

**SKILLS FRAMEWORK FOR DESIGN  
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE**

<b>TSC Category</b>	Creativity					
<b>TSC</b>	Empathetic Design					
<b>TSC Description</b>	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					
<b>TSC Proficiency</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
			DSN-DES-3024-1.1	DSN-DES-4024-1.1	DSN-DES-5024-1.1	
			Apply principles of empathetic design to examine how users think about products and services, and attempt to solve their problems and meet their needs	Manage empathy-centred design processes to innovate new solutions for meeting users' needs and preferences	Enforce a culture of empathy throughout the organisation by embedding an empathetic mind-set into organisational processes, from product conceptualisation and development to customer management	
<b>Knowledge</b>			<ul style="list-style-type: none"> <li>• Process and principles of empathetic design</li> <li>• Role of empathy in design</li> <li>• Concept of unarticulated needs in empathetic design</li> <li>• Importance of emotion in design</li> <li>• Concept and features of empathy maps</li> <li>• Concept of user experience journeys</li> <li>• Ways to cultivate curiosity in empathetic design</li> <li>• Methods to make sense of data collected through empathetic design tools</li> </ul>	<ul style="list-style-type: none"> <li>• Process and principles of empathetic design</li> <li>• Design research methodologies</li> <li>• Role of empathy in design</li> <li>• Concept of product and service design that goes beyond meeting users' functional needs</li> <li>• Challenges of empathetic design</li> <li>• Concept of emotional design</li> <li>• Concept and features of empathy maps</li> <li>• Concept of user experience journeys</li> <li>• Methods and processes for enhancing total user experience</li> </ul>	<ul style="list-style-type: none"> <li>• Principles and theories of empathetic design</li> <li>• Challenges of being empathetic</li> <li>• Design research methodologies</li> <li>• Methods for overcoming challenges in empathetic design</li> <li>• Concept of product and service design that goes beyond meeting users' functional needs</li> <li>• Methods to create an emotional connection with design</li> <li>• Methods to enhance commercial returns of future products</li> <li>• Linkage between empathy and creativity</li> <li>• Strategies for sense making data collected through empathetic design tools for product and/or service design</li> </ul>	

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<p><b>Abilities</b></p>			<ul style="list-style-type: none"> <li>• Build understanding of users' experiences of products and services by balancing the users' rationality and emotions</li> <li>• Identify how users think and attempt to solve their problems</li> <li>• Seek to understand the perspectives of others</li> <li>• Create empathy maps to map users' experience and emotional states during the use of products and services</li> <li>• Conduct experiments to ascertain whether products can meet the needs of users</li> <li>• Gather inputs from internal and external stakeholders during the design process</li> </ul>	<ul style="list-style-type: none"> <li>• Analyse qualitative data about end users' motivations, behaviours, and cognitive and attitudinal preferences</li> <li>• Review visuals and design work to ensure they evoke emotional connections with users</li> <li>• Validate design hypotheses with appropriate stakeholder groups</li> <li>• Develop strategies to enhance stakeholders' understanding of users and their experience journeys</li> <li>• Implement strategies to remove obstacles to empathetic design or negative emotions from user experience</li> </ul>	<ul style="list-style-type: none"> <li>• Build strategies to get users to connect with design and creative work</li> <li>• Drive research activities to understand users' motivations and experiences on using various products and services</li> <li>• Develop strategies to permeate empathy, from product development to customer management processes</li> <li>• Evaluate the outcomes of empathetic design solutions for the organisation</li> <li>• Strategise engagement with stakeholders to attain buy-in for empathetic design solutions</li> </ul>	
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