and resources to appropriate projects</li> </ul>
		<ul> <li>Coordinate capabilities, workload, and resources across multiple projects</li> </ul>
		• Develop resource plans using resource scheduling tools
		Track staff skillsets and certifications
	Influence organisational	• Provide feedback to direct reports and junior team members
development	• Provide on-the-job training to direct reports and junior team members	

### Design Project Manager

	TECHNICAL SKILLS AND COMPETENCIES		COMPETENCIES GENERIC SKILLS AND COMPETENCIES (TOP	
	Aesthetic and Design Sensibility	Level 3	Communication	Advanced
	Brand Management	Level 4	Decision Making	Intermediate
	Business Negotiation	Level 3	Problem Solving	Intermediate
	Business Presentation Delivery	Level 3	Resource Management	Intermediate
	Business Risk Management	Level 4	Service Orientation	Intermediate
	Change Management	Level 4		
	Conceptual Thinking	Level 3		
	Contract Development and Management	Level 4		
SKILLS &	Critical Thinking	Level 4		
COMPETENCIES	Data Analysis and Interpretation	Level 3		
	Design Sustainability and Ethics Management	Level 3		
	Design Thinking Practice	Level 4		
	Emerging Technology Synthesis	Level 3		
	Imagination and Exploration	Level 4	_	
	Product Management	Level 4		
	Project Management	Level 4		
	Stakeholder Management	Level 4		
	Systems Thinking	Level 3		
	User Testing and Usability Testing	Level 4		

### **Product Manager**

#### **JOB ROLE DESCRIPTION**

The Product Manager is in charge of design products and oversees their life cycles. He/She champions product development through ideation, prototyping and delivery. He ascertains commercial objectives of projects, and integrates key market feedback into the product ideation and development process in collaboration with product owners and other stakeholders. He draws on his product knowledge and technical expertise to generate innovative ideas to improve customer experience. As a team lead, he provides coaching to enhance the capabilities of his team.

An articulate and influential communicator, the Product Manager works well in a team environment and can effectively manage internal and external stakeholders to achieve product success. He is highly analytical, able to analyse the needs of users and recommend improvements to product offerings.

	CRITICAL WORK FUNCTIONS	KEYTASKS
Driv	Drive product development	<ul> <li>Identify the need for new products by understanding product owners' requirements</li> </ul>
		<ul> <li>Validate the need for design products through conceptualisation and concept testing</li> </ul>
		<ul> <li>Manage products through their lifecycles from conceptualisation to delivery</li> </ul>
		<ul> <li>Evaluate product functionalities and performance based on market feedback</li> </ul>
		<ul> <li>Integrate market feedback into the product ideation and development process in collaboration with product owners and other stakeholders</li> </ul>
	Manage projects	Ascertain commercial objectives of projects
CRITICAL WORK FUNCTIONS AND		• Develop project timelines and resourcing plans
KEY TASKS		• Communicate project objectives to obtain buy-in from stakeholders
		<ul> <li>Lead commercial discussions and negotiations</li> </ul>
		<ul> <li>Drive usage of project management tools and processes</li> </ul>
	Develop business	<ul> <li>Implement product go-to-market strategies</li> </ul>
	opportunities	<ul> <li>Analyse reports on product revenue and profitability</li> </ul>
		Generate innovative ideas to improve customer experience
		Drive volume and value from specific markets
		<ul> <li>Develop new business opportunities in partnership with internal stakeholders</li> </ul>
	Influence organisational development	• Provide feedback to direct reports and junior team members
		• Provide on-the-job training to direct reports and junior team members

### **Product Manager**

	TECHNICAL SKILLS AND COMPETENCIE	S	GENERIC SKILLS AND COMPETE	NCIES (TOP 5)
	Aesthetic and Design Sensibility	Level 4	Problem Solving	Advanced
	Behavioural Economics in Design	Level 4	Computational Thinking	Intermediate
	Brand Management	Level 5	Sense Making	Advanced
	Business Model Innovation	Level 4	Communication	Advanced
	Business Negotiation	Level 3	Teamwork	Intermediate
	Business Presentation Delivery	Level 3		
	Conceptual Thinking	Level 3		
	Critical Thinking	Level 4		
	Cultural Sensitivity for Design	Level 3		
	Data Analysis and Interpretation	Level 4		
	Design Standards and Specification	Level 4		
SKILLS &	Design Sustainability and Ethics Management	Level 3		
COMPETENCIES	Design Thinking Practice	Level 4		
	Emerging Technology Synthesis	Level 4		
	Empathetic Design	Level 4		
	Imagination and Exploration	Level 4		
	Intellectual Property Management	Level 4		
	Market Research	Level 4		
	Product Management	Level 5		
	Project Management	Level 4		
	Proposal Writing Development	Level 4		
	Scenario and Strategic Planning	Level 4	_	
	Stakeholder Management	Level 4		
	Systems Thinking	Level 3		
	Trend Forecasting	Level 4		
	User Testing and Usability Testing	Level 4		

### **Design Coach/Design Accelerator**

#### **JOB ROLE DESCRIPTION**

The Design Coach/Design Accelerator implements design thinking in the organisation. He/She leads design thinking induction across the organisation, and uncovers opportunities for improving workforce productivity and efficiency. He establishes effective working relationships and clear lines of communication with internal and external stakeholders. As a team lead, he sets goals and direction for staff under his charge.

The Design Coach/Design Accelerator possesses strong communication and stakeholder management skills. He is a creative idealist who can impart new methods and ideas to others. In addition, he works well in a team environment and can effectively manage stakeholders. Lastly, he can analyse the needs of users logically and recommend suitable improvements to current methods and processes.

	CRITICAL WORK FUNCTIONS	KEYTASKS
Deliver design thinking solutions	<ul> <li>Define organisational problems and challenges by leading stakeholders through problem-solving activities</li> </ul>	
		<ul> <li>Develop appropriate design thinking strategies and frameworks for organisation</li> </ul>
		• Lead design thinking induction across organisation
		<ul> <li>Engage stakeholders in promoting design thinking across the organisation</li> </ul>
CRITICAL WORK FUNCTIONS AND	• Oversee the implementation of change management processes in the organisation	
	• Uncover opportunities for improving workforce productivity and efficiency	
KEY TASKS		<ul> <li>Provide recommendations for addressing roadblocks to implementing change management initiatives</li> </ul>
	Deepen relationships with stakeholders	<ul> <li>Establish effective working relationships and clear lines of communication with internal and external stakeholders</li> </ul>
		<ul> <li>Partner with stakeholders for analysing potential change management opportunities</li> </ul>
		<ul> <li>Provide subject matter expertise in the development of long-term plans involving strategy development</li> </ul>
	Influence organisational development	<ul> <li>Provide feedback to direct reports and junior team members</li> <li>Provide on-the-job training to direct reports and junior team members</li> </ul>

### Design Coach/Design Accelerator

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP	
	Aesthetic and Design Sensibility	Level 4	Communication	Advanced
	Business Model Innovation	Level 4	Interpersonal Skills	Advanced
	Business Negotiation	Level 4	Decision Making	Intermediate
	Business Presentation Delivery	Level 4	Problem Solving	Advanced
	Change Management	Level 4	Sense Making	Intermediate
	Conceptual Thinking	Level 4		
	Creative Entrepreneurship	Level 5		
	Critical Thinking	Level 4		
	Cultural Sensitivity for Design	Level 3		
	Data and Information Visualisation	Level 4		
	Design Creation and Development	Level 4		
SKILLS &	Design Thinking Practice	Level 5		
COMPETENCIES	Digital and Physical Prototyping	Level 3		
	Emerging Technology Synthesis	Level 4		
	Empathetic Design	Level 4		
	Facilitation	Level 5		
	Imagination and Exploration	Level 4		
	Narrative Design	Level 4	-	
	Project Management	Level 4		
	Qualitative Research	Level 4		
	Scenario and Strategic Planning	Level 4		
	Stakeholder Management	Level 4	-	
	Systems Thinking	Level 4		
	User Experience Design	Level 4	-	
	User Testing and Usability Testing	Level 4		

### **Head of Design Production**

#### **JOB ROLE DESCRIPTION**

The Head of Design Production leads the design production team to meet the goals and objectives of product plans. He/She possesses a strong grasp of technical knowledge for negotiating agreements and contracts with project partners before commencing design production projects. He develops strategies to mitigate any risks identified during the design production process. He leads teams and nurtures staff by helping them to develop capabilities for reaching their potential.

The Head of Design Production is able to engage with stakeholders in all levels of the organisation and can manage multiple priorities. He possesses sound knowledge of technical and traditional art processes as well as production pipelines. In addition, his excellent analytical and problem-solving capabilities enables him to anticipate customer needs and enhance the design of the organisation's products. Lastly, he possesses strong leadership and mentoring skills for developing his team.

	CRITICAL WORK FUNCTIONS	5 KEY TASKS		
	Administer design production projects	Negotiate agreements with project partners		
		<ul> <li>Provide technical expertise to project partners and teams during the implementation of projects</li> </ul>		
		<ul> <li>Establish processes and systems for ensuring production quality and consistency with project partners</li> </ul>		
		<ul> <li>Collaborate with stakeholders to translate product plans to design production needs</li> </ul>		
		<ul> <li>Oversee the production process for projects to ensure all parameters in the design production plan are met</li> </ul>		
CRITICAL WORK FUNCTIONS AND KEY TASKS	Maintain design production quality	• Approve all final design production details, samples and prototypes		
		<ul> <li>Provide justification for the features and benefits of the recommended design production solutions</li> </ul>		
		<ul> <li>Communicate the impact on design production quality when implementing the recommended design production solutions</li> </ul>		
		<ul> <li>Develop strategies for mitigating design production risks</li> </ul>		
		<ul> <li>Assess technical and design production solutions against established Key Performance Indicators</li> </ul>		
	Influence organisational development	Develop staff through capability development and coaching		
		• Develop on-the-job training programmes		
		• Facilitate hiring decisions for the organisation		
		• Lead change management initiatives		
		<ul> <li>Address complaints and key concerns impacting staff morale and performance</li> </ul>		

### Head of Design Production

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Aesthetic and Design Sensibility	Level 4	Leadership	Advanced
	Business Negotiation	Level 4	Communication	Advanced
	Business Risk Management	Level 5	Decision Making	Advanced
	Conceptual Thinking	Level 4	Managing Diversity	Advanced
	Contract Development and Management	Level 5	Interpersonal Skills	Advanced
	Critical Thinking	Level 5		
	Data Analysis and Interpretation	Level 4		
	Design Creation and Development	Level 5		
	Design Standards and Specification	Level 5		
SKILLS &	Design Sustainability and Ethics Management	Level 4		
COMPETENCIES	Design Thinking Practice	Level 5		
	Digital and Physical Prototyping	Level 5		
	Emerging Technology Synthesis	Level 4		
	Form Giving	Level 4		
	Imagination and Exploration	Level 4		
	Material Studies and Production Processes	Level 5		
	Product and Production Engineering	Level 5		
	Project Management	Level 5		
	Stakeholder Management	Level 5		
	Systems Thinking	Level 4		
	Technical Drawing	Level 4		
	User Testing and Usability Testing	Level 5		

### Head of Projects/Head of Products

#### **JOB ROLE DESCRIPTION**

The Head of Projects/Head of Products is responsible for the implementation and achievement of overall design project objectives. He/She collaborates with internal and external stakeholders on the creation of project plans and critical paths, and oversees changes in project scope, as well as issues and risks that affect project and/or product delivery and implementation. He also pilots new lines of revenue for the organisation. He develops strategies for maximising contribution margins and billable utilisation, and he develops staff through capability development and coaching.

The Head of Projects/Head of Products possesses strong management and collaboration skills and can effectively liaise across various project teams. He is able to guide his project teams to successfully meet overall project objectives. He has excellent time management skills and is able to prioritise tasks. In addition, he possesses strong leadership and mentoring skills for developing his project teams.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Develop project plans	• Partner with stakeholders on creation of project plans and critical paths
		<ul> <li>Gain consensus from stakeholders on project goals, objectives and deliverables</li> </ul>
		<ul> <li>Provide overall direction for multiple projects with different timelines across the organisation</li> </ul>
		• Direct appropriate resources and methodologies to various projects across the organisation
	Implement design projects	• Lead project presentations to internal and external stakeholders
		<ul> <li>Oversee changes in project scope, issues and risks that affect project and/or product delivery and implementation</li> </ul>
		<ul> <li>Resolve issues encountered during project implementation in collaboration with stakeholders</li> </ul>
	Manage project resources	<ul> <li>Develop frameworks and processes for identifying resource needs and assigning resources</li> </ul>
CRITICAL WORK		<ul> <li>Develop strategies for maximising contribution margins and billable utilisation</li> </ul>
FUNCTIONS AND Key tasks		• Drive the resolution of project staffing issues
		<ul> <li>Analyse staffing needs based on project requirements</li> </ul>
	Drive product development	<ul> <li>Innovate new products or evolve existing products in collaboration with other stakeholders</li> </ul>
		• Pilot new lines of revenue for the organisation
		<ul> <li>Provide guidance on issues related to product design, development, and deployment, for product portfolios</li> </ul>
		• Oversee the development of product portfolios
		<ul> <li>Design monetisation strategies to scale products into revenue-drivers for the organisation</li> </ul>
	Influence organisational development	• Develop staff through capability development and coaching
		• Develop on-the-job training programmes
		• Facilitate hiring decisions for the organisation
		Lead change management initiatives
		<ul> <li>Address complaints and key concerns impacting staff morale and performance</li> </ul>

### Head of Projects/Head of Products

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP	
	Aesthetic and Design Sensibility	Level 4	Decision Making	Advanced
	Behavioural Economics in Design	Level 5	Leadership	Advanced
	Business Model Innovation	Level 4	Developing People	Advanced
	Business Negotiation	Level 4	Resource Management	Advanced
	Business Presentation Delivery	Level 4	Communication	Advanced
	Business Risk Management	Level 5		
	Change Management	Level 5		
	Conceptual Thinking	Level 4		
	Contract Development and Management	Level 5		
	Critical Thinking	Level 5		
	Cultural Sensitivity for Design	Level 4		
	Data Analysis and Interpretation	Level 5		
	Design Standards and Specification	Level 5		
SKILLS & COMPETENCIES	Design Sustainability and Ethics Management	Level 4		
	Design Thinking Practice	Level 5		
	Emerging Technology Synthesis	Level 4		
	Empathetic Design	Level 5		
	Imagination and Exploration	Level 5		
	Intellectual Property Management	Level 4		
	Market Research	Level 5		
	Product Management	Level 6		
	Project Management	Level 5		
	Proposal Writing Development	Level 5		
	Scenario and Strategic Planning	Level 5		
	Stakeholder Management	Level 5		
	Systems Thinking	Level 4		
	Trend Forecasting	Level 5		
	User Testing and Usability Testing	Level 4		

### **Head of Transformation**

#### **JOB ROLE DESCRIPTION**

The Head of Transformation oversees the delivery of transformation programmes for the organisation and ensures that staff engagement is maintained throughout the transformation process. He/She establishes desired change outcomes for the organisation and designs organisational-wide change management programmes. He also establishes relationships with stakeholders in order to help them overcome barriers to change. As an experienced leader in the organisation, he uncovers skills gaps and recommends development interventions to increase the competence of his team members.

