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

TSC Category	Technology Management					
TSC Title	Automation Management in Product Development					
TSC Description	Oversee automation systems to ensure operation requirements for product development are met as well as propose strategies for automation systems performance improvement					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
		Apply procedural knowledge of automation technologies and emerging technologies to execute development tasks in the product development process	Interpret workflow plan and recommendations from the product developer for the use of automation technologies in products	Review performance of automation technologies in products to assess areas of improvements and possible iterations to be made in products pre- and post-launch after A/B testing	Formulate new processes in product development that adopt automation technologies to enhance efficiency in the product development process, as well as product improvements to better meet the needs of consumers	Spearhead the use of wide applications of automation technologies in the product development teams to transform the product development track and processes
Knowledge		• Types of automation technologies • Methods of operating automation systems and emerging technologies for software development and product design tasks • Procedures of using automation systems and emerging technologies for software development and product design tasks	• Organisational workflows • Principles of automation technologies • Procedures for setting up and inspecting automation technologies in products • Approaches to oversee tasks that use automation technologies • Principles of automation algorithms • Methodology to assess efficacy of automation in products pre-launch and post-launch • Use A/B Testing through automation technologies to identify areas of improvements in products	• Range of applications of automation technologies • Methods of evaluating resources and skills to carry out tasks using automation technologies • Concepts pertaining to performance specifications and analysis • Best practices in automation • Principles of applying automation technologies in products • Types of programming skills of automation technologies	• Organisation's products, services, and processes • Methods of developing detailed operating procedures for automation technologies • Methods to influence adoption of new technologies • Impact of automation • Principles of change management	• Applications of emerging automation technologies • Industry best practices and applications of new technologies adoption in the industry • Impact of automation • Benefits and trade-offs of advanced robotic and automation • Financial cost of introducing advanced automation to processes and products • Automation cost benefits analysis methods • Methodology of return-on-investment (ROI) analysis • Methods of conducting research and development in automations • Automation legislative requirements • Principles of change management

Abilities		• Operate automation technologies by following product teams' instructions and procedures • Follow operational protocols when incorporating automation technologies in products • Identify and report any issues with automation technologies	• Oversee use of automation technologies • Diagnose faults in the use of automation technologies for processes and suggest solutions • Interpret and extract relevant process parameters from given specifications • Apply corrective actions for automation in products after analysing results from A/B Testing and post-product launch • Review feedback on operations of automation technologies and incorporate these into updated operating procedures	• Evaluate various automation technologies to compare strengths and limitations of the automation technologies • Apply optimisation techniques to improve automated processes' efficiency and product quality • Evaluate the benefits and trade-offs of implementing automaton into products and businesses	• Determine range of application, resources, skill requirements and feasibility for automation technologies • Develop technical operating procedures for automation • Drive automation technology • Refine parameters of automation processes to enhance efficiency in the product development processes, and make improvements within each product to better meet the needs of consumers • Determine post-processing procedures using automation technologies	• Synthesise innovation developments • Anticipate macro trends and their impact on speed, process, or automation requirements• • Evaluate the benefits and trade-offs of implementing advanced automation to the products and business • Assess the cost and return on investment of automating processes • Develop automation application strategies • Analyse alternative approaches to automation to enhance productivity • Identify potential opportunities to improve automation approaches in the organisation • Prepare a business case for implementing advanced automation to satisfy business and legislative requirements
Range of Application	N/A					