
# Staff Development Plan

## Communications and Information Management

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# Contents

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The Staff Development Program is a forward-looking capability-building framework designed to prepare the workforce for the demands of the Fourth Industrial Revolution (4.0 IR) and the evolving policy, governance, and business environment. The program aligns human capital development with institutional strategy by strengthening workforce agility, digital fluency, and leadership readiness.

### CHANGING WORKFORCE

Aimed on His Majesty's 2040 vision and a more adaptable multi-skilled workforce.

### NEW CAPABILITY

Increased requirement for a more flexible, multi-skilled and technology-enabled workforce.

### CHANGING LEARNING APPROACH

Expanding necessity to supplement traditional teaching methods with simulation, augmented reality, virtual reality, and online life-long training.

### CHANGING BUSINESS MODELS

New innovative technological advancements will change business models and requisites new supply networks.

As governance and policy institutions increasingly shift from traditional regulatory roles to ecosystem enablers, the program builds competencies aligned to evolving business models, including Public–private partnership engagement and Commercial and strategic mindset development.

## INTRODUCTION

The Ministry of Transport, Communications and Information Technology is a strategic enabler of Oman's economic diversification and digital transformation agenda. Through integrated oversight of transport infrastructure, telecommunications policy, and digital governance, the Ministry drives connectivity, innovation, institutional modernization, and private-sector-led growth aligned with Vision 2040. To successfully deliver diversification agenda under Vision 2040, digital fluency must be embedded as a national capability and a strategic enabler of competitiveness, productivity, and innovation. The digital fluency transformation strategy focuses on 4'Cs: Capacity, Capability, Community and Culture which are the main themes for staff development program as shown below:

| | Micro-Processes | Capacity | Capability | Community | Culture |
|---|---|---|---|---|---|
| TALENT ACQUISITION | **Resources Strategy and Recruitment** | Limited digital and high-cost resources in the market (locally) | In-balance of supply vs demand - digital skills i.e., data scientists in the market. | Lack of market exposure internally and external. | Misconception on the recruitment process and staff expectation. |
| | | Develop resourcing strategy (MPS, Contract, FTE. etc.) | Acquire capabilities in collaboration with the international partners through project. | Exposure to new digital trends through webinars, SME's, conferences. | Early engagement to showcase the resource and recruitment strategy. |
| TALENT MANAGEMENT | **Performance Management, Development and Retention** | Staff dynamic movement driven by progression and external attraction | Current digital competencies do not include the skills needed for future. | Limited exposure which leads to undermining digital economy deliverables. | Mindset reluctance to see the bigger picture. |
| | | Enhance ICT staff development plan, career path and technical ladder | JCP enhancements in alignment to future trends | Embed knowledge sharing (Gemba walks, showcase, publicity etc.) to promote digital economy community. | Transparent development plan that measures performance and promotes recognition. |
| TALENT OPTIMIZATION | **Succession Planning, Re-Skilling / Up-Skilling and Resources Optimizations.** | Current ICT resources are central bound with limited growth opportunities. | Current focus is on data management centric skills with limited digital specialization. | Lack of understanding of future demand | Mindset reluctance to change or adopt new challenges and or new ways of working. |
| | | Develop a model with embedment of ICT resources (Cross-Posting etc) | reskill and upskill to cater for future demand and challenges | Exposure to new digital skills through webinars, SME's, conferences. | Continue engagements (team building, fishbowl etc.) to transform challenges to opportunities. |

## CASE FOR CHANGE

To deliver Oman's digital economy mandate and diversification objectives, capability building must be institutionalized across leadership, governance, technical, and commercial dimensions. Infrastructure investment without capability development limits economic value realization. Building digital fluency and institutional competence transforms digital assets into sustained GDP growth, private-sector competitiveness, and long-term national resilience.

To successfully deliver digital economy and diversification mandate under Vision 2040, the ICT sector must strengthen institutional capability. The first phase of the ICT Staff Development Program therefore begins with the Directorate General of Digital Policy & Governance, as it is the strategic nucleus responsible for shaping national ICT policies, digital economy frameworks, and regulatory direction.

Starting with policy and governance ensures that capability building cascades from the top — embedding digital fluency, regulatory agility, and data-driven decision-making across the entire ICT sector.

## FOCUS AREAS

The workforce dynamic framework will focus on elevating four areas of development with the core emphasis on people development. As we embark on the next generation technologies, we need to be sure that our workforce is ready to take on the challenge. Upskilling and Reskilling will be the corner stone of our foundation. Starting with the right curriculum, we will focus on positioning the right and effective competences, prepare the training programme (formal/self-learning) with digital fluency, establish a technical coach system, and drive the cultural changes to manage the new ways of learning.

| **Competence** | **Coaching** | **Culture** | **Training** |
|---|---|---|---|
| Our competences are built to be goal-oriented (i.e., they focus on areas identified as requiring performance improvement), and they linked directly towards effective knowledge transfer.<br><br>By linking the new digital competences to the training, the transfer gap between the training environment and working on the job is reduced substantially.<br><br>As a result, it takes less time for employees to become competent in the required areas. This, in turn, contributes to improved efficiency where training and assessment are concerned. | Coaching gives the individual an opportunity to define their career goals in a realistic way. With the assistance of a technical coach, together, they can set these goals and then actively work towards them.<br><br>Coaching engages coachees with unique one-on-one feedback and lots of encouragement. When an individual becomes engaged with their workplace, they can contribute more effectively to the team and the organization<br><br>Our technical coaching isn't just about improving an individual's skills in the workplace; it takes learning to an even deeper level allowing coachees to learn quick and work smarter. | Change is the new normal. To cater for the 4IR disruption, innovation in the culture dynamics needs to undergo new ways of learning. Move away from static learning models to adaptive life-long learning.<br><br>The model of learning will change and has been disrupted. The need to continuous upskilling and reskilling is the way forward.<br><br>Staff will be encouraged to develop a habit and master the 4C elements of Critical Thinking and Problem Solving, Communication, Collaboration, and Creativity. | Training needs to be affective, link the competences to the learning ladder assures each training is aligned to drive effective learning.<br><br>Curriculum is positioned to contain the appropriate training and tools needed for an effective learning platform. Tools are position to form a transparent methodology for individuals to follow.<br>A clear career ladder, a learning ladder, competence model per job family and a training / coaching framework. |

