The Registry Capability Maturity Model™ (RCMM)

A Holistic Approach Towards Enhanced Register Performance

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Introduction

In the ever-evolving landscape of digital transformation, organizations and custodians are grappling with the challenges and opportunities presented by the dynamic realm of registry management. To guide this transformative journey, we are pleased to present this paper (a subset of our published works), combining industry insights, global benchmarks, and internal/external expertise to craft a well-defined “framework for the future.”

This framework aims to assess current operational models, envision the desired future state, and lay down a roadmap for registry transformation. At the heart of this strategic approach lies the Registry Capability Maturity Model™ (RCMM) - a comprehensive and indispensable guide for organizations aiming to elevate their registry management practices and operations.

The Registry Capability Maturity Model (RCMM) leverages the clarity and outline of a Target Operating Model (TOM), guiding architectural principles, and the adaptation and integration of best practices to create a roadmap for optimizing registry capabilities and to foster excellence in registry management. These elements intertwine to form a holistic approach, playing a dominant and critical role in enhancing registry operations across diverse sectors.

The Importance of the TOM in a RCMM

The Target Operating Model (TOM) serves as a strategic blueprint for organizations, guiding them from their current state to a desired future state. In the realm of registry management, where data is the lifeblood, a well-defined TOM becomes the linchpin for optimal performance.

Creating a detailed roadmap serves as a navigational chart guiding your enterprise toward the TOM. In a report by McKinsey & Company, 70% of organizational transformations fail, and one key differentiator for the successful 30% is a comprehensive roadmap. The roadmap spells out each step, milestone, and criteria for success, fostering alignment and accountability.1

This synergy ensures that the RCMM is not only well-informed but also strategically aligned with industry practice standards and the registry organizations unique challenges and goals. These can be classified as such:

1. **Alignment of Strategy and Operations:** The TOM's strategic direction aligns seamlessly with the RCMM's process improvement objectives, ensuring that the organization's efforts are coherent and harmonized with broader strategic goals. Simultaneously, the guiding architectural principles aid in aligning technological and business innovations with the strategic direction.

2. **Process Optimization:** The TOM inherently includes well-defined processes and workflows designed to support the organization's strategic goals. These processes are optimized and streamlined, mirroring the best practices and the desired RCMM “maturity level”. In this way, the TOM creates a blueprint for operational excellence, while the architectural framework help assess the impact of innovations on existing processes and structures.

3. **Resource Allocation:** The TOM specifies the resources necessary for executing processes and achieving strategic objectives. By aligning these resource requirements with RCMM goals, organizations can effectively allocate resources to enhance process maturity. The guiding architectural principles provide a framework for evaluating the resource requirements of innovative solutions being deployed (e.g., leveraging AI/RPA).

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1 [https://www.capstera.com/target-operating-model/](https://www.capstera.com/target-operating-model/)
4. **Change Management:** A structured approach to change management is an intrinsic part of the TOM. This approach facilitates the transition from the current state to the desired future state, a critical aspect of implementing improvements associated with higher maturity levels. The guiding architectural principles assist in change management by providing a framework for assessing the overall impact of technology decisions and adaptive innovations on the organization’s culture and structure.

5. **Continuous Improvement:** The TOM often incorporates a culture of continuous improvement, which harmonizes with the RCMM’s philosophy of ongoing process enhancement. This culture encourages organizations to continue striving for higher maturity levels, even after achieving initial targets. The guiding architectural principles serve as a critical compass for innovation adoption, ensuring that emerging technologies and practices align with strategic objectives, maintain interoperability, scale efficiently, enhance data security and privacy, optimize processes, and facilitate change management.

6. **Measurement and Monitoring:** The TOM outlines key performance indicators (KPIs) and metrics essential for monitoring progress toward achieving strategic objectives. These metrics align with process maturity evaluation as part of the RCMM assessment and improvement process. The guiding architectural principles help organizations select and implement relevant metrics to measure the impact of innovations on processes and capabilities.

When the Target Operating Model, guiding architectural principles, best practices, and recent registry innovations come together, they create a dynamic and comprehensive framework for developing a RCMM that is responsive to the unique challenges and opportunities within the registry domain.

When the TOM is combined with guiding architectural principles, best practices, and best practice statements, it forms a powerful quartet that profoundly influences the development of the Registry Capability Maturity Model for the registry domain.

