The Initial IT Infrastructure Flexibility Maturity Model

Maturity level	TECHNICAL DIMENSION		PEOPLE DIMENSION			MANAGEMENT DIMENSION	
	Compatibility *Ability to share information within/across IT system*	**Modularity** *Ability of IT system to be easily reconfigured*	**IT leadership skill** *Skills and roles acquired to manage IT projects*	**Business functional skill** *Responsibility of IT personnel towards intellection of latest IT*	**Project management skill** *Understanding of IT personnel to the nature of construction business*	**Technical-oriented** *Infrastructure provided to support the development of IT project*	**Management-oriented** *Management practiced for managing IT project*
Level 5 **FLEXIBLE**	*Integrated and automated* ▪ **File format standardization:** An integrated system used to standardise file formats in all IT systems within an organisation. ▪ **Integration interval:** Able to integrate in minutes to seconds.	*Continuous improvement* ▪ **System design**: Computerized system is used to test the design usability and design analysis.	*Optimized* ▪ **Teamwork:** Fully support the individual's effort towards continuous development of team competencies. ▪ **Independence & proactiveness:** Trust gained from the top management.	*Expert* ▪ **IT awareness:** Establish a data management system and trend analysis. ▪ **IT learning commitment:** Integrated and standardized data management used within organization. ▪ **Willingness of change:** Flexible in adapting to changing realities through reviewing best practices. ▪ **Hybrid skill:** Harmony understanding between IT and the other departments within a whole organization.	*Performance analysis* ▪ **CSF awareness:** Able to perform IT project CSF analysis and react to changing CSF.	*Advanced strategy* ▪ **Connectivity:** Utilize open system framework in promoting full stack interoperability and portability. ▪ **IT security management:** Utilize artificial intelligence into the development of IT system security tools. ▪ **Data management:** Integrate the in-house data management tool that has search ability across multiple systems, and include auto-reporting and analyzing.	*Established approach to continuous improvement* ▪ **IT project management:** Establish an ability to anticipate future capacity and capability requirements, with IT change management plan is recognized.
Level 4 **EXTENSIVE**	*Centralized* ▪ **File format standardization:** A centralised system is used to standardize file formats for a particular IT system. ▪ **Integration interval:** Able to integrate in days to hours.	*Adaptive design* ▪ **System design:** The documentation is updated on a regular cycle to reflect the updated IT designs.	*Challenged* ▪ **Teamwork:** Establish a project management team. Team building activities are performed. ▪ **Independence & proactiveness:** Reliable and can work under own initiative.	*Reliable* ▪ **IT awareness:** Awareness shared through knowledge sharing activities within organization. ▪ **IT learning commitment:** Document relevant latest IT processes and share within organization. ▪ **Willingness of change:** Enforcement by the top management to adapt new approaches. ▪ **Hybrid skill:** All IT individuals commonly understand business objectives, but without mutual understanding between technical and management team.	*Evaluation* ▪ **CSF awareness:** Able to provide solutions in correspond to IT project CSF.	*Enhanced and focused* ▪ **Connectivity:** Provide network that connects to one another wirelessly and automatically. ▪ **IT security management:** Carry out data encryption and establish IT risk and security analysis. ▪ **Data management:** Develop a standalone in-house data management tool.	*Service centric and integrated process.* ▪ **IT project management:** Process efficiency is monitored for improvement by taking into account changing business needs and external factors.
Level 3 **RESTRICTED**	*Standardized* ▪ **File format**	*Standard design* ▪ **System design:** Design	*Collaborative* ▪ **Teamwork:** Identify roles	*Adequate* ▪ **IT awareness:** Latest IT	*Best practice* ▪ **CSF awareness:** Aware	*Essential and consistent* ▪ **Connectivity**: Combine	*Consistent and comprehensive* ▪ **IT project management:**

	standardization: Standardized file formats are used for each type of IT system. ▪ **Integration interval:** Able to integrate in weeks to days.	standards exist. Technical reference mode and standards profile framework established.	based on the core competencies required to perform the specific nature of IT project. ▪ **Independence & proactiveness:** Proactive but needs the manager to determine the goal.	awareness grows among top management level. ▪ **IT learning commitment:** Some of IT processes are documented but in isolation. Learn by demonstration, through conferences, and readings. ▪ **Willingness of change:** The top management encourages new approach adaptation, with the change willingness is vary. ▪ **Hybrid skill:** A manager capable to understand business objectives, but the understanding among team members varies.	about IT project CSF, with active involvement in identifying CSF.	more than one network interface into one physical logical interface. ▪ **IT security management:** Execute the statistical data security system to control the access to systems. ▪ **Data management:** Utilize a third-party data management tool, in isolation.	Consistent standards are used by all IT systems.
Level 2 **RIGID**	*Limited standardization* ▪ **File format standardization:** Limited standardized file formats for some parts of IT system exist. ▪ **Integration interval:** Able to integrate in weeks	*Informal approach* ▪ **System design:** IT documentation and standards are established by a variety of ad hoc means, and are localized or informal.	*Compassionate* ▪ **Teamwork:** A formal organisational chart and staffing management plan are defined. ▪ **Independence & proactiveness:** Committed and understand the function of the team, and perform the common and repeatable methods for the specific tasks.	*Improved* ▪ **IT awareness:** Latest IT awareness varies among individuals. ▪ **IT learning commitment:** Learning technology processes in individual effort basis, without an existence of any documentation. ▪ **Willingness of change:** No encouragement from the top management, with change willingness is on individual efforts. ▪ **Hybrid skill:** Limited understanding of business objectives with minimal guidance.	*Recognition* ▪ **CSF awareness:** Aware about IT project CSF with identification made by the top management.	*Fundamental needs* ▪ **Connectivity**: Provide internal wireless and cabled network. ▪ **IT security management:** Provide networked IT security to protect and secure the entire platform, including access controls. ▪ **Data management:** Define stand-alone data administration on project basis.	*Adoption of basic approach to project execution.* ▪ **IT project management:** Inconsistency of defined standard approaches used between IT systems.
Level 1 **INITIAL**	*Unstructured and project-based* ▪ **File format standardization:** Each IT system has its own file formats. ▪ **Integration interval:** Able to integrate in months to weeks.	*No involvement* ▪ **System design:** IT documentation and standards are not established.	*Reliant* ▪ **Teamwork:** Form an ad hoc team with minimal understanding of each responsibility. ▪ **Independence & proactiveness:** Aware about the tasks' objectives, but actions taken only under manager's instructions.	*Incompetent* ▪ **IT awareness:** Unaware/not interested in latest IT tools. ▪ **IT learning commitment:** Not interested to learn related IT process. ▪ **Willingness of change:** Unwilling to change, and prefer to work within a comfort zone. ▪ **Hybrid skill:** Unguided understanding about business objectives.	*Deficient understanding* ▪ **CSF awareness:** Little awareness of IT project CSF, and it is based on individual efforts.	*Ad-hoc and localized* ▪ **Connectivity:** Provide internal cabled network. ▪ **IT security management:** Basic identifications (username) and authentications (password) are used in stand-alone PCs. ▪ **Data management:** Manage data manually using local disk storage.	*Ad hoc IT processes.* ▪ **IT project management:** Unstructured approach to dealing with IT systems