

# IT INFRASTRUCTURE FLEXIBILITY MATURITY MODEL

		TECHNICAL DIMENSION		PEOPLE DIMENSION			MANAGEMENT DIMENSION	
		Compatibility <i>Ability to share information within/across IT system</i>	Modularity <i>Ability of IT system to be easily reconfigured</i>	IT Leadership Skill <i>Skills and roles acquired to manage IT projects</i>	Business Functional Skill <i>Responsibility towards intellection of latest IT</i>	Project Management skill <i>Understanding of the nature of construction business</i>	Technical-oriented <i>Infrastructure provided to support the development of IT project</i>	Management-oriented <i>Management practices for managing IT project</i>
Flexible	LEVEL 5	<p><i>Integrated and automated</i></p> <ul style="list-style-type: none"> <li><b>File format standardization:</b> An integrated system is used to standardize file formats between the system and other authorized internal/external systems.</li> <li><b>Integration interval:</b> Able to integrate in few days.</li> </ul>	<p><i>Continuous improvement</i></p> <ul style="list-style-type: none"> <li><b>System design:</b> The automated tool is used to assimilate the design for design usability improvement.</li> </ul>	<p><i>Optimized</i></p> <ul style="list-style-type: none"> <li><b>Teamwork:</b> Perform team-building activities to support continuous development of team competencies.</li> <li><b>Independence &amp; proactiveness:</b> Autonomous and trust gained, where actions are taken with freedom without influenced by the top management.</li> </ul>	<p><i>Expert</i></p> <ul style="list-style-type: none"> <li><b>IT awareness:</b> Establish a data management system and trend analysis.</li> <li><b>IT learning commitment:</b> Establish a standardized and integrated knowledge management system.</li> <li><b>Willingness of change:</b> Continuous encouragement with change willingness becomes a culture.</li> <li><b>Hybrid skill:</b> Harmony understanding between IT and the other departments within a whole organization.</li> </ul>	<p><i>Performance analysis</i></p> <ul style="list-style-type: none"> <li><b>CSF awareness:</b> Able to perform IT project CSF analysis and react to changing CSF.</li> </ul>	<p><i>Advanced strategy</i></p> <ul style="list-style-type: none"> <li><b>Connectivity:</b> Utilize open system framework in promoting full stack interoperability and portability.</li> <li><b>IT security management:</b> Utilize artificial intelligence into the development of IT system security tools.</li> <li><b>Data management:</b> Integrate the in-house data management tool that has search ability across multiple systems, and include auto-reporting and analyzing.</li> </ul>	<p><i>Established approach for continuous improvement</i></p> <ul style="list-style-type: none"> <li><b>IT project management:</b> Establish an ability to anticipate future capacity requirements, with IT change management plan is recognized.</li> </ul>
	LEVEL 4	<p><i>Centralized</i></p> <ul style="list-style-type: none"> <li><b>File format standardization:</b> A centralized and automated tool is used within the system to standardize file format.</li> <li><b>Integration interval:</b> Able to integrate within a week.</li> </ul>	<p><i>Adaptive design</i></p> <ul style="list-style-type: none"> <li><b>System design:</b> The documentation is updated upon new requirements and necessities.</li> </ul>	<p><i>Challenged</i></p> <ul style="list-style-type: none"> <li><b>Teamwork:</b> Establish an IT Project Management team.</li> <li><b>Independence &amp; proactiveness:</b> Reliable but need little assistance from the top management.</li> </ul>	<p><i>Reliable</i></p> <ul style="list-style-type: none"> <li><b>IT awareness:</b> Perform knowledge sharing activities within organization.</li> <li><b>IT learning commitment:</b> Document relevant latest IT processes and share within organization.</li> <li><b>Willingness of change:</b> Enforcement from the top management, by providing information and trainings, with a performance assessment.</li> <li><b>Hybrid skill:</b> IT team commonly understand business objectives, but without mutual understanding between technical and management team.</li> </ul>	<p><i>Evaluation</i></p> <ul style="list-style-type: none"> <li><b>CSF awareness:</b> Able to provide solutions in correspond to IT project CSF.</li> </ul>	<p><i>Enhanced and focused</i></p> <ul style="list-style-type: none"> <li><b>Connectivity:</b> Provide network that connects to one another wirelessly and automatically.</li> <li><b>IT security management:</b> Carry out data encryption and establish IT risk and security analysis.</li> <li><b>Data management:</b> Develop a standalone in-house data management tool.</li> </ul>	<p><i>Service centric and integrated</i></p> <ul style="list-style-type: none"> <li><b>IT project management:</b> Process efficiency is monitored for improvement by taking into account changing business needs and external factors.</li> </ul>
