## **Power BI Enterprise Adoption Maturity Model**

	1 Initial	2 Repeatable / Planned	3 Defined / Standard	4 Capable / Enterprise	5 Efficient / Influence
	This is the starting point for new data-related investments that are new, undocumented, and without any process discipline.	At this point on the maturity curve, data management is planned and executed. Data management is based on defined processes, though these processes may not apply uniformly throughout the organization.	At this point on the maturity curve, a set of standardized data management processes are established and consistently applied across organizational boundaries.	At this point on the maturity curve, data is well-managed across its entire lifecycle.	At this point on the maturity curve, the emphasis is now on automation and continuous improvement.
Culture / Adoption	<ul> <li>An individual has heard of, or been initially exposed to, Power BI in some way.</li> <li>An individual may have access to Power BI but is not yet actively using it.</li> <li>Isolated desktop deployments</li> <li>Report consumers loading PBIX files</li> <li>No / very limited Cloud adoption</li> <li>All report developers have completed the organisations Privacy training and/or Data Privacy training and passed any tests required and/or maintains up-to-date certification if/where required.</li> </ul>	<ul> <li>An individual develops understanding of the benefits of Power BI to deliver analytical value and support decision-making.</li> <li>An individual shows interest and starts to use Power BI.</li> <li>Organisation - Freedom to do vs. Locked Down.</li> <li>Who is allowed to author and publish? Refer Organisation data culture.</li> </ul>	<ul> <li>An individual actively gains Power BI skills by attending formal training, self-directed learning, or experimentation.</li> <li>An individual gains basic competency with the aspects of Power BI relevant to their role.</li> <li>Usage of BI based reports are standard operating model (rather than usage of Spreadsheets)</li> <li>Ubiquitous adoption of data documentation / description standards and usage, including new developer introduction and training. (i.e. Alation) – data knowledge is shared for consistent usage.</li> </ul>	<ul> <li>An individual actively uses Power BI on a regular basis.</li> <li>An individual understands how to use Power BI in the way in which it was intended, as relevant for their role.</li> <li>An individual modifies their behaviour and activities to align with organizational governance processes.</li> <li>An individual's willingness to support organizational processes and change efforts is growing over time, and they become an advocate for Power BI in the organization.</li> <li>An individual makes the effort to continually improve their skills and stay current with new product capabilities and features.</li> <li>Central group within organisation driving</li> <li>No Org. reliance on individuals for ongoing success</li> <li>Mobile App aware development for reports that maximise user useability.</li> <li>Self Service Reporting Reports provide Business Intelligence output (rather than tabular results) – Strategic Insight and / or Time Saving – delivering value to users – data driven business.</li> </ul>	<ul> <li>Proactive and engaged Power BI user base.</li> <li>Development of inhouse visuals with one or many possibly being released to the MarketPlace.</li> </ul>
Education	<ul> <li>Adoption – pushed by tech team members</li> </ul>	<ul> <li>Adoption – Pushed by tech leaders</li> <li>Training the business users by individual report developers</li> <li>Employees seeking Microsoft Exam / Certifications (i.e. DA100)</li> </ul>	<ul> <li>Usage of Power BI reports and user adoption embedded with the organisation</li> <li>Specialists emerging DAX, M, Incremental Refresh, Tool adoption, API integration</li> <li>Employees regularly attending conferences</li> </ul>	<ul> <li>Employees presenting at conferences</li> <li>Users (report consumers) able to edit their own report presentations online.</li> </ul>	<ul> <li>Presenting cutting edge ideas and concepts at conferences.</li> <li>"Train the Trainers", collaboration across the enterprise where citizen developers mentor each other.</li> </ul>
Standards	<ul> <li>BI Report published to Workspaces</li> <li>BI Reports Published as Apps</li> <li>Report developers are likely self taught and in isolated pockets within the organisation.</li> </ul>	<ul> <li>Regular Updates to users/employees for Power BI Desktop distributed automatically</li> <li>Development standards emerging from individuals</li> <li>PBIX Templates/Corporate themes in use</li> </ul>	<ul> <li>Assigned group within the organisation responsible for Power BI Governance/Adoption.</li> <li>Organisation learning through podcasts/conferences etc.</li> <li>Adherence to visuals only being certified Microsoft</li> <li>Use of Deployment Pipelines (possibly limited)</li> <li>A form of Source Control for PBIX files is in place (maybe OneDrive versioning or SharePoint or other technology as things mature.</li> <li>Development of Standards for published reports</li> <li>Report branding and themes in place</li> <li>Publishing/Release Standards &amp; Disciplines – right deployment first time.</li> </ul>	<ul> <li>Reports Embedded in Teams</li> <li>Embedded Content (Power Apps , Custom Apps)</li> <li>Mature usage of Deployment Pipelines and/or other Methodology or Technology that supports a controlled release from test to production for datasets and reports</li> <li>Source Control for PBIX files is mandatory in the organisation. [not specifying technology at time of writing]</li> </ul>	<ul> <li>Automation &amp; Continuous improvement</li> <li>Coding standards and reviews – i.e. Best Practice Analyser c/- Tabular Editor</li> <li>Understanding of "rules", but also use cases when its OK to break rules (i.e. deep understand</li> <li>Custom in-house development (visualisations, Rest APIs etc)</li> </ul>
