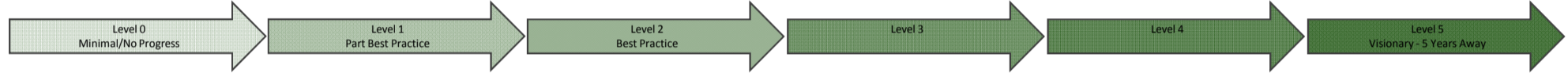


Data Center Maturity Model

IT



Storage

6.1	Workload	• Duplicated and unnecessary data	• Deduplication (backup data)	• Deduplication (rest of data)		
6.2	Architecture	• Data held on high availability/high cost storage	• Classifying data/tiering	• Tiering according to business need	• Auto-tiering	
6.3	Operations	• Redundancy not matched to business need • Inefficient capacity management – requests & allocations	• Storage decommissioning/repurpose - aligned to other decommissioning initiatives (e.g. server, application) • Share resources between similar types of business units	• Storage consolidation • Assess estate against data management policy and business need • Power down hot spares • Demand Management - challenge business requests for storage	• Minimize data to business and application need • Implement user changes to reduce total data volume	• Operational media choice (solid state vs. tape vs. DVD vs. disk vs. MAID vs. Cloud, etc.) based on TCO model, energy usage, operational carbon footprint and business need • Improve application use and creation of data • Operational media choice (solid state vs. tape vs. DVD vs. disk vs. MAID vs. Cloud, etc.) based on TCO model, energy usage, embedded carbon footprint and business need
6.4	Technology	• Inefficient storage hardware	• Utilize low power drive technology. Use small form factor drives	• Utilize low power consuming technology (e.g. solid state drive technology)	• Use variable speed mechanical components such as drives and fans - many spin at a constant speed	• Use/enablement of low power states for storage
6.5	Provisioning	• Shared storage not utilized (dedicated systems)	• Shared storage (hardware - SAN, iSCSI, etc.) without robust capacity control	• Thin provisioning	• Dynamic capacity provisioning	• Ability to shift storage - abstract from hardware and linked to application - "Follow the Moon" strategy