

# SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT

TSC Category	Development and Implementation					
TSC Title	Data Visualisation and Storyboarding					
TSC Description	Implement contemporary techniques, dynamic visual displays with illustrative and interactive graphics to present patterns, trends, analytical insights from data or new concepts in a strategic manner for the intended audience					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			ICT-DIT-3006-1.1	ICT-DIT-4006-1.1	ICT-DIT-5006-1.1	
			Select appropriate visualisation techniques to translate data insights into visual and narrative formats to deliver compelling messages and develop dashboards to reflect data trends and findings	Design storyboards and data displays to present trends and finding, incorporating new and advanced visualisation techniques and analytics capabilities	Establish an effective data storytelling and visualisation architecture and design intelligent and adaptable displays employing optimal delivery modes, mechanisms and timings	
Knowledge			<ul style="list-style-type: none"> <li>Interpretation of data analysis and findings</li> <li>Types of information displays</li> <li>Suitability of different data representations and visual displays for different contexts</li> <li>Data visualisation tools and techniques</li> <li>Elements of data dashboards</li> </ul>	<ul style="list-style-type: none"> <li>New data visualisation tools and techniques</li> <li>Range of methods to portray data patterns, trends and correlations</li> <li>Dashboard development process and techniques</li> <li>Features of data displays</li> <li>Strategic visualisation and mapping techniques</li> <li>Storyboarding and framework development</li> <li>Exploratory and diagnostic analysis of data</li> <li>Data dashboard creation and application capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Emerging trends and developments in data visualisation</li> <li>Strategic elements and considerations in a data presentation architecture</li> <li>Modes and mechanisms for data delivery</li> <li>Intelligent data dashboard design methodologies and techniques</li> <li>Strategic visualisation and mapping techniques</li> <li>Storyboarding and framework development</li> </ul>	
Abilities			<ul style="list-style-type: none"> <li>Select appropriate visualisation techniques and information displays to convey data and findings</li> <li>Organise the presentation of data to reflect trends and</li> </ul>	<ul style="list-style-type: none"> <li>Draw key meanings and insights from data available</li> <li>Develop general framework and storyboard for communicating data</li> </ul>	<ul style="list-style-type: none"> <li>Design general framework and storyboard for communicating data</li> <li>Lead efforts to align storyboard to business vision, strategic, goals and branding</li> </ul>	

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			<p>correlations in a visually compelling way</p> <ul style="list-style-type: none"> <li>• Incorporate appropriate elements to create informative and dynamic data displays</li> <li>• Develop basic dashboards and scorecards to display internal as well as external benchmark data</li> <li>• Incorporate interactive graphics, visuals and technical features into the data presentation</li> <li>• Communicate limitations of data and interpretations of findings</li> <li>• Describe context and commentary behind visualised data patterns</li> <li>• Describe data trends and patterns in narrative format suited to level of understanding of audience</li> <li>• Adjust language and presentation formats according to audience being communicated to</li> <li>• Present and describe key meaning and insights</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce new or emerging visualisation tools and techniques that are fit for purpose</li> <li>• Exercise judgement on the presentation of data to ensure that critical trends and findings are presented in the optimal way</li> <li>• Develop dashboards and scorecards incorporating advanced visualisation techniques and embedding analytics capabilities</li> <li>• Review tables, graphs, and dynamic data displays, to ensure key questions from key stakeholders are addressed</li> <li>• Design features of data displays including navigation, layout, user interface and user experience of interactive graphics</li> <li>• Identify and define linkages between data, visuals and narratives being shared</li> <li>• Identify context to support data storytelling objectives</li> <li>• Guide others towards developing data storytelling and data visualisation abilities</li> <li>• Align interpretation and presentation of data analytics findings with subject matter experts</li> </ul>	<ul style="list-style-type: none"> <li>• Establish an effective data presentation architecture to address critical business questions</li> <li>• Integrate latest developments in data visualisation tools, techniques and methodologies</li> <li>• Determine suitable data presentation delivery modes and mechanisms, tailored to key stakeholders' needs</li> <li>• Make decision on the optimal timing for presentation and updates of data and trends on dashboards and systems</li> <li>• Design intelligent data dashboards and customisable visual displays</li> <li>• Lead efforts to interpret and present explanations for counterintuitive patterns or findings</li> </ul>	
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Range of Application	<p>Data visualisation tools may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Tableau</li> <li>• HTML/CSS</li> <li>• SAS Visual Analytics</li> <li>• R</li> </ul> <p>Data visualisation techniques may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Line charts</li> <li>• Network diagram</li> <li>• Map frequency chart</li> </ul>
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