Governance	<ul> <li>Some successful BI reports used by the organisation although data management does not play a large part and risks exist due to lack of awareness of how data should be used.</li> <li>There is no clear path for Power BI adoption across the organisation.</li> </ul>	<ul> <li>Executive Sponsor for corporate Power BI Adoption</li> <li>User licencing model E3/E5 and/or individual (per user)</li> <li>Over-reliance on individuals for success</li> <li>Certain Power BI content is now critical and broadly used across the organisation</li> <li>Internal community established via Teams channel (or other mechanism)</li> <li>Recognition that a Center of Excellence (COE) can deliver value.</li> </ul>	<ul> <li>May have a dedicated team of BI Report developers and/or teams.</li> <li>Premium per user or Premium Capacity purchased and managed (see Operations / Admin)</li> <li>A Community of Practice (COP) is established</li> <li>Champions identified with a Champions network established</li> <li>A Centre of Excellence is established (Power BI Capability Centre).</li> </ul>	<ul> <li>Role separation / specialisation (Tenant/capacity monitoring health, tenant, ETL, Visual story tellers, optimisation (queries, dataflows, slow reports)</li> <li>Buy in and sponsorship from range of execs (including using reports interactively, as opposed to PDF/printed reports)</li> <li>Governance framework (clearly defined people, regular meetings, focus/user groups etc.)</li> <li>Release standards documented &amp; used &amp; reviewed</li> <li>Design standards documented &amp; used &amp; reviewed</li> <li>Best practice documentation &amp; used &amp; reviewed</li> <li>New features of relevance to the business are identified, reviewed, and socialised.</li> <li>New feature "watch lists" are followed.</li> <li>User feedback loops set-up</li> <li>CICD (Continuous Integration, Continuous Deployment) in use</li> </ul>	<ul> <li>Proactive engagement with Microsoft on PBI roadmap and feature requests.</li> <li>With Power BI adoption within the organisation being very high this means that legacy assets should be deprecated or migrated. Plans should be in place for this activity. In addition skill sets of staff should be upgraded, retrained, redeployed.</li> <li>Champions are able to feedback into the Centre of Excellence (COE)</li> </ul>
Operations / Admin		<ul> <li>Enterprise Admin is a recognised role and there is either someone appointed into the role or covers the role as required.</li> <li>Regular Updates to Gateways Regularly (closer matching to desktop installs)</li> </ul>	<ul> <li>Enterprise Capacity – refresh performance/reviews/failures</li> <li>Enterprise capacity – measuring performance for best spend</li> <li>Usage metrics are monitored</li> <li>XMLA EndPoint is Read/Write</li> </ul>	<ul> <li>Azure Monitor / Use of Log Analyser</li> <li>Organisation visuals licenced and available for all</li> <li>Organisational visual management (what's allowed – certified visuals)</li> </ul>	<ul> <li>Automated tooling – adoption of the MS (BI) API framework and specialists within the business with a deep understanding of their innerworkings</li> <li>Review/Clean-up of unused datasets/reports</li> <li>Automated tools for Release processes</li> </ul>
Dataset Management		<ul> <li>Composite Models exist (with appropriate data modelling)</li> <li>Some Promoted datasets exist</li> <li>Refreshes are being triggered via other means – API, Virtual Agents, Power Automate, XMLA EndPoint</li> <li>Dataset Refresh performance is reviewed (ad-hoc) for optimisation</li> </ul>	<ul> <li>Promotion/Endorsement of datasets, streaming datasets, and dataflows (see Microsoft Dataset Hub)</li> <li>Dataset Refresh performance is reviewed and Monitored centrally. Failures are identified and addressed / remediated</li> <li>Dataset Refresh performance is reviewed and peer reviewed</li> </ul>	<ul> <li>Organisation embraces publishing of Certified datasets for user consumption and report development.</li> <li>Certification of datasets, streaming datasets and dataflows (approved by governance group with defined set of criteria)</li> <li>Composite Models – performance implications can be identified if they exist.</li> </ul>	
Security		Row level Security in use	<ul> <li>Row Level Security is being optimally used and knowledge of usage deployed with others</li> <li>Report exports are disabled based on data sensitivity</li> </ul>	<ul> <li>External report sharing – with controls for security and standards</li> <li>Microsoft Privacy and Sensitivity labels in use – guidelines published and usage understood across the organisation</li> </ul>	
Tooling		<ul> <li>Use/Integration of Power Platform (Automate, App)</li> <li>3rd Party Tools Tabular Editor, Dax Studio, ALM Toolkit packaged and available for all BI Developers</li> </ul>	• 3 <sup>rd</sup> party tools used, adopted and understood how to use them	<ul> <li>Use of Python and R scripting/visuals adopted</li> </ul>	<ul> <li>Build / publish the organisations own visualisations</li> </ul>

Power BI Adoption Maturity Model drafted by David Wilson and Stephen Fox @dgwilson65 @StevefromTePuia First published 24 September 2021, **Revised 5 November 2021**