The Head of Transformation possesses exceptional communication, analytical and organisational skills. He uses his expertise in facilitation to assist stakeholders in handling changing environments and priorities. He is able to develop creative solutions for overcoming organisational challenges and demonstrates deep business acumen in facilitating business transformation.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Deliver design thinking solutions	<ul> <li>Develop predictive models for resolving organisational challenges in collaboration with stakeholders</li> </ul>
		• Develop suitable business transformation strategies for responding to internal and external drivers of change
		• Oversee the implementation of organisational development processes for employee engagement, systems thinking and team development
		• Lead the adoption of new operating models, methods, processes, tools and metrics
CRITICAL WORK FUNCTIONS AND KEY TASKS	Facilitate change management	• Establish desired change outcomes for the organisation
		<ul> <li>Challenge existing organisational practices and conventions</li> </ul>
		<ul> <li>Instil a discipline of process change and change management across the organisation</li> </ul>
	Deepen relationships with stakeholders	• Eradicate internal barriers and bureaucracy by integrating teams
		• Lead engagement with stakeholders on overcoming barriers to change
		• Mentor leaders throughout transformational changes and journeys
	Influence organisational development	• Develop staff through capability development and coaching
		• Develop on-the-job training programmes
		• Facilitate hiring decisions for the organisation
		Lead change management initiatives
		<ul> <li>Address complaints and key concerns impacting staff morale and performance</li> </ul>

### Head of Transformation

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Business Model Innovation	Level 5	Decision Making	Advanced
	Business Negotiation	Level 5	Leadership	Advanced
	Business Presentation Delivery	Level 5	Problem Solving	Advanced
	Change Management	Level 5	Sense Making	Advanced
	Conceptual Thinking	Level 5	Creative Thinking	Advanced
	Creative Entrepreneurship	Level 6		
	Critical Thinking	Level 5		
	Cultural Sensitivity for Design	Level 4		
	Data and Information Visualisation	Level 5		
	Design Creation and Development	Level 5		
	Design Thinking Practice	Level 6		
SKILLS & COMPETENCIES	Emerging Technology Synthesis	Level 5		
	Empathetic Design	Level 5		
	Facilitation	Level 5		
	Imagination and Exploration	Level 5		
	Project Management	Level 5		
	Proposal Writing Development	Level 5		
	Qualitative Research	Level 5		
	Scenario and Strategic Planning	Level 5		
	Stakeholder Management	Level 5		
	Systems Thinking	Level 5		
	Trend Forecasting	Level 5		
	User Experience Design	Level 5		
	User Testing and Usability Testing	Level 5		

# Design

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#### **Co-Founder and CEO**

#### Prasoon Kumar billionBricks

#### ERADICATING HOMELESSNESS AND INSPIRING HOPE WITH DESIGN

Prasoon is an urban planner and architect by profession with over 10 years of experience in design firms across Asia and America. He believes that design encompasses more than aesthetics, and that good design can solve some of today's most pressing global problems.

He blended his passion with compassion to co-found billionBricks, a non-profit organisation that attempts to eradicate the issue of homelessness by designing scalable and sustainable shelters for the homeless and vulnerable across the globe. billionBricks uses design and technology as its tools to innovate shelter and infrastructure solutions for the homeless and vulnerable. One of its innovations is an insulated tent that can be used as an emergency shelter to save the lives of homeless people during extreme weather conditions.

Prasoon's belief that good design can save lives was cemented when he witnessed the ordeals of homeless people first-hand, following the aftermath of a devasting earthquake in Nepal in 2015. His company set up 120 tents to shelter some of the homeless families there, and this was where he truly experienced how life-changing a "simple tent" could be to the homeless.

This was further reinforced when he met a homeless woman with a young child who had lived their entire lives on the streets, before they finally made a home out of the tent that they were given. "We can never fully understand "Design professionals need to understand the impact and implications that their work can have on society. Don't just search for better pay. Find meaning and fulfilment in what you do."

how much a small gesture can mean to someone, and this pushes us to do better - to help the millions of people who need these support systems."

He urges aspiring entrepreneurs to step out and pursue business ventures that are built on their passions. This is especially so with the Skills Framework in place, as professionals can use it as a roadmap towards learning the skills they need, so they can succeed in their ambitions. "I wasted precious years following a fixed academic route to success. This delayed the formation of billionBricks, where I could have helped more homeless people. Don't worry about money or financial abilities, because that will all fall in place once you follow your passion."

He believes that innate passion, combined with the direction provided by the Skills Framework, can guide professionals and aspiring creatives towards successful careers and ventures. Prasoon says, "The Skills Framework provides a helpful career map that others can use as a guide for acquiring the skills and abilities necessary to succeed in this line."

Prasoon also advises up-and-coming professionals to acquire and build the attributes of confidence and business integrity. He says, "Design professionals need to understand the impact and implications that their work can have on society. Don't just search for better pay. Find meaning and fulfilment in what you do."

#### Designer

#### **JOB ROLE DESCRIPTION**

The Designer is responsible for all phases of design projects and ascertains the feasibility of implementing new products and services for the organisation. He/She executes research to gather data and translates research insights into design outcomes. He uncovers new design ideas, conducts feasibility tests on prototypes and communicates results of design tests and project implementation.

The Designer works in a team. He is encouraged to uncover the latest trends in the industry and develop deep business acumen to meet the needs of the organisation. He possesses mastery of design fundamentals and technical skills to execute design concepts required for products and services. He is able to work on multiple projects concurrently, and deliver on expectations within tight deadlines.

He may specialise as an Architect, Landscape Architect/Landscape Designer, Interior Designer, Fashion Designer, Product Designer, Furniture Designer, Graphic Designer and/or Interaction Designer, etc.

	CRITICAL WORK FUNCTIONS	KEYTASKS
CRITICAL WORK FUNCTIONS AND KEY TASKS	Deliver design output	<ul> <li>Generate ideas for new design concepts and prototypes</li> <li>Produce designs and test specifications for new ideas</li> <li>Administer experiments for testing the feasibility of prototypes</li> <li>Communicate outcomes of design tests and project implementation</li> <li>Prepare design plans and specification documents for submission</li> <li>Prepare communication materials and samples for production</li> </ul>
	Perform design intelligence for design projects	<ul> <li>Execute primary and secondary research for data gathering</li> <li>Participate in design workshops for insights gathering</li> <li>Consolidate research findings for report preparation</li> <li>Prepare research reports for circulation to stakeholders</li> <li>Prepare design visualisation for communicating research outcomes</li> </ul>

### Designer

	TECHNICAL SKILLS AND COMPETENCI	ES	GENERIC SKILLS AND COMPETENCIES (TOP 5	
	Aesthetic and Design Sensibility	Level 3	Creative Thinking	Intermediate
	Business Presentation Delivery	Level 3	Problem Solving	Intermediate
	Conceptual Thinking	Level 3	Sense Making	Basic
	Critical Thinking	Level 3	Communication	Intermediate
	Cultural Sensitivity for Design	Level 3	Teamwork	Basic
	Data Analysis and Interpretation	Level 2		
	Design Creation and Development	Level 3		
	Design Sketching	Level 3		
	Design Standards and Specification	Level 3		
	Design Sustainability and Ethics Management	Level 3		
SKILLS &	Design Thinking Practice	Level 3		
COMPETENCIES	Digital and Physical Prototyping	Level 3		
	Empathetic Design	Level 3		
	Form Giving	Level 3		
	Imagination and Exploration	Level 3		
	Intellectual Property Management	Level 2		
	Material Studies and Production Processes	Level 3		
	Narrative Design	Level 2		
	Product and Production Engineering	Level 3		
	Systems Thinking	Level 3		
	Technical Drawing	Level 3		
	User Experience Design	Level 3		
	Visual Communication	Level 3		

### Visualiser/Storyteller

#### **JOB ROLE DESCRIPTION**

The Visualiser/Storyteller creates design concept visualisations in various formats, depending on the context and requirements of projects. He/She conducts research to uncover new methods of visual delivery and communicates data-driven insights and recommendations to various stakeholders. He also visualises new design ideas by executing sketch prototypes and mock-ups for the development of designs.

The Visualiser/Storyteller possesses strong mastery in either hand-drawing, prototyping of physical prototypes, storyboarding, two-dimensional (2D) and three-dimensional (3D) modelling and rendering, hardware tinkering, or videography and animation, and can visualise concepts in their forms as intended by the designer. In addition, he demonstrates stakeholder management skills in partnering internal stakeholders to develop quality creative solutions that meet business objectives and goals.

He may specialise as a Renderer, Graphic Designer, Multimedia Artist, Commercial Artist, Photographer, Videographer, 2D/3D Visualiser, Creative Visualiser and/or Data Visualiser, etc.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Visualise designs	<ul> <li>Translate accurate visualisations from design concepts based on communicated requirements</li> </ul>
		<ul> <li>Execute sketch prototypes, visualisations and mock-ups for design development</li> </ul>
CRITICAL WORK		<ul> <li>Create three-dimensional (3D) models from architectural plans, rough sketches and/or real-life objects using special rendering software</li> </ul>
		• Create visualisations and storyboards of user journeys
		<ul> <li>Interpret illustrations, computer-aided design files, and/or other modelling data, as specified within projects</li> </ul>
FUNCTIONS AND KEY TASKS		<ul> <li>Convert data sets from computer-aided designs or other 3D modelling packages</li> </ul>
	Enhance design work	• Develop new methods for prototype modelling
		<ul> <li>Conduct research on competitors' projects and market trends</li> </ul>
		<ul> <li>Incorporate feedback from previous iterations of designs into subsequent mock-ups and future projects</li> </ul>
	Report insights	Create engaging information graphics for stakeholders
		<ul> <li>Translate quantitative and qualitative data into meaningful reports and recommendations</li> </ul>
		• Communicate data-driven insights and recommendations to stakeholders

## Visualiser/Storyteller

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Aesthetic and Design Sensibility	Level 3	Communication	Advanced
	Brand Management	Level 3	Creative Thinking	Advanced
	Business Presentation Delivery	Level 4	Problem Solving	Advanced
	Conceptual Thinking	Level 3	Interpersonal Skills	Intermediate
	Content Development and Strategy	Level 3	Transdisciplinary Thinking	Basic
	Cultural Sensitivity for Design	Level 3		
	Data and Information Visualisation	Level 4		
KILLS & COMPETENCIES	Design Creation and Development	Level 3		
	Design Sketching	Level 4		
	Design Standards and Specification	Level 3		
	Digital and Physical Prototyping	Level 2		
	Empathetic Design	Level 3		
	Imagination and Exploration	Level 3		
	Narrative Design	Level 4		
	Technical Drawing	Level 4		
	Visual Communication	Level 4		

#### **Content Writer**

#### **JOB ROLE DESCRIPTION**

The Content Writer plans, writes and coordinates content that conveys persuasive points to readers. He/She works in close partnership with various stakeholders to brainstorm ideas and concepts in various media forms, and ensures accuracy and consistency in language, style and tone. He also keeps abreast of competitors' products and industry trends to develop appropriate content for the organisation.