**RCMM Stages of Maturity**

At the core of the RCMM lies a methodology that defines and refines a registry organization’s digital transformation process and journey. Envisioning the future where registers become entirely digital constructs, the RCMM describes a five-level evolutionary path:

1. **Pre-Digital Register Operator:** The foundational level where digital elements are minimal, and traditional methods dominate.

2. **Partially Digital Operator:** Transitioning into the digital era, with a mix of traditional and digital processes.

3. **Digital Curator:** Embracing digital practices more comprehensively, with an increased focus on organization and systematic maturity.

4. **Intelligent Register:** Leveraging advanced technologies, analytics, and intelligent systems to enhance registry operations.

5. **Fully Optimized Digital Register and Vigilant Shepherd:** The pinnacle where the registry is fully digitized, optimized for peak performance, and overseen by vigilant custodians.

Aligned with the above Stages, we have structuring our RCMM against 6 main “Maturity Dimensions or Themes” (adding a 7th Dimension, the Digital Leader, enabling global benchmarking across the registry domain). We suggest that frequent monitoring (e.g. annually or at a minimum every 3 years) be instituted at each “Stage of Maturity”, as the transformational elements we have detailed below are indicative across each can then be assessed and improved either independently or in a global context.
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Transitioning through the “Stages” demands that certain transformative activities are completed from the previous “Stage”

**Stage 1: Emerging**
- Pre-Digital Register
- Entry level with processes not engineered, ad-hoc, and largely paper-based.
- Threshold with processing paper filings – challenges with imaging and document management initiatives
- Processes Documented but not Audited, NO BPRs, Backlogs
- Legislation remains entrenched in paper input and output processes
- People Not Organized by Division/ Knowledge Base
- Clients Filing Paper – Data Entry/Completion Errors

**Stage 2: Developing**
- Partially Digital
- Processes established/defined. Online but mimic the paper process, minimal service redesign
- Digitalization of Paper Processes, Initiating BPRs
- Legislation Revised to be Consistent with Modern Tech and Digital Services
- People organized but specialized to specific tasks
- Stakeholders viewed by the register to support the key up of data

**Stage 3: Established**
- Mostly online but paper persists. Applications/technology underpinnings have been refreshed but the custodian of the register is passive to compliance to the legislation
- Continual Improvements Process Register KPIs Leading.
- Manually Correcting the Register
- Staff undertake risk profiling, KYC BO Legislation Enacted
- People are no longer a factor in the throughput of the register
- Dashboards, Account Management – Agile Teams Configuring the Registry
- TOOP Leveraged, Digital Wallets

**Stage 4: Managed**
- Digital Curator
- Services deployed are customer-centric, inputs/outputs fully digitalized, technology supports redesign and/or continual process improvement, easy to support changes in legislation
- Data Triangulation with Registers, Configurable Processing Rules
- Standardization of Data Elements, Data Dictionary Developed
- Knowledge Base => Client Service Improvements, TOOP, etc.
- Interoperable Across Jurisdictions, API First Support
- Interconnected and interoperable register promotes compliance by a standardised public service design process within register services; the register exists within a connected ecosystem of other registers and regulatory bodies both national and international.
- Active Gatekeeper for compliance of the legal entities on the register
- IDX, A/RPA, Blockchain, Digital ID fully integrated, Digital Wallets

**Stage 5: Aspirational**
- Fully Optimized/Vigilant Shepherd
- QA Fully Integrated-Automated, ISO Standards Driven, A/RPA Fully Utilized
- Data Governance Framework Regular, Updating, Cleansing and Maintenance
- Risk profiling, KYC, enforcement with AO tools, Interoperable Data
- Enterprise Architecture enabled by modern technologies and processes
- Digital Curator, Registry Aware Platform Fully Operational, One-Stop Business Services Enabled,
- Data Triangulation with Registers, Configurable Processing Rules
- Interconnected and interoperable register promotes compliance by a standardised public service design process within register services; the register exists within a connected ecosystem of other registers and regulatory bodies both national and international.
- Seamlessly integrated, technology supports redesign and/or continual process improvement, easy to support changes in legislation

Figure 2: Registry Capability Maturity Model – Stages, Dimensions and Key Transformational Elements

A standard People Process Technology (PPT) framework is what most organisations we reviewed are using. However, this PPT framework is two-dimensional when it comes to assessing the operations, structure, and processes of a register, where there is an inherent legislative basis to their existence. We contend that what we propose here is a far richer means of understanding a register, where it is at in its evolution, where to focus its change efforts, and ultimately how it can be helped to perform most effectively.