	LEVEL 3	<p><i>Standardized</i></p> <ul style="list-style-type: none"> <li><b>File format standardization:</b> Standardized file formats are determined for the whole modules within the system; with manual file conversion exists in standard procedure.</li> <li><b>Integration interval:</b> Able to integrate in less than a month.</li> </ul>	<p><i>Standard design</i></p> <ul style="list-style-type: none"> <li><b>System design:</b> Formal design standards and procedures exist.</li> </ul>	<p><i>Collaborative</i></p> <ul style="list-style-type: none"> <li><b>Teamwork:</b> Identify roles based on the core competencies required to perform the specific nature of IT project.</li> <li><b>Independence &amp; proactiveness:</b> Get the activities done proactively using their expertise, with goals set by the top management.</li> </ul>	<p><i>Adequate</i></p> <ul style="list-style-type: none"> <li><b>IT awareness:</b> Aware of new IT, with an encouragement from the top management.</li> <li><b>IT learning commitment:</b> Encouragement from the top management by sending for trainings, conferences, and demonstrations. Informal documentation exists.</li> <li><b>Willingness of change:</b> Enforcement from the top management without sufficient training to educate.</li> <li><b>Hybrid skill:</b> An IT manager capable to understand business objectives, but the understanding among individuals varies.</li> </ul>	<p><i>Best practice</i></p> <ul style="list-style-type: none"> <li><b>CSF awareness:</b> Aware about IT project CSF, with active involvement in identifying CSF.</li> </ul>	<p><i>Essential and consistent</i></p> <ul style="list-style-type: none"> <li><b>Connectivity:</b> Combine more than one network interface into one physical logical interface.</li> <li><b>IT security management:</b> Execute the statistical data security system to control the access to systems.</li> <li><b>Data management:</b> Utilize third party data management tools, in isolation.</li> </ul>	<p><i>Consistent and comprehensive</i></p> <ul style="list-style-type: none"> <li><b>IT project management:</b> Consistent standards are used for the whole IT systems.</li> </ul>
	LEVEL 2	<p><i>Limited standardization</i></p> <ul style="list-style-type: none"> <li><b>File format standardization:</b> Standardized file formats in some modules of the system with manual file conversions.</li> <li><b>Integration interval:</b> Able to integrate in less than 3 months.</li> </ul>	<p><i>Informal approach</i></p> <ul style="list-style-type: none"> <li><b>System design:</b> IT documentation and standards are established by a variety of adhoc means, and are localized/informal.</li> </ul>	<p><i>Compassionate</i></p> <ul style="list-style-type: none"> <li><b>Teamwork:</b> Establish dedicated job descriptions, but roles and responsibility are beyond the job's scope.</li> <li><b>Independence &amp; proactiveness:</b> Committed and understand the function of the team, and perform the common and repeatable methods for the specific tasks.</li> </ul>	<p><i>Improved</i></p> <ul style="list-style-type: none"> <li><b>IT awareness:</b> Aware of new IT, on individual efforts basis.</li> <li><b>IT learning commitment:</b> Learning technology processes on individual effort basis, without an existence of any documentation.</li> <li><b>Willingness of change:</b> No encouragement from the top management, with change willingness is on individual effort.</li> <li><b>Degree of hybrid:</b> Limited understanding of business objectives with, minimal guidance from the top management.</li> </ul>	<p><i>Recognition</i></p> <ul style="list-style-type: none"> <li><b>CSF awareness:</b> Aware about IT project CSF, with identification made by the top management.</li> </ul>	<p><i>Fundamental needs</i></p> <ul style="list-style-type: none"> <li><b>Connectivity:</b> Provide internal wireless and cabled network.</li> <li><b>IT security management:</b> Provide networked IT security to protect and secure the entire platform, including access controls.</li> <li><b>Data management:</b> Establish standalone data administration on project basis.</li> </ul>	<p><i>Basic approach</i></p> <ul style="list-style-type: none"> <li><b>IT project management:</b> Inconsistency of defined standard approaches used between IT systems.</li> </ul>
	LEVEL 1	<p><i>Unstructured &amp; project-based</i></p> <ul style="list-style-type: none"> <li><b>File format standardization:</b> The system does not support different file format.</li> <li><b>Integration interval:</b> Able to integrate in more than 3 months.</li> </ul>	<p><i>No involvement</i></p> <ul style="list-style-type: none"> <li><b>System design:</b> IT documentation and standards are not established.</li> </ul>	<p><i>Reliant</i></p> <ul style="list-style-type: none"> <li><b>Teamwork:</b> Form an ad hoc team with minimal understanding of each responsibility.</li> <li><b>Independence &amp; proactiveness:</b> Aware about the tasks' objectives, but actions taken only under manager's instructions.</li> </ul>	<p><i>Incompetent</i></p> <ul style="list-style-type: none"> <li><b>IT awareness:</b> Unaware/not interested in latest IT tools.</li> <li><b>IT learning commitment:</b> Not interested to learn related IT process.</li> <li><b>Willingness of change:</b> Unwilling to change, and prefer to work within a comfort zone.</li> <li><b>Hybrid skill:</b> Unguided understanding about business objectives.</li> </ul>	<p><i>Deficient understanding</i></p> <ul style="list-style-type: none"> <li><b>CSF awareness:</b> Little awareness of IT project CSF, and it is based on individual efforts.</li> </ul>	<p><i>Ad hoc and localized</i></p> <ul style="list-style-type: none"> <li><b>Connectivity:</b> Provide wireless network.</li> <li><b>IT security management:</b> Provide identifications and authentications in standalone PCs, with complete computer security (anti-malware, antivirus, and firewalls)</li> <li><b>Data management:</b> Manage data is manually using local disk storage.</li> </ul>	<p><i>Ad hoc IT processes</i></p> <ul style="list-style-type: none"> <li><b>IT project management:</b> Unstructured approach to dealing with IT systems.</li> </ul>

Flexible

Extensive

Restricted

Rigid

Initial