A creative and adaptable individual, the Content Writer is able to devise innovative means of delivering content. He is also proactive in continually researching and building capability in content writing. In addition, he demonstrates strong interpersonal and stakeholder management skills in collaborating with various teams on design and art. He is culturally sensitive, ensuring content appropriateness for multi-cultural audiences.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Develop content strategies for	• Create appropriate content for brands' designated audiences
	projects	<ul> <li>Identify project requirements through the interpretation of copywriting briefs</li> </ul>
CRITICAL WORK FUNCTIONS AND		• Design slogans and taglines for marketing campaigns
		<ul> <li>Consult business stakeholders to clarify requirements and prepare copywriting briefs</li> </ul>
		• Keep abreast of competitors' products and industry trends
		<ul> <li>Conduct editorial reviews to ensure accuracy and consistency in language, style and tone</li> </ul>
KEY TASKS		<ul> <li>Revise content to accommodate requests by internal and external stakeholders</li> </ul>
		• Establish style guides in line with the organisation's art direction
	Manage copywriting projects	<ul> <li>Create copywriting ideas in partnership with internal and external stakeholders</li> </ul>
		<ul> <li>Work with media planners and the production department for advertising campaigns</li> </ul>
		• Explore different ideas and concepts for visual and verbal elements with the creative team
		• Collaborate with design and art teams for content development

#### **Content Writer**

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP	
	Aesthetic and Design Sensibility	Level 3	Sense Making	Intermediate
	Brand Management	Level 3	Creative Thinking	Intermediate
	Business Presentation Delivery	Level 3	Communication	Intermediate
	Conceptual Thinking	Level 3	Teamwork	Basic
	Content Development and Strategy	Level 4	Interpersonal Skills	Basic
	Critical Thinking	Level 3		
SKILLS & COMPETENCIES	Cultural Sensitivity for Design	Level 3		
	Design Writing	Level 4		
	Empathetic Design	Level 3		
	Imagination and Exploration	Level 3		
	Narrative Design	Level 4		
	Stakeholder Management	Level 3		
	Trend Forecasting	Level 3		
	Visual Communication	Level 3		

### Lead Designer

#### **JOB ROLE DESCRIPTION**

The Lead Designer manages all aspects of the design process, from research and ideation to creative conceptualisation and design. He/She collaborates with stakeholders to research and develop cohesive design plans, concepts and prototypes. As a team lead, he initiates research activities to be performed and provides on-the-job training to enhance the core competence of his team members. He also works with a diverse group of internal and external stakeholders to ensure final design output meet the needs of the organisation or customers.

The ability to delegate and lead project teams towards successful adoption of new design ideas is essential for the Lead Designer. He possesses a strong mastery of design fundamentals in and can generate creative work that meets the requirements of stakeholders. He is able to work on multiple projects concurrently and deliver on expectations within tight deadlines.

He may specialise as an Architect, Landscape Architect/Landscape Designer, Interior Designer, Fashion Designer, Product Designer, Furniture Designer, Graphic Designer and/or Interaction Designer, etc.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Deliver design output	• Develop cohesive design plans, concepts and prototypes in collaboration with stakeholders
		• Evaluate the feasibility of new design ideas or concepts
		• Analyse results of feasibility tests through regular project reviews
		• Troubleshoot issues arising from project implementation
		• Develop schedules, timeline and budgets for projects
CRITICAL WORK FUNCTIONS AND		• Present design recommendations, proposals and options to stakeholders
KEY TASKS	Perform design intelligence	• Initiate research activities in accordance to project requirements
	for design projects	<ul> <li>Frame objectives and agendas for design workshops</li> </ul>
		<ul> <li>Analyse research findings to inform design directions</li> </ul>
		<ul> <li>Review research reports before circulation to stakeholders</li> </ul>
		<ul> <li>Communicate research findings to stakeholders for informed decision making</li> </ul>
	Influence organisational	• Provide feedback to direct reports and junior team members
	development	• Provide on-the-job training to direct reports and junior team members

### Lead Designer

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Aesthetic and Design Sensibility	Level 4	Creative Thinking	Intermediate
	Business Presentation Delivery	Level 4	Communication	Intermediate
	Conceptual Thinking	Level 4	Sense Making	Intermediate
	Contract Development and Management	Level 4	Decision Making	Intermediate
	Critical Thinking	Level 4	Problem Solving	Intermediate
	Cultural Sensitivity for Design	Level 4		
	Data Analysis and Interpretation	Level 3		
	Design Creation and Development	Level 4		
	Design Sketching	Level 4		
	Design Standards and Specification	Level 4		
	Design Sustainability and Ethics Management	Level 4		
	Design Thinking Practice	Level 4		
SKILLS &	Design Writing	Level 3		
COMPETENCIES	Digital and Physical Prototyping	Level 4		
	Empathetic Design	Level 4		
	Form Giving	Level 4		
	Imagination and Exploration	Level 4		
	Intellectual Property Management	Level 3		
	Material Studies and Production Processes	Level 4		
	Narrative Design	Level 3		
	Product and Production Engineering	Level 4		
	Project Management	Level 4		
	Proposal Writing Development	Level 3		
	Stakeholder Management	Level 4	-	
	Systems Thinking	Level 4		
	Technical Drawing	Level 4		
	User Experience Design	Level 4		
	Visual Communication	Level 4	-	

### Lead Visualiser/Lead Storyteller

#### **JOB ROLE DESCRIPTION**

The Lead Visualiser/Lead Storyteller leads design concept visualisation. He/She manages project scopes for concept visualisations and oversees the development of visualisation tools and communication output for the organisation. As a team lead, he provides on-the-job training and feedback to enhance the core competence of his team members. He also leads presentations of design visualisations and collaterals to clients, and research efforts to uncover new methods of visual delivery.

The Lead Visualiser/Lead Storyteller is strong in either hand-drawing, prototyping of physical prototypes, storyboarding, two-dimensional (2D) and three-dimensional (3D) modelling and rendering, hardware tinkering, or videography and animation, to visualise concepts in their forms as intended by the designers. A good eye for aesthetics is helpful as he is responsible for translating design ideas and concepts into prototypes. Lastly, he possesses good stakeholder management skills, partnering internal and external stakeholders to develop creative solutions that meet business objectives and goals.

He may specialise as a Renderer, Graphic Designer, Multimedia Artist, Commercial Artist, Photographer, Videographer, 2D/3D Visualiser, Creative Visualiser and/or Data Visualiser, etc.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Visualise designs	• Develop requirements for visualisation output
		• Oversee development of visualisation output
		• Refine designs using special rendering software
		• Create design visuals from verbal briefs
		• Deliver design visualisations and presentations to stakeholders
CRITICAL WORK FUNCTIONS AND	Enhance design work	<ul> <li>Provide inputs to identify software libraries for architectural rendering needs and applications</li> </ul>
KEY TASKS		<ul> <li>Lead research efforts for enhancing visual delivery</li> </ul>
	Report insights	• Design data reports, visualisation tools and communication output for the organisation
		• Draw insights and recommendations from research for influencing and enhancing designs
		• Share insights during team meetings and other key strategic forums
	Influence organisational	• Provide feedback to direct reports and junior team members
	development	• Provide on-the-job training to direct reports and junior team members

### Lead Visualiser/Lead Storyteller

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Aesthetic and Design Sensibility	Level 4	Communication	Advanced
	Brand Management	Level 4	Creative Thinking	Advanced
	Business Presentation Delivery	Level 5	Problem Solving	Advanced
	Conceptual Thinking	Level 4	Interpersonal Skills	Advanced
	Content Development and Strategy	Level 4	Leadership	Intermediate
	Cultural Sensitivity for Design	Level 4		
	Data and Information Visualisation	Level 5		
SKILLS &	Design Creation and Development	Level 4		
COMPETENCIES	Design Sketching	Level 5		
	Design Standards and Specification	Level 4		
	Digital and Physical Prototyping	Level 3		
	Empathetic Design	Level 4		
	Imagination and Exploration	Level 4		
	Narrative Design	Level 5		
	Stakeholder Management	Level 3		
	Technical Drawing	Level 5		
	Visual Communication	Level 5		

#### **Content Strategist**

#### **JOB ROLE DESCRIPTION**

The Content Strategist develops strategies for delivering and promoting persuasive content. He/She builds relationships with internal and external stakeholders to understand various project requirements before leading junior staff in the creation of content. He also develops standards, systems and best practices for the real-time implementation of content strategies and is instrumental in setting editorial strategies to drive consistent and compelling content across all delivery streams.

The Content Strategist is a problem-solver who is strong at generating ideas. He is meticulous with a penchant for keeping track of details, ensuring that content generated is aligned with organisational strategies. He possesses highly developed communication skills, can develop clear strategies for engaging audiences, and is able to deliver on expectations within tight deadlines.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Develop content strategies for projects	<ul> <li>Oversee the creation of appropriate content for brands' designated audiences</li> </ul>
		• Implement content marketing strategies across the organisation
		<ul> <li>Develop standards, systems and best practices for the real-time implementation of content strategies</li> </ul>
CRITICAL WORK		<ul> <li>Identify project requirements through consultation with internal stakeholders</li> </ul>
		<ul> <li>Provide inputs for new design content ideas, based on research on competitors' messaging and content</li> </ul>
		• Set guidelines for the tone, style and voice of all brand content
FUNCTIONS AND KEY TASKS		• Set editorial strategies for content consistency across delivery streams
		<ul> <li>Create subjective art style framework and directions that are aligned to business goals and objectives</li> </ul>
	Manage copywriting projects	<ul> <li>Monitor copywriting project progress and budgets to ensure project feasibility</li> </ul>
		<ul> <li>Monitor web traffic and engagement for projects</li> </ul>
		<ul> <li>Manage editorial calendar to ensure timely publication</li> </ul>
		<ul> <li>Uncover gaps in content development and standards through close communication with stakeholders</li> </ul>
	Influence organisational development	<ul> <li>Provide feedback to direct reports and junior team members</li> <li>Provide on-the-job training to direct reports and junior team members</li> </ul>

### **Content Strategist**

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5	
	Aesthetic and Design Sensibility	Level 4	Sense Making	Advanced
	Brand Management	Level 4	Creative Thinking	Intermediate
	Business Negotiation	Level 4	Communication	Intermediate
	Business Presentation Delivery	Level 4	Problem Solving	Intermediate
	Conceptual Thinking	Level 4	Decision Making	Intermediate
	Content Development and Strategy	Level 5		
	Critical Thinking	Level 4		
SKILLS & COMPETENCIES	Cultural Sensitivity for Design	Level 4		
	Design Writing	Level 5		
	Empathetic Design	Level 4		
	Imagination and Exploration	Level 4		
	Narrative Design	Level 5		
	Scenario and Strategic Planning	Level 4		
	Stakeholder Management	Level 4		
	Trend Forecasting	Level 4		
	Visual Communication	Level 4		

### **Principal Designer**

#### **JOB ROLE DESCRIPTION**

The Principal Designer provides design direction for multiple project teams and conceptualises new design ideas for the organisation. He/She oversees the quality of design output and identifies new approaches for expanding the organisation's product and service offerings. He coaches team members and leads change management initiatives. He collaborates with business partners/stakeholders to conceive innovative design ideas that meet the needs of the organisation or customers.

The Principal Designer demonstrates exceptional leadership and communication skills in leading multiple project teams and establishing partnerships throughout the organisation. He possesses strong analytical skills for identifying favourable unique opportunities that create value for the organisation. In addition, his deep industry knowledge enables him to anticipate new industry trends and market factors that may impact the organisation's product and service offerings.

He may specialise as an Architect, Landscape Architect/Landscape Designer, Interior Designer, Fashion Designer, Product Designer, Furniture Designer, Graphic Designer and/or Interaction Designer, etc.

	CRITICAL WORK FUNCTIONS	KEYTASKS		
	Deliver design output	• Secure support and resources for research and development		
		<ul> <li>Conceive new and/or innovative design ideas in collaboration with stakeholders</li> </ul>		
		• Enhance the feasibility of new design ideas through market research and testing		
		• Approve project schedules and quality of project deliverables		
		• Develop communication or marketing materials for dissemination		
		• Evaluate overall effectiveness and viability of design output		
	Maintain design quality and	• Ensure design strategies align with design vision		
CRITICAL WORK	aesthetics	<ul> <li>Synthesise inputs and feedback from design teams</li> </ul>		
FUNCTIONS AND KEY TASKS		<ul> <li>Secure support and resources for research and development</li> <li>Conceive new and/or innovative design ideas in collaboration with stakeholders</li> <li>Enhance the feasibility of new design ideas through market research a testing</li> <li>Approve project schedules and quality of project deliverables</li> <li>Develop communication or marketing materials for dissemination</li> <li>Evaluate overall effectiveness and viability of design output</li> <li>Ensure design strategies align with design vision</li> <li>Synthesise inputs and feedback from design teams</li> <li>Review prototypes against established design vision and standards</li> <li>Identify financial goals and possible market potential for the organisation's design solutions</li> <li>Develop a roadmap for the implementation of new design solutions</li> </ul>		
	Envision new design solutions			
		• Develop a roadmap for the implementation of new design solutions		
		• Oversee the development of new or enhanced designs for the organisation		
	Influence organisational	• Develop staff through capability development and coaching		
	development	• Develop on-the-job training programmes		
		• Facilitate hiring decisions for the organisation		
		• Lead change management initiatives		

### **Principal Designer**

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETE	NCIES (TOP 5)
	Aesthetic and Design Sensibility	Level 5	Leadership	Intermediate
	Business Model Innovation	Level 5	Communication	Advanced
	Business Negotiation	Level 5	Decision Making	Intermediate
	Business Opportunities Development	Level 4	Developing People	Intermediate
	Business Presentation Delivery	Level 5	Transdisciplinary Thinking	Intermediate
	Business Risk Management	Level 5		
	Conceptual Thinking	Level 5		
	Contract Development and Management	Level 5		
	Critical Thinking	Level 5		
	Cultural Sensitivity for Design	Level 5		
	Data Analysis and Interpretation	Level 4		
	Design Creation and Development	Level 5		
	Design Sustainability and Ethics Management	Level 5		
SKILLS & COMPETENCIES	Design Thinking Practice	Level 5		
COMPETENCIES	Design Writing	Level 4		
	Emerging Technology Synthesis	Level 5		
	Empathetic Design	Level 5		
	Facilitation	Level 5		
	Form Giving	Level 5		
	Imagination and Exploration	Level 5		
	Intellectual Property Management	Level 4		
	Material Studies and Production Processes	Level 5		
	Project Management	Level 5		
	Proposal Writing Development	Level 4		
	Scenario and Strategic Planning	Level 5		
	Stakeholder Management	Level 5		
	Systems Thinking	Level 5		
	Trend Forecasting	Level 5		
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### Chief Design Officer/Chief Innovation Officer/ Chief Experience Officer/Chief Strategy Officer

#### **JOB ROLE DESCRIPTION**

The Chief Design Officer/Chief Innovation Officer/Chief Experience Officer/Chief Strategy Officer maintains an overview of all design projects in the organisation, and directs design tests from conception to completion to ascertain the feasibility of new products and services. As a senior executive in the organisation, he/she directs the quality management of all design output, and he formulates new business ideas to propel the growth of the organisation. He identifies emerging trends or issues in the industry to align design solutions with evolving customer needs. He champions succession planning, as well as capability development and employee engagement initiatives for the organisation. He forges local and international networks across the design industry to promote the organisation.