A Register Capability Maturity Model helps all registers (domain agnostic) because it fully embraces:

1. **Process Improvement:** provides a structured approach to process improvement. By assessing the maturity of current processes, organizations can identify areas for improvement and establish a roadmap for enhancing their capabilities.

2. **Benchmarking:** it offers a means to benchmark against its peers and other regulatory organisations, which can provide a measure of its current capabilities. This benchmarking helps in setting realistic goals for improvement and provides a basis for comparing progress over time.

3. **Risk Management:** Most registers are currently undertaking some form of transformation project in a post-covid world. This often involves changes to existing processes and the introduction of new technologies and applications. RCMM helps in identifying potential risks and weaknesses in the current processes, allowing registers to proactively address and mitigate these risks.

4. **Consistency and Standardization:** the RCMM promotes consistency and standardisation in processes. This is crucial in transformation projects where uniformity in how processes are executed can contribute to efficiency, reduced errors, and improved overall quality.
5. **Strategic Alignment:** RCMM can assist in aligning process improvement efforts with register goals and TOMs. This alignment ensures that the transformation project is not just a technical endeavour but also addresses the strategic needs of the organisation.

6. **Resource Optimisation:** Understanding the maturity level of the register allows the register to allocate resources more effectively. It helps in identifying areas where investments in training, tools, or technology can yield the most significant improvements.

7. **Customer Satisfaction:** By improving processes, registers can enhance the quality of their products and services. This, in turn, can lead to increased customer satisfaction, a crucial factor in the success of any transformation or change initiative.

8. **Continuous Improvement:** RCMM emphasises the importance of continuous improvement in a register. It provides a framework for the register to assess their maturity periodically and adjust their processes as needed, to move to the next maturity level.

9. **Change Management:** Transformation projects often face resistance from employees accustomed to existing processes. RCMMs can be used as a communication tool to help employees understand the need for change and the benefits that the transformation will bring and how these efforts are a logical step to increasing the efficacy of the register.

10. **Measurable Result:** RCMMs provide a structured way to measure progress. This enables registers to demonstrate tangible improvements over time, which is essential for justifying the investment in transformation projects.

It is intended that from this structured process of evaluation, that we can then formulate a Registry Capability Maturity Rating (sample output below) allowing for an initial comparative assessment of the current state, is domain agnostic, is easily discernible, and provides for identification of the Stages across Themes. This then becomes the initial roadmap for structured and targeted improvement areas across the register and organization.

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**Figure 3: The RCMM Spider Diagram – Current and Future State Comparative Assessments**
Concluding Remarks

The RCMM is not just a theoretical construct; it’s a practical and strategic roadmap designed for organizations seeking to assess, enhance, and truly transform their business registry operations. The RCMM leverages the clarity and outline of a Target Operating Model (TOM), guiding architectural principles, and the adaptation and integration of best practices for optimizing registry capabilities and to foster excellence in registry management. These elements intertwine to form a holistic approach, playing a dominant and critical role in enhancing registry operations across diverse sectors.

In conducting our research for the full Paper, we were struck at the dearth of management theory available with respect to register domains in general. In equal measure, we found that little work was undertaken by registrars/custodians in assessing their Current Operating Model (COM), how they defined their Target Operating Model (TOM), and what they used to direct or assess their transformation programs that they were wholly committed to. In simple terms, we found it difficult to understand what the guiding principles of these registers were and what vision they ascribed to.

As we navigate the digital future, the Registry Capability Maturity Model™ stands as a beacon for organizations, registrars and custodians, offering a transformative framework to assess, enhance, and ultimately elevate their registry operations. The RCMM serves as a guiding light, offering organizations a structured approach to evaluate their registry operations, set improvement objectives, and chart a clear path toward optimal performance and service delivery.

We invite all stakeholders and executive leaders to delve into the details, embrace the digital evolution, and embark on a journey toward a fully optimized and vigilant registry future. The complete Thought Leadership Paper on the RCMM including others in this Series which include: “Enabling Digital Government”, Registers the New Frontier” and “Architecting Register Systems of the Future”, are available on our websites.

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