The Chief Design Officer/Chief Innovation Officer/Chief Experience Officer/Chief Strategy Officer is up-to-date with new trends and technologies in the industry. In addition, he demonstrates strong leadership skills, business acuity and exceptional written and verbal communication skills. He is able to inspire others to think 'out of the box', and he foster a workplace culture that encourages stakeholders to share innovative ideas.

	CRITICAL WORK FUNCTIONS	KEYTASKS		
	Deliver design output	<ul> <li>Proliferate new knowledge on design management across the organisation</li> </ul>		
		• Direct design tests from conception to completion		
		<ul> <li>Appraise the effectiveness of new design output against the organisation's commercial objectives</li> </ul>		
	Maintain design quality and	• Direct the quality management of all design output		
	aesthetics	• Set the overall direction for design aesthetics and user experience		
		<ul> <li>Proliferate new knowledge on design management across the organisation</li> <li>Direct design tests from conception to completion</li> <li>Appraise the effectiveness of new design output against the organisation's commercial objectives</li> <li>Direct the quality management of all design output</li> <li>Set the overall direction for design aesthetics and user experience</li> <li>Provide creative direction on the development of prototypes</li> <li>Drive research efforts to identify emerging trends or issues in the design industry</li> <li>Enhance the organisation's design solutions and offerings</li> <li>Align design solutions and offerings with evolving customer needs, technological advancements, and the organisation's brand identity</li> <li>Conceptualise design solutions and offerings for the organisation</li> <li>Develop strategies and design solutions that differentiate the organisation's capabilities in the market</li> <li>Endorse business strategies, policies and plans, and business continuity frameworks</li> <li>Maximise the organisation 's financial and operational performance</li> <li>Steer the organisation towards excellence in a globalised environment</li> </ul>		
	Envision new design solutions			
		• Enhance the organisation's design solutions and offerings		
CRITICAL WORK		• Conceptualise design solutions and offerings for the organisation		
FUNCTIONS AND KEY TASKS		<ul> <li>Proliferate new knowledge on design management across the organisation</li> <li>Direct design tests from conception to completion</li> <li>Appraise the effectiveness of new design output against the organisation's commercial objectives</li> <li>Direct the quality management of all design output</li> <li>Set the overall direction for design aesthetics and user experience</li> <li>Provide creative direction on the development of prototypes</li> <li>Drive research efforts to identify emerging trends or issues in the design industry</li> <li>Enhance the organisation's design solutions and offerings</li> <li>Align design solutions and offerings with evolving customer needs, technological advancements, and the organisation's brand identity</li> <li>Conceptualise design solutions and offerings for the organisation</li> <li>Develop strategies and design solutions that differentiate the organisation's capabilities in the market</li> <li>Endorse business strategies, policies and plans, and business continuity frameworks</li> <li>Maximise the organisation towards excellence in a globalised environmen</li> <li>Drive value creation for the organisation by leading initiatives in busin and digital transformation</li> <li>Formulate new business ideas and direction</li> <li>Coach identified successors and future leaders of the organisation</li> <li>Align human resources with business needs</li> <li>Lead organisational succession planning, capability development and employee engagements</li> <li>Build relationships with executive management</li> </ul>		
	Drive business growth			
		<ul> <li>Maximise the organisation's financial and operational performance</li> </ul>		
		• Steer the organisation towards excellence in a globalised environment		
		• Drive value creation for the organisation by leading initiatives in business and digital transformation		
		• Formulate new business ideas and direction		
	Influence organisational	Coach identified successors and future leaders of the organisation		
	development	• Align human resources with business needs		
		• Build relationships with executive management		

#### Chief Design Officer/Chief Innovation Officer/ Chief Experience Officer/Chief Strategy Officer

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	TECHNICAL SKILLS AND COMPETENCI	ES	GENERIC SKILLS AND COMPET	ENCIES (TOP 5)
	Business Model Innovation	Level 5	Leadership	Advanced
	Business Negotiation	Level 6	Global Mindset	Advanced
	Business Opportunities Development	Level 5	Transdisciplinary Thinking	Advanced
	Business Presentation Delivery	Level 5	Interpersonal Skills	Advanced
	Business Risk Management	Level 6	Communication	Advanced
	Change Management	Level 6		
	Conceptual Thinking	Level 5		
	Content Development and Strategy	Level 6		
	Creative Entrepreneurship	Level 6		
	Critical Thinking	Level 5		
LS &	Design Sustainability and Ethics Management	Level 6		
PETENCIES	Design Thinking Practice	Level 6		
	Emerging Technology Synthesis	Level 6		
	Empathetic Design	Level 5		
	Imagination and Exploration	Level 5		
	Intellectual Property Management	Level 6		
	Material Studies and Production Processes	Level 5		
	Product Management	Level 6		
	Project Management	Level 6		
	Scenario and Strategic Planning	Level 6		
	Stakeholder Management	Level 6		
	Systems Thinking	Level 5		
	Trend Forecasting	Level 5		

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# Innovation

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#### **Senior UX Designer**

#### Melisa Chan Government Technology Agency, Singapore

#### A STEP-BY-STEP PROCESS TO SUCCESS

From a young age, Melisa knew she wanted to be a designer. Growing up, she pursued her passion in painting and drawing, and soon learnt that there are many types of design that required vastly different training and technical sensitivities. Though originally trained in interior architecture, Melisa most recently found a home for her skillset and domain experience in the practice of Design Thinking, Service Design and Experience Design.

In her current role as a Senior UX Designer, Melisa works in a multi-disciplinary team of designers, researchers and strategists. She currently leads a team of researchers and designers on a project in the areas of education and learning with technology. She also weighs in on the designers' wellbeing, both in terms of honing their professional practice, and creating a culture in which they feel proud to be a part of.

Melisa reckons that her biggest challenge at work is managing and changing the mindsets of project stakeholders - such as management teams and executives in-charge of projects, in particular, convincing them that there are better ways of doing something. In her view, design is a service that serves many masters - not only their clients but also end users. She takes pains to prove the value of design to her stakeholders, often ensuring its impact is as measurable and visible as possible, in ways that are relevant.

To be successful in her job, Melisa notes that it's imperative to have an inquisitive mind and an urge to question the status quo. Having a genuine optimism that design can 'make lives "The Skills Framework showcases possibilities for design roles in areas like business and technology, as the industry has changed much in recent years."

better' and grit – the ability to thrive in adversity – are also key to success.

The importance of being a team player is often underestimated. She tells us, "In the work we do, it is impossible to do it effectively if we do it alone." She further states that as far as talent is admirable, the ability to work well with colleagues and stakeholders is a much better indicator of how far a person can go in a collaborative industry. She is heartened that the Skills Framework highlights important skills, such as design research, communication and strategy, that aspiring designers should have if they wish to excel in the industry.

Melisa notes that design roles are evolving in the civil service and there are opportunities for design – as a practice and community – to show its value and contribution to society. As her own career has not followed a traditional, linear pathway, Melisa is interested in how the Skills Framework showcases possibilities for design roles in areas like business and technology, which also helps nondesigners see the interwoven nature of groups of skillsets.

For the future, Melisa hopes to continue leading a meaningful design practice, and producing work that's appreciated by her peers. She advises those considering joining the industry to acquire more life experiences and cultivate interests outside of 'design' and 'the job', as marrying passion with technical abilities will help to enrich designers' perspectives, improving the quality of their ideas and work.

#### **Design Researcher**

#### **JOB ROLE DESCRIPTION**

The Design Researcher supports the development of user experiences for a variety of applications. He/She studies key industry trends and competitors' user experience strategies in order to support the development of user journeys, wireframes and prototypes. Together with the service design and experience design team, he ensures that design work executed is in alignment with organisational standards and protocols. He also collects meaningful metrics to assess the performance of user interfaces and he participates in networking events to build his expertise within the design sector.

The Design Researcher is strong in analysis and data literacy, and can evaluate user feedback and synthesise insights to optimise user experiences. He possesses good communication and interpersonal skills for working effectively in a team, and is able to put forth ideas confidently to team members and other stakeholders. He can navigate ambiguity comfortably to explore creative possibilities, and demonstrates understanding of cultural differences. He displays empathy in formulating design research studies, understanding how the results translate to human-centred designs.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Construct design research studies	<ul> <li>Ascertain research context and requirements based on research objectives</li> </ul>
		• Determine logistics for and scheduling needs of design research studies
CRITICAL WORK		• Draft essential documents that will protect the interests of research participants
FUNCTIONS AND KEY TASKS	Conduct design research studies	<ul> <li>Collect research data on consumers, competitors and market conditions using both quantitative and qualitative research methods</li> </ul>
		<ul> <li>Conduct ethnographic research in accordance with design research study objectives</li> </ul>
	Synthesise data	• Uncover trends and patterns based on information gathered
		• Liaise with stakeholders for research output development
		• Draw conclusions from analyses performed

### **Design Researcher**

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Behavioural Economics in Design	Level 3	Creative Thinking	Advanced
	Business Presentation Delivery	Level 3	Sense Making	Advanced
	Conceptual Thinking	Level 3	Teamwork	Intermediate
	Critical Thinking	Level 3	Problem Solving	Intermediate
	Cultural Sensitivity for Design	Level 3	Communication	Advanced
	Data Analysis and Interpretation	Level 3		
	Data and Information Visualisation	Level 3		
	Design Thinking Practice	Level 3		
	Design Writing	Level 3		
SKILLS &	Empathetic Design	Level 3		
COMPETENCIES	Facilitation	Level 3		
	Market Research	Level 3		
	Narrative Design	Level 2		
	Qualitative Research	Level 3	_	
	Quantitative Research	Level 3		
	Scenario and Strategic Planning	Level 3		
	Stakeholder Management	Level 3		
	Systems Thinking	Level 3	_	
	Trend Forecasting	Level 3		
	User Testing and Usability Testing	Level 3		
	Visual Communication	Level 3		

### **Strategist/Business Designer**

#### **JOB ROLE DESCRIPTION**

The Strategist/Business Designer executes strategic planning activities that enhances the organisation's brands, products and/or services. He/She has a strong understanding of the organisation's challenges and opportunities and generates ideas for furthering the market potential of the organisation. He conducts data analysis and modelling for future projections based on findings from research studies, to produce insights on the possible scenarios for the organisation's strategic trajectory.

The Strategist/Business Designer possesses an analytical and data-driven mindset. He is an idealist who can imagine various innovative scenarios for the organisation. He also has good interpersonal and communication skills, able to gather insights from interviews and present his ideas clearly and succinctly.

	CRITICAL WORK FUNCTIONS	KEYTASKS		
	Uncover organisational needs and new opportunities	<ul> <li>Ascertain organisational challenges and new opportunities through primary and secondary research</li> </ul>		
		• Utilise models and frameworks for identifying core challenges and areas of opportunities for the organisation		
		• Gather insights on how users will engage with the organisation		
		• Administer tests to validate hypotheses relating to the growth of the organisation		
	Conduct design research studies	<ul> <li>Collect research data on consumers, competitors and market conditions using quantitative and qualitative research methods</li> </ul>		
CRITICAL WORK FUNCTIONS AND		<ul> <li>Monitor the success of design research studies in close cooperation with stakeholders</li> </ul>		
KEY TASKS		<ul> <li>Oversee the delivery of multi-disciplinary workshops for design research studies</li> </ul>		
	Develop business models and design concepts	<ul> <li>Design new products and/or services that differentiate the organisation from competition</li> </ul>		
		<ul> <li>Prototype new business ideas to test the viability of new products and/or services</li> </ul>		
		<ul> <li>Ascertain organisational challenges and new opportunities through primary and secondary research</li> <li>Utilise models and frameworks for identifying core challenges and an of opportunities for the organisation</li> <li>Gather insights on how users will engage with the organisation</li> <li>Administer tests to validate hypotheses relating to the growth of the organisation</li> <li>Collect research data on consumers, competitors and market condition using quantitative and qualitative research methods</li> <li>Monitor the success of design research studies in close cooperation wistakeholders</li> <li>Oversee the delivery of multi-disciplinary workshops for design research studies</li> <li>Design new products and/or services that differentiate the organisation</li> <li>Prototype new business ideas to test the viability of new products and services</li> <li>Examine business model possibilities in accordance with established design concepts</li> <li>Identify opportunities for complementary value creation</li> <li>Source new innovations through researching and futuring activities</li> </ul>		
	Support strategic growth	• Identify opportunities for complementary value creation		
		<ul> <li>Source new innovations through researching and futuring activities</li> </ul>		
		<ul> <li>Evaluate impact of strategic initiatives in relation to organisational rules, policies and standards</li> </ul>		

### **Strategist/Business Designer**

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPE	TENCIES (TOP 5)
	Behavioural Economics in Design	Level 3	Sense Making	Advanced
	Business Model Innovation	Level 3	Transdisciplinary Thinking	Intermediate
	Business Negotiation	Level 3	Creative Thinking	Advanced
	Business Opportunities Development	Level 2	Problem Solving	Advanced
	Business Presentation Delivery	Level 3	Communication	Advanced
	Business Risk Management	Level 3		
	Change Management	Level 3		
	Conceptual Thinking	Level 3		
	Creative Entrepreneurship	Level 4		
	Critical Thinking	Level 3	-	
	Cultural Sensitivity for Design	Level 3		
KILLS & OMPETENCIES	Data Analysis and Interpretation	Level 3		
	Data and Information Visualisation	Level 3		
	Design Thinking Practice	Level 3		
	Empathetic Design	Level 3		
	Facilitation	Level 3		
	Imagination and Exploration	Level 3		
	Intellectual Property Management	Level 3		
	Market Research	Level 3		
	Product Management	Level 3		
	Proposal Writing Development	Level 3		
	Scenario and Strategic Planning	Level 4		
	Stakeholder Management	Level 3		
	Systems Thinking	Level 3	-	

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### Lead Design Researcher

#### **JOB ROLE DESCRIPTION**

The Lead Design Researcher leads a project team in translating human-centred insights into meaningful opportunities for design and innovation. He/She leads the analysis of complex data to enhance the performance and design of products and/or services. He advances research studies and determines changes to be instituted for products and/or services. Moreover, he is responsible for knowledge transfer within the design process and he frames insights in a useful manner for the design team. As a team lead, he provides on-the-job training to his junior team members.

The Lead Design Researcher has extensive knowledge of research tools, methodologies and sciences. He works collaboratively with individuals across all levels in the organisation, and he is highly analytical, able to construct quality solutions across a range of diverse situations. He also demonstrates empathy when formulating design research studies while meeting clients' business needs. Lastly, he possesses strong communication skills and can effectively present design research to internal and external stakeholders.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Construct design research	• Frame research objectives in collaboration with stakeholders
	studies	• Plan research study activities and timelines for implementation
		<ul> <li>Implement processes and precautions for the protection of research participants' interests</li> </ul>
	Conduct design research studies	<ul> <li>Monitor the success of design research studies in close cooperation with stakeholders</li> </ul>
CRITICAL WORK		<ul> <li>Oversee the implementation of multi-disciplinary workshops for design research studies</li> </ul>
FUNCTIONS AND KEY TASKS	Synthesise data	• Distill data into actionable outputs for sharing
		• Develop research solutions in close partnership with stakeholders
		<ul> <li>Apply social scientific theories to the interpretation of data, trends and patterns for insights</li> </ul>
	Strategise process, product	• Evaluate impact of design research studies
	and service improvements	<ul> <li>Propose strategies for enhancing organisational success based on design research output</li> </ul>
	Influence organisational development	<ul> <li>Provide feedback to direct reports and junior team members</li> <li>Provide on-the-job training to direct reports and junior team members</li> </ul>

### Lead Design Researcher

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Behavioural Economics in Design	Level 4	Creative Thinking	Advanced
	Business Presentation Delivery	Level 4	Sense Making	Advanced
	Conceptual Thinking	Level 4	Teamwork	Advanced
	Critical Thinking	Level 4	Problem Solving	Advanced
	Cultural Sensitivity for Design	Level 4	Communication	Advanced
	Data Analysis and Interpretation	Level 4		
	Data and Information Visualisation	Level 4		
	Design Thinking Practice	Level 4		
	Design Writing	Level 4		
	Emerging Technology Synthesis	Level 4		
KILLS &	Empathetic Design	Level 4		
OMPETENCIES	Facilitation	Level 4		
	Market Research	Level 4		
	Narrative Design	Level 3		
	Project Management	Level 4		
	Qualitative Research	Level 4		
	Quantitative Research	Level 4		
	Scenario and Strategic Planning	Level 4		
	Stakeholder Management	Level 4		
	Systems Thinking	Level 4		
	Trend Forecasting	Level 4		
	User Testing and Usability Testing	Level 4	_	
	Visual Communication	Level 4		

### Lead Service Designer/Lead Experience Designer

#### **JOB ROLE DESCRIPTION**

The Lead Service Designer/Lead Experience Designer develops engaging user experiences for a variety of applications, and manages the creation of design assets. He/She determines relevant user experience research to be conducted, and translates user needs and business requirements into features with the overall aim of enhancing application experiences. He oversees usability testing of prototypes, and builds relationships with stakeholders to attain buy-in for proposed user experience strategies. As a team lead, he develops the capabilities of junior team members.

The Lead Service Designer/Lead Experience Designer is adept at strategic visioning, mentally agile, able to envision optimal user experiences and develop innovative design strategies for the organisation. He possesses strong communication skills and can communicate his ideas and vision in a clear and engaging manner. He demonstrates cultural sensitivity in designing user experiences. In addition, his openness to new perspectives and business acumen enables him to anticipate users' needs in the future.

	CRITICAL WORK FUNCTIONS	KEYTASKS
CRITICAL WORK FUNCTIONS AND KEY TASKS	Understanding business and user needs	<ul> <li>Clarify stakeholders' goals, requirements and expectations</li> <li>Frame user research study agendas in collaboration with stakeholders</li> <li>Generate pre-concept ideas for user experience enhancement</li> </ul>
	Formulate user experience strategies	<ul> <li>Develop user journeys that addresses customer and business needs</li> <li>Draft design blueprints and frameworks for user journeys</li> <li>Extract insights from research data points</li> <li>Facilitate and lead design thinking workshops to generate ideas and solutions for user experience strategies</li> </ul>
	Design user experiences	<ul> <li>Lead the implementation of user experience designs, ensuring their alignment with design and brand standards, analytics insights and customer feedback</li> <li>Prepare documentation for design standards, design wireframes, mock-ups, specifications and patterns, across channels and products</li> <li>Assess the feasibility of prototypes for idea testing</li> <li>Promote the generation of new ideas for enhancing user experience</li> </ul>
	Conduct usability testing	<ul> <li>Oversee usability and concept testing of prototypes in laboratory, remote and real-life settings</li> <li>Analyse user feedback on the feasibility of user interface performance</li> <li>Recommend refinements and iterations to design based on usability and concept testing results</li> <li>Improve the quality of interaction between the customer, product and the organisation</li> </ul>
	Influence organisational development	<ul> <li>Provide feedback to direct reports and junior team members</li> <li>Provide on-the-job training to direct reports and junior team members</li> </ul>

### Lead Service Designer/Lead Experience Designer

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Aesthetic and Design Sensibility	Level 4	Creative Thinking	Advanced
	Behavioural Economics in Design	Level 3	Problem Solving	Advanced
	Business Model Innovation	Level 3	Sense Making	Advanced
	Business Presentation Delivery	Level 4	Service Orientation	Advanced
	Conceptual Thinking	Level 4	Communication	Advanced
	Critical Thinking	Level 4		
	Cultural Sensitivity for Design	Level 4		
	Data Analysis and Interpretation	Level 4		
	Design Creation and Development	Level 4		
	Design Standards and Specification	Level 3		
	Design Thinking Practice	Level 4		
SKILLS &	Digital and Physical Prototyping	Level 4		
COMPETENCIES	Empathetic Design	Level 4		
	Facilitation	Level 4		
	Imagination and Exploration	Level 4		
	Interaction Design Practice	Level 3		
	Narrative Design	Level 4		
	Project Management	Level 3		
	Qualitative Research	Level 4		
	Scenario and Strategic Planning	Level 3		
	Stakeholder Management	Level 4		
	Systems Thinking	Level 4		
	User Experience Design	Level 4		
	User Testing and Usability Testing	Level 4		
	Visual Communication	Level 4		

### Lead Strategist/Lead Business Designer

#### **JOB ROLE DESCRIPTION**

The Lead Strategist/Lead Business Designer manages strategic planning activities to enhance the organisation's brands, products and/ or services. He/She analyses market and competitive intelligence data to identify new opportunities for the organisation, and leads brainstorming sessions with stakeholders to harness solutions for the organisation. He proposes new design concepts in alignment with strategic goals, as well as new ventures for revenue generation. As a team lead, he coaches his junior team members, and works closely with a diverse group of stakeholders.

The Lead Strategist/Lead Business Designer possesses an in-depth knowledge of the organisation's business operations and its full value chain of activities. He can think strategically to develop strategic solutions or innovations that are grounded by user insights. In addition, he has excellent interpersonal and communication skills, and can lead interviews and presentations independently.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Uncover organisational needs and new opportunities	<ul> <li>Analyse market and competitive intelligence data to identify new opportunities for the organisation</li> </ul>
		• Reframe business problems using a design perspective
		<ul> <li>Facilitate workshops with stakeholders for understanding the organisation's challenges and changes</li> </ul>
		• Articulate business hypotheses for testing and validation
	Conduct design research studies	<ul> <li>Lead brainstorming sessions with stakeholders to gather insights to harness solutions</li> </ul>
		• Develop materials for process owners to execute design research studies
		<ul> <li>Define scope, briefs and approaches for design research studies in collaboration with stakeholders</li> </ul>
CRITICAL WORK FUNCTIONS AND KEY TASKS	Develop business models and design concepts	<ul> <li>Design fitting business models to align with new and evolved products and/or services</li> </ul>
		<ul> <li>Simulate the impact of new products and/or services on the organisation's business models</li> </ul>
		<ul> <li>Propose new design concepts in alignment with strategic and organisational goals</li> </ul>
	Support strategic growth	<ul> <li>Evaluate new growth options within current product, service and/or brand offerings</li> </ul>
		• Propose new ventures for revenue generation
		<ul> <li>Design internal tools and processes to achieve organisational commercial objectives</li> </ul>
		<ul> <li>Provide technical guidance to various functions for the implementation of new strategic initiatives</li> </ul>
	Influence organisational development	<ul> <li>Provide feedback to direct reports and junior team members</li> <li>Provide on-the-job training to direct reports and junior team members</li> </ul>

### Lead Strategist/Lead Business Designer

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Behavioural Economics in Design	Level 4	Sense Making	Advanced
	Business Model Innovation	Level 4	Transdisciplinary Thinking	Intermediate
	Business Negotiation	Level 4	Creative Thinking	Advanced
	Business Opportunities Development	Level 3	Resource Management	Basic
	Business Presentation Delivery	Level 4	Problem Solving	Advanced
	Business Risk Management	Level 4		
	Change Management	Level 4		
	Conceptual Thinking	Level 4		
	Contract Development and Management	Level 4		
	Creative Entrepreneurship	Level 4		
	Critical Thinking	Level 4		
SKILLS & COMPETENCIES	Cultural Sensitivity for Design	Level 4		
JUMPETENCIES	Data Analysis and Interpretation	Level 4		
	Data and Information Visualisation	Level 4		
	Design Thinking Practice	Level 5		
	Empathetic Design	Level 4		
	Facilitation	Level 4		
	Imagination and Exploration	Level 4		
	Intellectual Property Management	Level 4		
	Market Research	Level 4		
	Product Management	Level 4		
	Proposal Writing Development	Level 4		
	Scenario and Strategic Planning	Level 5		
	Stakeholder Management	Level 4	-	
	Systems Thinking	Level 4		

### **Principal Design Researcher**

#### **JOB ROLE DESCRIPTION**

The Principal Design Researcher manages all aspects of research by leading project teams to translate human-centred insights into meaningful opportunities for design and innovation. He/She plays a critical role in analysing complex data to enhance the performance and design of products and/or services. He conceptualises new research studies and builds key relationships with stakeholders to determine changes to be instituted for products and/or services. He also manages the creation of design assets. As a department lead, he provides on-the-job training and coaching to junior staff.

The Principal Design Researcher has extensive knowledge of research tools, methodologies and sciences. He possesses strong communication, interpersonal and stakeholder management skills, can work collaboratively with individuals across all levels within the organisation, and build and maintain relationships with stakeholders. In addition, he is highly analytical, able to develop solutions for a diverse range of situations. He possesses outstanding time-management and organisational skills for delivering research projects within tight timelines.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Construct design research studies	<ul> <li>Conceptualise new research studies for uncovering perception of products and services</li> </ul>
		• Strategise design research methodologies and approaches
		<ul> <li>Set design research guidelines and parameters in alignment with regulatory standards</li> </ul>
CRITICAL WORK FUNCTIONS AND KEY TASKS		• Align objectives of design research studies with organisational goals
	Conduct design research studies	<ul> <li>Provide advice for overcoming challenges encountered during design research studies</li> </ul>
		<ul> <li>Propose research methodologies for understanding motivations and behaviours of respondents</li> </ul>
	Synthesise data	<ul> <li>Formulate recommendations to enhance the performance of products and services</li> </ul>
		<ul> <li>Drive decision making in projects across the organisation based on insights synthesised from data</li> </ul>
		• Direct the development of new systems and models for uncovering new insights from data
	Strategise process, product and service improvements	• Direct research activities and findings across the organisation
		<ul> <li>Shape organisational processes, and product and/or service offerings based on results of design research</li> </ul>
		<ul> <li>Develop collaborations with internal and industry stakeholders for further review of research outcomes on products and services</li> </ul>
	Influence organisational	Develop staff through capability development and coaching
	development	• Develop on-the-job training programmes
		• Facilitate hiring decisions for the organisation
		Lead change management initiatives
		<ul> <li>Address complaints and key concerns impacting staff morale and performance</li> </ul>

### Principal Design Researcher

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMP	GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Behavioural Economics in Design	Level 5	Developing People	Advanced	
	Business Negotiation	Level 5	Leadership	Advanced	
	Business Presentation Delivery	Level 5	Resource Management	Advanced	
	Conceptual Thinking	Level 5	Teamwork	Advanced	
	Critical Thinking	Level 5	Communication	Advanced	
	Cultural Sensitivity for Design	Level 5			
	Data Analysis and Interpretation	Level 5			
	Data and Information Visualisation	Level 5			
	Design Thinking Practice	Level 5			
	Design Writing	Level 5			
	Emerging Technology Synthesis	Level 4			
& TENCIES	Empathetic Design	Level 5			
	Facilitation	Level 5			
	Market Research	Level 5			
	Narrative Design	Level 4			
	Project Management	Level 5			
	Proposal Writing Development	Level 5			
	Qualitative Research	Level 5			
	Quantitative Research	Level 5			
	Scenario and Strategic Planning	Level 5			
	Stakeholder Management	Level 5			
	Systems Thinking	Level 5			
	Trend Forecasting	Level 5			
	User Testing and Usability Testing	Level 5			

SKILLS COMPE

### Principal Service Designer/ Principal Experience Designer

#### **JOB ROLE DESCRIPTION**

The Principal Service Designer/Principal Experience Designer drives projects for designing engaging user experiences. He/She spearheads research to uncover new user experience solutions, and is accountable for all user experience design decisions in the organisation. His overall aim is to enhance customer loyalty for the organisation or clients, and he develops strategies to mitigate risks associated with the implementation of new user experience solutions. He establishes strategic partnerships to meet the needs of the organisation, and as a seasoned practitioner, he provides technical leadership to enhance the functional competence of his team members.

The Principal Service Designer/Principal Experience Designer possesses exceptional leadership and communication skills. He is able to inspire and engage stakeholders to envision the optimal user experience and attain their buy-in for his proposed solutions. In addition, he is up-to-date with the latest developments in the design sector, and is highly proficient in negotiation and problem-solving the future.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Understanding business and user needs	<ul> <li>Align stakeholders' user experience expectations with organisation's user experience strategies</li> </ul>
		• Direct the development and execution of research projects for new user experience solutions
		<ul> <li>Communicate scenarios, end-to-end experiences, interaction models, and screen designs to stakeholders and attain their buy-in</li> </ul>
	Formulate user experience	• Oversee the design of user journeys for the organisation
	strategies	<ul> <li>Evaluate the effectiveness of design blueprints and frameworks in meeting the needs of users</li> </ul>
		<ul> <li>Translate research insights into ideation frameworks</li> </ul>
		<ul> <li>Preside over strategic design and user experience decisions related to core and new functions and features of products and services</li> </ul>
	Design user experiences	• Provide direction for the implementation of user experience designs
CRITICAL WORK FUNCTIONS AND KEY TASKS		• Endorse documentation for user experience design
		• Endorse plans and proposals for idea testing
		<ul> <li>Identify and mitigate risks associated with the implementation of new ideas for enhancing user experience</li> </ul>
	Conduct usability testing	<ul> <li>Direct all phases of usability and concept testing in laboratory, remote and real life settings</li> </ul>
		<ul> <li>Address concerns raised regarding user interface performance</li> </ul>
		$\bullet$ Endorse refinement plans based on usability and concept testing results
		<ul> <li>Oversee the implementation of improvements to functionalities, design and navigation for application sites</li> </ul>
		• Drive strategies for enhancing customer satisfaction and loyalty
	Influence organisational	• Develop staff through capability development and coaching
	development	Develop on-the-job training programmes
		• Facilitate hiring decisions for the organisation
		Lead change management initiatives
		<ul> <li>Address complaints and key concerns impacting staff morale and performance</li> </ul>

#### Principal Service Designer/ Principal Experience Designer

Behavioural Economics in Design       Level 4       Communication       A         Business Model Innovation       Level 4       Transdisciplinary Thinking       Ir         Business Presentation Delivery       Level 5       Creative Thinking       A	dvanced
Business Model Innovation       Level 4       Transdisciplinary Thinking       In         Business Presentation Delivery       Level 5       Creative Thinking       A         Conceptual Thinking       Level 5       Decision Making       A         Critical Thinking       Level 5       Decision Making       A         Cultural Sensitivity for Design       Level 5       Level 5       Data Analysis and Interpretation       Level 5	
Business Presentation Delivery       Level 5       Creative Thinking       A         Conceptual Thinking       Level 5       Decision Making       A         Critical Thinking       Level 5       Evel 5       Evel 5         Cultural Sensitivity for Design       Level 5       Evel 5         Data Analysis and Interpretation       Level 5       Evel 5	dvanced
Conceptual Thinking       Level 5       Decision Making       A         Critical Thinking       Level 5       Image: Conceptual Sensitivity for Design       Image: Conceptual Sensitivity for Design	termediate
Critical ThinkingLevel 5Cultural Sensitivity for DesignLevel 5Data Analysis and InterpretationLevel 5	dvanced
Cultural Sensitivity for DesignLevel 5Data Analysis and InterpretationLevel 5	dvanced
Data Analysis and Interpretation Level 5	
Design Creation and Development Level 5	
Design Standards and Specification Level 4	
Design Thinking Practice Level 5	
SKILLS & Digital and Physical Prototyping Level 5	
COMPETENCIES Empathetic Design Level 5	
Facilitation Level 5	
Imagination and Exploration Level 5	
Interaction Design Practice Level 4	
Narrative Design Level 5	
Project Management Level 4	
Qualitative Research Level 5	
Scenario and Strategic Planning Level 4	
Stakeholder Management Level 5	
Systems Thinking Level 5	
User Experience Design Level 5	
User Testing and Usability Testing Level 5	
Visual Communication Level 5	

#### **Head of Strategy**

#### **JOB ROLE DESCRIPTION**

The Head of Strategy oversees the development, communication and execution of strategic initiatives with the aim of winning new business for the organisation. He/She directs the alignment of research projects across multiple teams and stakeholders to strategic goals, and drives stakeholder understanding across the organisation to facilitate strategy creation. He creates content and narration for presenting new business models, and designs strategic roadmaps for innovation and commercial activities. As a leader, he plays a crucial role in leading change management initiatives for the organisation.

The Head of Strategy's strong business and financial acumen enables him to meet and exceed the commercial objectives of the organisation. He possesses strong interpersonal and communication skills to interact with people across all levels. He is an independent thinker with the drive to propel the growth of the organisation. In addition, he is a visionary who inspires trust and confidence in others, leading others to readily adopt his insights and directives.

	CRITICAL WORK FUNCTIONS	KEYTASKS
	Uncover organisational needs and new opportunities	• Conceive studies and experiments for uncovering new business ideas and concepts
		• Synthesise business strategies across multiple disciplines before testing and implementation of new ideas
		• Drive stakeholder understanding across the organisation to facilitate strategy creation
		• Translate research findings into cohesive strategies and solutions
	Conduct design research	• Oversee the implementation of multiple design research studies
CRITICAL WORK FUNCTIONS AND KEY TASKS	studies	<ul> <li>Drive the alignment of research projects to strategic goals, across multiple teams and stakeholders</li> </ul>
		Conceptualise new design research studies
	Develop business models and design concepts	<ul> <li>Define changes to organisational structures and strategic assets based on new business models and concepts</li> </ul>
		<ul> <li>Create narratives for presenting new business models to senior management</li> </ul>
KET TASKS		<ul> <li>Align new design concepts to strategic goals through consultation with senior management</li> </ul>
	Support strategic growth	• Develop solutions for resolving the organisation's growth challenges
		<ul> <li>Design strategic roadmaps for innovation and commercial activities</li> </ul>
		<ul> <li>Design new revenue streams by leveraging emerging technologies, new business models and differentiated consumer experiences</li> </ul>
		<ul> <li>Mentor stakeholders through different phases of product and/or service development</li> </ul>
	Influence organisational	Develop staff through capability development and coaching
	development	• Develop on-the-job training programmes
		• Facilitate hiring decisions for the organisation
		Lead change management initiatives
		<ul> <li>Address complaints and key concerns impacting staff morale and performance</li> </ul>

# Head of Strategy

	TECHNICAL SKILLS AND COMPETENCIES		GENERIC SKILLS AND COMPETENCIES (TOP 5)	
	Behavioural Economics in Design	Level 5	Transdisciplinary Thinking	Advanced
	Business Model Innovation	Level 5	Decision Making	Advanced
	Business Negotiation	Level 5	Creative Thinking	Advanced
	Business Opportunities Development	Level 4	Communication	Advanced
	Business Presentation Delivery	Level 5	Problem Solving	Advanced
	Business Risk Management	Level 5		
	Change Management	Level 5		
	Conceptual Thinking	Level 5		
	Contract Development and Management	Level 5		
	Creative Entrepreneurship	Level 5		
	Critical Thinking	Level 5		
	Cultural Sensitivity for Design	Level 5		
S & ETENCIES	Data Analysis and Interpretation	Level 5		
	Design Sustainability and Ethics Management	Level 5		
	Design Thinking Practice	Level 6		
	Emerging Technology Synthesis	Level 5		
	Empathetic Design	Level 5		
	Facilitation	Level 5		
	Imagination and Exploration	Level 5		
	Intellectual Property Management	Level 5		
	Market Research	Level 5		
	Product Management	Level 5		
	Proposal Writing Development	Level 5		
	Scenario and Strategic Planning	Level 6		
	Stakeholder Management	Level 5		
	Systems Thinking	Level 5		

SKILL Comp

# Technology

#### JOB ROLES

Creative Technologist

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### **Creative Technologist**

#### Ziqq Rafit Foolproof

#### PUTTING MIND, HEART AND SOUL INTO DESIGN

If Ziqq could pinpoint the exact event that would lead him to his present position in the world of design, it would be a school service learning trip to Cambodia in 2009.

On seeing how small design interventions such as painting murals and playgrounds in a children's centre could have a profound positive impact on people's lives, he realised that design could be an important catalyst for social change.

Ziqq started his career in 2012 while pursuing his design education in London. He has been living and breathing design for over half a decade and is now taking on a designer position at the Singapore office of UK design agency, Foolproof, translating insights into design.

After having previously worked in London where experimenting and innovation are ingrained in the culture, his biggest challenge as a creative professional in Singapore has been guiding and educating clients about the value of design. Ziqq says that soft skills are important for creative professionals to build trust with clients and help them see how design can potentially have a positive impact on their businesses. He stresses, "The Skills Framework is important as it formalises necessary soft skills such as communication, and helps individuals look at areas of growth and new skills to acquire to become a more rounded and experienced designer."

"Soft skills are often overlooked but they are extremely important. If we were to strip everything down to the very core, it is all about relationships and how we manage them."

Of course, Ziqq also acknowledges that technical abilities are important for producing quality work and going far in this career. He's thankful that the Skills Framework is available as a resource to help guide individuals in navigating their areas of growth as they develop the relevant skillsets to become a more rounded and experienced designer.

Recently, Ziqq made a trip to Cape Town, South Africa, where he spoke about his journey in the realm of humanitarian design at the UX Cape Town Conference. It was one of the most memorable moments in his career as his sharing brought the spotlight on Singapore as a design hub at an international platform.

In the future, Ziqq plans to be an educator and hopes to nurture the next generation of designers. He says, "It's not all about the mind, but also about nurturing the heart and soul, which are just as important for growth."

### **Creative Technologist**

#### **JOB ROLE DESCRIPTION**

The Creative Technologist spearheads new product development and the improvement of existing products. He/She leads the development of drawings for prototyping and production, and conducts feasibility analysis for design plans. He works in close partnership with stakeholders to revitalise design solutions for outdated products and/or services. He develops staff through capability development and coaching.

The Creative Technologist is able to manage multiple projects concurrently. He is responsible for the development and training of the design engineering team to ensure the delivery of quality design products. In addition, he is a strong communicator with the ability to present ideas and concepts to both technical and non-technical audiences.

		CRITICAL WORK FUNCTIONS	KEYTASKS			
		Determine design requirements	<ul> <li>Communicate requirement-specific solutions to stakeholders</li> <li>Develop design rules and guidelines for product designs</li> </ul>			
			Compartmentalise designs into functionally effective components			
			• Conduct feasibility analysis for design plans			
		Develop prototypes for new	<ul> <li>Oversee design adjustments made to prototypes</li> </ul>			
		products and/or services	<ul> <li>Manage components and assemblies of prototypes in adherence to applicable industry and business standards</li> </ul>			
			• Develop solutions to circumvent future design issues			
			<ul> <li>Lead the design and demonstration of product prototypes</li> </ul>			
			<ul> <li>Lead the development of drawings for prototyping and production</li> </ul>			
	CRITICAL WORK		Monitor project execution to ensure timely completion			
	FUNCTIONS AND	Evaluate product and service performance	• Develop explanations regarding the limits of technical solutions			
	KEY TASKS		<ul> <li>Implement changes and corrections across the lifecycle of products and/ or services</li> </ul>			
			<ul> <li>Revitalise design solutions for outdated products and/or services in partnership with stakeholders</li> </ul>			
			<ul> <li>Preside over decisions that require deviation from standard practices for design of products and/or services</li> </ul>			
			<ul> <li>Engage external stakeholders to gauge the feasibility of products and/or services</li> </ul>			
			• Evaluate product concepts or technical solutions to identify the most viable products and/or services for implementation			
		Influence organisational	<ul> <li>Develop staff through capability development and coaching</li> </ul>			
		development	• Develop on-the-job training programmes			
			• Facilitate hiring decisions for the organisation			
			• Lead change management initiatives			

### **Creative Technologist**

	TECHNICAL SKILLS AND COMPETENCI	ES	GENERIC SKILLS AND COMPETE	NCIES (TOP 5)
	Aesthetic and Design Sensibility	Level 4	Problem Solving	Advanced
	Behavioural Economics in Design	Level 3	Creative Thinking	Advanced
	Business Presentation Delivery	Level 4	Transdisciplinary Thinking	Advanced
	Conceptual Thinking	Level 4	Computational Thinking	Advanced
	Creative Entrepreneurship	Level 4, 5	Digital Literacy	Advanced
	Critical Thinking	Level 4		
	Cultural Sensitivity for Design	Level 4		
	Data Analysis and Interpretation	Level 4		
	Design Sustainability and Ethics Management	Level 4, 5		
	Design Thinking Practice	Level 4, 5		
& ENCIES	Digital and Physical Prototyping	Level 4		
	Emerging Technology Synthesis	Level 4, 5	_	
	Empathetic Design	Level 4		
	Facilitation	Level 4		
	Imagination and Exploration	Level 4		
	Intellectual Property Management	Level 4, 5		
	Interaction Design Practice	Level 4, 5		
	Material Studies and Production Processes	Level 4		
	Product and Production Engineering	Level 4		
	Stakeholder Management	Level 4, 5		
	Systems Thinking	Level 4		
	User Testing and Usability Testing	Level 4		

SKILLS & Competi

TSC Category	TSC Title	TSC Description		Pro	ficien	cy Lev	vels	
150 outegory	150 mile		1	2	3	4	5	6
Analytical Thinking	Conceptual Thinking	Analyse and synthesise information by identifying key issues, perceiving unseen patterns and trends and deducing connections between issues to develop relevant ideas and solution			•	•	•	
	Critical Thinking	Examine, manage and connect issues and ideas from multiple perspectives to identify reasoning in a variety of fields with differing assumptions, contents and methods			•	•	•	
	Data Analysis and Interpretation	Extract meaningful patterns and insights from data to improve organisational performance and decision-making		•	•	•	•	
	Data and Information Visualisation	Combine communication, data science and design to present complex insights and information in a manner that facilitates meaningful storytelling and better decision-making for the organisation			•	•	•	
	Systems Thinking	Identify, analyse and evaluate relationships among systems' parts, with the use of simulation tools and systems thinking techniques and frameworks to understand situations and drive change for improvements			•	•	•	
Business Development	Business Negotiation	Conduct negotiations to establish win-win outcomes for the organisation			•	•	•	•
	Business Presentation Delivery	Perform required tasks to prepare and present information in various business settings involving preparation, understanding of audience, delivery and tailoring of messages to be conveyed			•	•	•	
Business Strategy	Behavioural Economics in Design	Examine psychological, behavioural, emotional and social factors to uncover insights on how people behave and make decisions			•	•	•	
	Brand Management	Co-create the organisation's projected brand and reputation with the customer, consider customer's perspectives and the organisation's desired image and priorities. This also includes the development and execution of branding campaigns, public relations and reputation management strategies to sustain or enhance the desired brand			•	•	•	
	Business Model Innovation	Identify and capitalise on untapped areas of business opportunity by proposing and instituting innovative changes to existing business models			•	•	•	
	Business Risk Management	Forecast and assess existing and potential risks which impact the operation and/or profitability to the business as well as the development and roll out of company-wide strategies and processes to mitigate risks, minimise their impact or effectively manage such business risks			•	•	•	•
	Creative Entrepreneurship	Develop and inspire the creation of creative or intellectual capital to generate activities for business success				•	•	•
	Emerging Technology Synthesis	Monitor and integrate emerging technology trends and developments, structured data gathering for the identification of new and emerging technological products, services and techniques. In addition, the performance of cost-benefit analysis and evaluation of their relevance, viability, sustainability and potential value add to the business			•	•	•	•

TSC Category	TSC Title	TSC Description		Pro	ficien	cy Lev	vels	
150 outegory	150 1140	i so seseription	1	2	3	4	5	6
Business Strategy	Market Research	Plan and conduct marketing and digital research and analysis to uncover market, customer and competitor trends in order to extract useful business insights. This also includes the evaluation of marketing activity effectiveness and development of ways to optimise marketing efforts			•	•	•	
	Product Management	Create and manage a product roadmap, involving the ideating, planning, forecasting, marketing and management of a product or a suite of products throughout stages of its lifecycle, from its conceptualisation to market entrance and eventual phasing-out. This includes the creation of a new product idea or concept and definition of the product strategy based on a projection of its potential benefits to the customer as well as the review of product performance against milestones and targets set			•	•	•	•
	Scenario and Strategic Planning	Brainstorm alternative accounts of the future that may be caused by emerging factors, and develop a plan of action for each of the scenarios			•	•	•	•
	Trend Forecasting	Drive the practice of collecting and comparing information over time to identify trends and patterns, in order to predict and plan for future events			•	•	•	
Corporate Governance and Policies	Design Sustainability and Ethics Management	Create designs that consider the limitations, regulations and guidelines on intellectual property, sustainability, diversity, inclusivity and accessibility, aligning to behaviours and actions which are generally accepted in the profession			•	•	•	•
	Intellectual Property Management	Evaluate, determine and implement organisational intellectual property rights to mitigate potential infringement		•	•	•	•	•
Creativity	Aesthetic and Design Sensibility	Imagine and develop novel, relevant and appropriate aesthetics to engage and evoke accurate and appropriate emotional and sensorial responses from target audiences						
	Cultural Sensitivity for Design	Develop an appreciation and thorough understanding of intended target audiences' cultures to reflect consideration to cultural sensitivities in design						
	Design Thinking Practice	Manage design thinking methodologies and processes to solve specific challenges for the organisation, and guide stakeholders through the phases of inspiration, empathy, ideation and implementation						
	Empathetic Design	Apply and drive empathetic-centred design thinking to better understand users' feelings and perceptions towards products and services, as well as the emotional tone of creative design work						
	Imagination and Exploration	Utilise imagination and design exploration techniques across multiple disciplines to envision better outcomes and develop possible and relevant solutions						
Design Communication	Content Development and Strategy	Brainstorm, ideate and utilise writing strategies and plans to maximise user engagement			•	•	•	•

TSC Category	TSC Title	TSC Description		Profi 1 2		cy Lev	vels		
ISC Category	150 mile	r Se bescription	1	2	3	4	5	6	
Design Communication	Design Writing	Convey a design story, idea or concept in a compelling and engaging manner through writing			•	•	•		
	Facilitation	Facilitate workshops with the intent of guiding, mentoring and leading participants to move through the process of learning and planning			•	•	•		
	Narrative Design	Develop the flow of the content through designing narrative elements to create an engaging audience experience	•		•	•	•		
	Proposal Writing Development	Draft strategic business proposals by conducting research, to respond to business opportunities			•	•	•		
	Visual Communication	Design visual communication outputs to elicit emotional connections and responses from target audiences			•	•	•		
General Management	Change Management	Manage organisational change management systems to drive organisational success and outcomes by preparing, equipping and supporting adoption of change				•	•	•	•
	Project Management	Execute projects by managing stakeholder engagement, resources, budgets and resolving problems			•	•	•	•	
Stakeholder and Customer Management	Business Opportunities Development	Identify new business opportunities to better meet the needs of existing markets and bring benefits to the organisation		•	•	•	•		
	Contract Development and Management	Manage contract creation, evaluation, negotiation, tendering to maximise operation and financial performance of an organisation				•	•		
	Stakeholder Management	Manage stakeholder expectations and needs by aligning those with requirements and objectives of the organisation. This involves planning of actions to effectively communicate with, negotiate with and influence stakeholders			•	•	•	•	
Technical Craft	Design Creation and Development	Utilise relevant design approaches for the conceptualisation, development and enhancement of design solutions			•	•	•		
	Design Sketching	Communicate and visualise ideas and designs in accurate form, perspective and proportion through drawing			•	•	•		
	Design Standards and Specification	Apply knowledge of relevant standards that govern the design requirements, and deliver design specifications according to the required standards			•	•	•		
	Digital and Physical Prototyping	Construct design concepts, either digitally or physically, to develop deeper understanding of the designs and test their usability and functionality		•	•	•	•		
	Form Giving	Giving ideas and/or designs tangible forms and aesthetics, with consideration for function, emotions, technology, culture and organisational values			•	•	•		
	Interaction Design Practice	Develop digital and/or physical interactions across technology, products, space and services media to enhance relationships and engagement with users			•	•	•		

TSC Category	TSC Title	TSC Description		Pro	ficien	cy Lev		
TSC Category TSC Title		150 Description	1	2	3	4	5	6
Technical Craft	Material Studies and Production Processes	Administer the study of material properties and applications to facilitate production, construction, engineering and processing of materials into specific designs			•	•	•	
	Product and Production Engineering	Explore product design and development processes to manufacture or innovate on products			•	•	•	
	Qualitative Research	Conduct and lead qualitative research studies, focusing on the study of people, habits, norms and cultures, to uncover insights driving the behaviour of different respondents			•	•	•	
	Quantitative Research	Conduct and lead systematic statistical, mathematical and numerical analyses to formulate facts, uncover patterns in research, test hypotheses and draw sound conclusions for problem-solving			•	•	•	
	Technical Drawing	Manage the composition of precise and detailed drawings that visually communicate how designs function, or are produced, to guide the construction			•	•	•	
	User Experience Design	Conceptualise and enhance the users' interactions and engagement with products and services by integrating elements of interaction design, information architecture, information design, visual interface design, user assistance design and user-centered design			•	•	•	
	User Testing and Usability Testing	Conduct and manage user tests to validate the feasibility of design, evaluate its functionality and ease of use as part of a user-centred design process			•	•	•	

#### General Descriptor for Technical Skills and Competencies (TSCs)

Level	<b>Responsibility</b> (Degree of supervision and accountabiity)	Autonomy (Degree of decision-making)	<b>Complexity</b> (Degree of difficulty of situations and tasks)	Knowledge and Abilities (Required to support work as described under Responsibility, Autonomy and Complexity)
6	Accountable for significant areas of work, strategy or	Empowered to chart direction and practices within and	Complex	<ul> <li>Synthesise knowledge issues in a field of work and the interface between different fields, and create new forms of knowledge</li> </ul>
	overall satisfaction	outside of work (including professional field/ community), to achieve/exceed		<ul> <li>Employ advanced skills, to solve critical problems and formulate new structures, and/or to redefine exisiting knowledge or professional practice</li> </ul>
		work results		<ul> <li>Demonstrate exemplary ability to innovate, and formulate new ideas and structures</li> </ul>
5	Accountable for achieving assigned objectives, decisions made by self	Provide leadership to achieve desired work results; Manage resources, set	Complex	<ul> <li>Evaluate factual and advanced conceptual knowledge within a field of work, involving critical understanding of theories and principles</li> </ul>
	and others	milestones and drive work		• Select and apply an advanced range of cognitive and technical skills, demonstrating mastery and innovation, to devise solutions to solve complex and unpredictable problems in a specialised field of work
				Manage and drive complex work activities
4	Work under broad direction	Exercise judgement; adapt and influence to achieve work		<ul> <li>Evaluate and develop factual and conceptual knowledge within a field of work</li> </ul>
	Hold accountability for performances of self and others	performance		<ul> <li>Select and apply a range of cognitive and technical skills to solve non-routine/ abstract problems</li> </ul>
				<ul> <li>Manage work activities which may be unpredictable</li> </ul>
				• Facilitate the implementation of innovation
3	Work under broad direction May hold some	Use discretion in identifying and responding to issues, work with others and	Less routine	<ul> <li>Apply relevant procedural and conceptual knowledge and skills to perform differentiated work activities and manage changes</li> </ul>
	accountability for performance of others, in addition to self	contribute to work performance		• Able to collaborate with others to identify value-adding opportunities
2	Work with some supervision	Use limited discretion in resolving issues	Routine	<ul> <li>Understand and apply factual and procedural knowledge in a field of work</li> </ul>
	Accountable for a broader set of tasks assigned	or enquiries. Work without frequently looking to other for guidance		<ul> <li>Apply basic cognitive and technical skills to carry out defined tasks and to solve routine problems using simple procedures and tools</li> </ul>
				<ul> <li>Present ideas and improve work</li> </ul>
1	Work under direct	Minimal discretion	Routine	• Recall factual and procedural knowledge
	supervision Accountable for tasks	required. Expected to seek guidance		<ul> <li>Apply basic skills to carry out defined tasks</li> </ul>
	assigned			<ul> <li>Identify opportunities for minor adjustments to work tasks</li> </ul>

#### Generic Skills and Competencies (GSCs)

050			<b>Proficiency Levels</b>	
GSC	GSC Description	Basic	Intermediate	Advanced
Communication	Convey and exchange thoughts, ideas and information effectively through various mediums and approaches.	Communicate information with others to respond to general inquiries and to obtain specific information.	Articulate and discuss ideas and persuade others to achieve common outcomes.	Negotiate with others to address issues and achieve mutual consensus.
Computational Thinking	Develop and use computational models, tools and techniques to interpret and understand data, solve problems and guide decision-making.	Use computational models, tools and techniques to identify patterns in a problem and develop a solution.	Modify existing computational models, tools and techniques to develop different solutions.	Develop and create computational models, tools and techniques to implement new solutions and apply to other problems.
Creative Thinking	Adopt a fresh perspective to combine ideas or information in new ways and make connections between seemingly unrelated fields to create new ideas and applications.	Connect ideas or information from related fields or applications to address an immediate issue.	Connect or combine ideas or information from unrelated fields or applications to generate multiple ideas to bring about a specific outcome.	Create original applications or ideas to reveal new possibilities and reshape goals through high level of innovativeness.
Decision Making	Choose a course of action from various alternatives using a reasoned process to achieve intended goals.	Make decisions of simple or routine nature to achieve intended goals using given information and guidelines.	Make decisions in a complex setting to achieve intended goals using a structured process and multiple sources of available information.	Make decisions in a volatile and ambiguous setting using a structured process and limited sources of available information to achieve intended goals.
Developing People	Help others to learn and develop their capabilities to enhance their performance and achieve personal or professional goals.	Use demonstration and explanation to teach a familiar task to inexperienced co-workers.	Provide coaching to others to develop their skills and knowledge on their jobs to enhance performance.	Provide mentorship to help others in their professional and personal development to improve performance and further their careers.
Digital Literacy	Use ICT tools, equipment and software to create, evaluate and share information digitally with others.	Perform basic functions using software programmes pertaining to computer operating systems and file management, and search online information.	Use available software features to create and edit documents, customise templates and reports and evaluate online information.	Use available software features to enhance documents, analyse and manipulate data, and use ICT to organise, share and communicate information clearly and coherently.
Global Mindset	Awareness of diversity across global cultures and markets. Seek opportunities to adopt successful practices and ideas.	Demonstrate understanding of global challenges and opportunities and how to transfer best practices across cultures. Respect cultural differences and needs of a diverse workforce.	Develop global networks and manage virtual relationships while balancing both local and global perspectives. Adopt a local and global perspective when making decisions.	Build the organisation's capabilities to compete in a global environment. Manage tension between corporate requirements, global and cultural differences.

#### Generic Skills and Competencies (GSCs)

GSC			<b>Proficiency Levels</b>	
650	GSC Description	Basic	Intermediate	Advanced
Interpersonal Skills	Manage relationships efficiently and communicate with others effectively to achieve mutual consensus and outcomes.	Recognise own internal feelings and emotional states to manage interpersonal relationships in social situations.	Detect and decipher emotions of others to manage interpersonal relationships in social situations.	Influence, guide and handle others' emotions to build instrumental relationships and manage conflicts and disagreements.
Leadership	Lead others to achieve objectives in the most effective way. Provide an inclusive workplace that cultivates workplace relationships and teamwork, and foster the development of others.	Demonstrate professionalism to set a good example at peer level. Support others through own initiative and enthuse others through own positive and energetic approach.	Lead by example at team level. Encourage and guide others to adopt a point of view, make changes or take action. Provide a team environment that facilitates relationships building, teamwork and the development of others.	Lead by example at organisational level. Inspire, motivate and guide others to adopt a point of view, make changes or take action. Cultivate an open, cooperative and collaborative learning culture for the organisation.
Lifelong Learning	Seek out opportunities to enhance one's knowledge and skills. Access and acquire new knowledge and skills actively for continual learning.	Organise and manage own learning by setting learning targets. Identify learning approaches to achieve work or career goals.	Engage in collaborative learning by discussing one's learning with others and soliciting feedback to continually improve oneself.	Conduct self-reflective practices to review one's learning to facilitate continual growth in one's career or profession.
Managing Diversity	Work well with people from different ethnic, social, cultural and educational backgrounds and understand the concerns and interests of diverse work groups.	Demonstrate sensitivity to the cultural characteristics, values, beliefs, and behaviors of another ethnic or cultural group.	Build relationships with different ethnic or cultural groups by engaging in cross-cultural cooperative projects.	Manage conflicts arising from different ethnic or cultural groups and work effectively in cross-cultural settings.
Problem Solving	Generate feasible and efficient solutions to solve problems and capitalise on new opportunities.	Identify easily perceivable problems and follow given guidelines and procedures to solve the problems.	Identify less perceivable problems and use problem solving tools and techniques to solve the problems.	Anticipate potential problems beyond the current scope and apply higher order problem solving tools and techniques to turn problems into opportunities.
Resource Management	Efficient and effective deployment and allocation of resources when and where they are needed. Include planning, allocating and scheduling of resources to tasks, which typically include manpower, machines, money and materials.	Use resources to ensure optimum and efficient use of resources.	Deepen insights into the planning, allocation and deployment of resources to anticipate needs. Plan the allocation and deployment of resources efficiently and effectively.	Establish strategies for the allocation and deployment of resources efficiently and effectively.

#### Generic Skills and Competencies (GSCs)

050	OCO Decemination		Proficiency Levels	
GSC	GSC Description	Basic	Intermediate	Advanced
Sense Making	Organise and analyse data and information accurately to identify relationships and detect patterns and trends to gain insights for decision-making.	Identify relationships and linkages within different components of data.	Interpret data to uncover patterns and trends between various sources of data.	Analyse data relationships, patterns and trends to gain important insights and make informed decisions.
Service Orientation	Commit to exceeding both internal and external customers' needs. Proactively identify customer needs and sustain a culture of service excellence within the organisation.	Exceed customer needs and expectations and handle service challenges with a positive mindset. Demonstrate an understanding of the organisation's service vision, mission and values.	Anticipate customer needs and expectations and elicit feedback from customers to improve service. Build relationships with customers to create and sustain customer loyalty.	Model, lead, train and motivate staff with a focus on sustaining a culture that encourages commitment to service excellence and high performance.
Teamwork	Work collaboratively and effectively with others to contribute to group efforts to achieve identified objectives.	Contribute to a positive and cooperative working environment by fulfilling own responsibilities and providing support to co-workers to achieve team goals.	Facilitate work team activities, provide assistance and support needed by team members and promote ownership and commitment among team members to work goals to improve team performance.	Establish teams, design and assess tasks to continually improve team effectiveness and cultivate a sense of organisational ownership and a cooperative working environment.
Transdisciplinary Thinking	Understanding of concepts across multiple disciplines, with the capacity to synthesise the knowledge and insights to guide decisions and foster cooperation.	Research and adapt concepts from outside one's field of expertise to supplement one's core knowledge and proficiency.	Co-relate material from diverse knowledge bases to guide decisions and policy making. Participate in reflective and trans-disciplinary communities within and outside the organisation.	Synthesise knowledge and insights across disciplinary boundaries to aid strategic decisions and foster cooperation within and outside of the organisation.
Virtual Collaboration	Use online collaborative communication tools to work as teams to accomplish tasks or projects.	Participate and contribute in a virtual team. Set up appropriate online collaborative tools and supporting equipment.	Use interactive collaborative tools to foster cohesion and commitment among virtual team members to achieve goals. Keep up- to-date with innovative online collaborative tools and applications to enhance one's proficiency in engaging in virtual collaboration.	Leverage on diverse team talent, latest online collaborative technologies and virtual platforms to produce collaborative behaviour and achieve technological savviness in virtual collaboration.

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- Individuals who have agreed to share their personal career stories
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- Education and training providers for their inputs on skills and competencies development

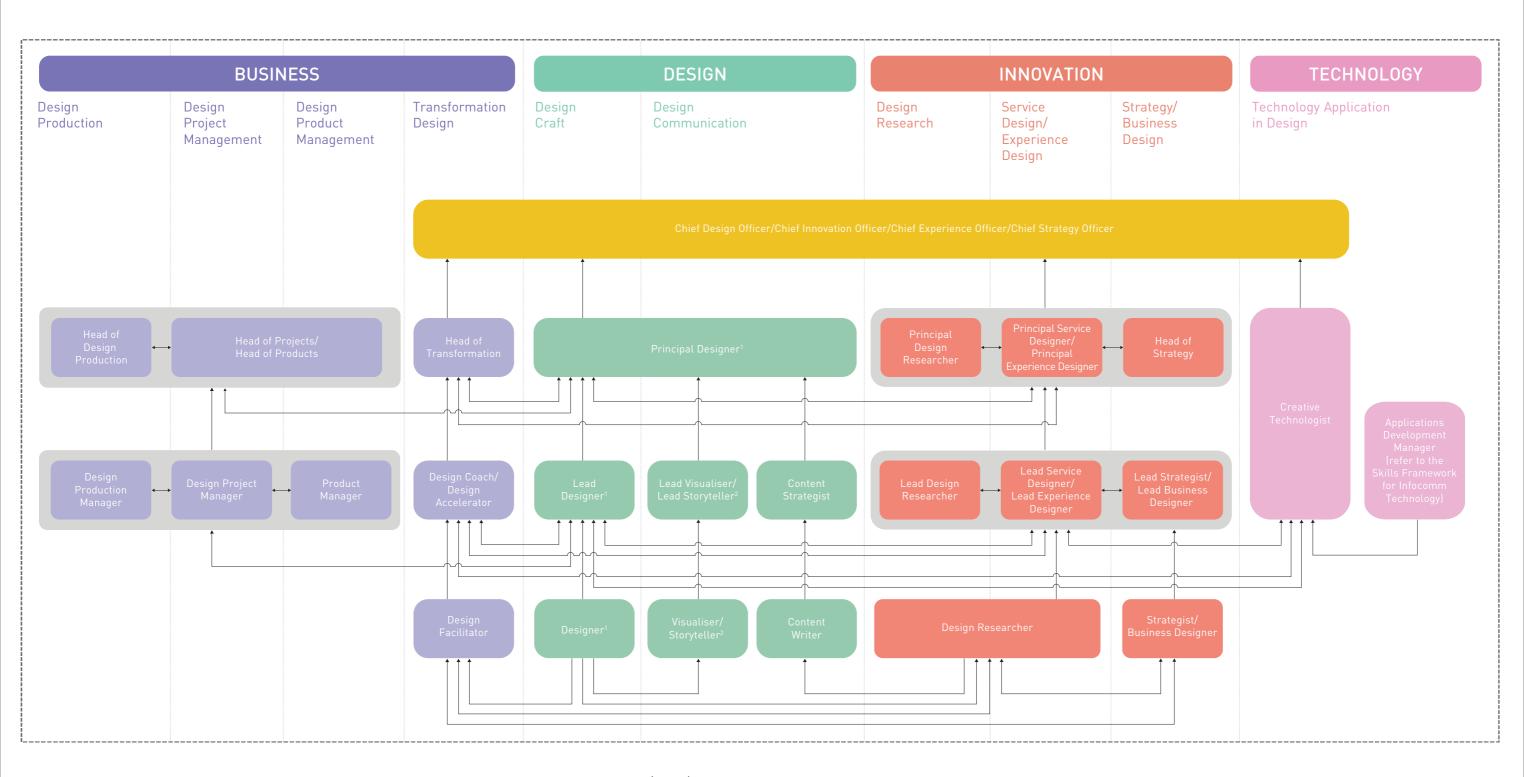
### Wage Information

	Monthly G	ross Wage
Occupation	25TH PERCENTILE (S\$)	75TH PERCENTILE (S\$)
Designer	\$2,250	\$3,750
Lead Designer	\$3,750	\$5,250
Principal Designer	\$5,250	\$8,250
Visualiser/Storyteller	\$2,250	\$4,875
Lead Visualiser/Lead Storyteller	\$2,250	\$5,250
Content Writer	\$2,250	\$3,750
Content Strategist	\$3,750	\$9,750
Design Researcher	\$3,750	\$7,500
Lead Service Designer/Lead Experience Designer	\$3,750	\$6,750
Strategist/ Business Designer	\$3,750	\$9,750
Head of Strategy	\$6,000	\$14,250
Design Project Manager	\$4,125	\$8,250
Chief Design Officer/Chief Innovation Officer/Chief Experience Officer/Chief Strategy Officer	\$6,000	\$14,250

Source: National Design Industry & Manpower Study 2017 commissioned by DesignSingapore Council.

Notes: The above data reflects the indicative monthly gross salary and includes fixed bonuses, variables, overtime pay and allowances. Actual salaries may differ due to market conditions and company/organisation policies.

### SKILLS FRAMEWORK FOR DESIGN Career Pathways



<sup>1</sup> Includes job roles such as Architect, Landscape Architect/Landscape Designer, Interior Designer, Fashion Designer, Product Designer, Furniture Designer, Graphic Designer and Interaction Designer.

### <sup>2</sup> Includes job roles such as Renderer, Graphic Designer, Multimedia Artist, Commercial Artist, Photographer, Videographer, 2D/3D Visualiser, Creative Visualiser and Data Visualiser.

#### Legend:

Denotes vertical job role progression

Denotes lateral job role transition

The Career Map serves as a reference to reflect the available job roles and possible career pathways in the Design sector, which may vary depending on each company's structure and business context. The career progression pathways would depend on individual performance, capability, experience, aspiration, as well as company needs.

Denotes lateral job role transitions across functional tracks

### SKILLS FRAMEWORK FOR DESIGN Career Pathways



Scan this QR code to find out more about the Skills Framework for Design







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