## BUILDING THE SUSTAINABLE MODEL

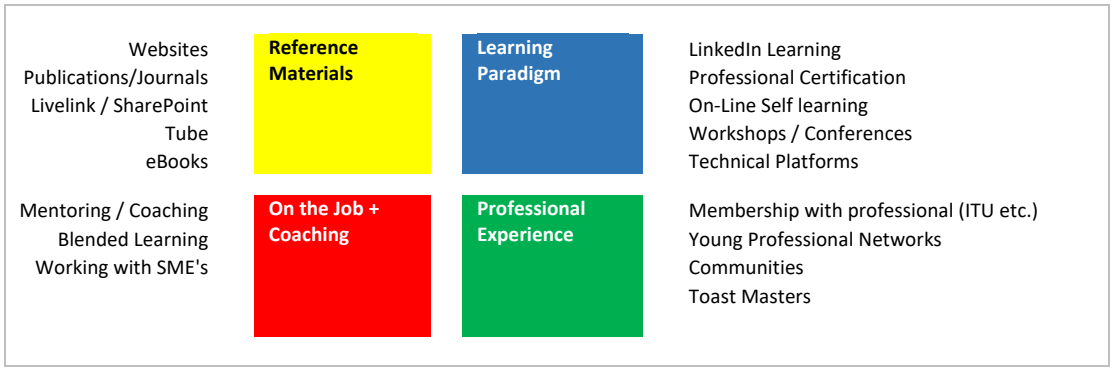
Staff Development Framework is designed to ensure that capability building occurs in parallel with the delivery of the annual ICT program. By integrating culture transformation, structured competence development, coaching and embedded training into live policy and program execution, the Ministry strengthens institutional maturity while advancing Oman's national digital economy and diversification objectives.

## MODE OF DEPLOYMENT

The vehicle to drive these competences and ensure upskilling and reskilling happens within a transparent method. Using the 70/20/10 model it allows core focus on the skillsets and marries the staff with a coach and an Subject Matter Expert (SME) throughout their entire development. If skills are needed to bridge the skillset, individual will be embedded into the annual execution program.

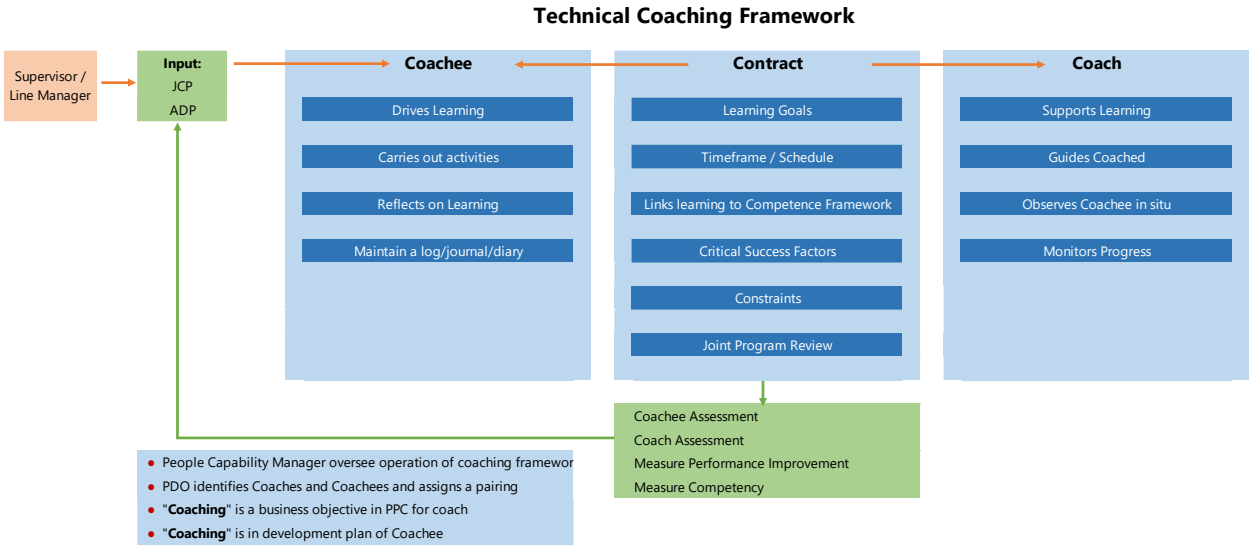
| On-the-Job Learning, experience based and Practice | Coaching, Mentoring and development though others | Formal and Life-long Learning |
|---|---|---|
| 70% | 20% | 10% |

The 4-box model will be injected with new future skills to ensure more self-learning is encouraged via online LinkedIn Learning platform and other online faculties.




Assessment will be performed to allow the right training and coaching happens. It includes a Learning curriculum and clear career path. Furthermore, to respond to future challenges, strong focus will be on embedment of the new skillset into the ICT competence framework which will include social and technical fluency.


Embedment of Digital skills




The Coaching Methodology

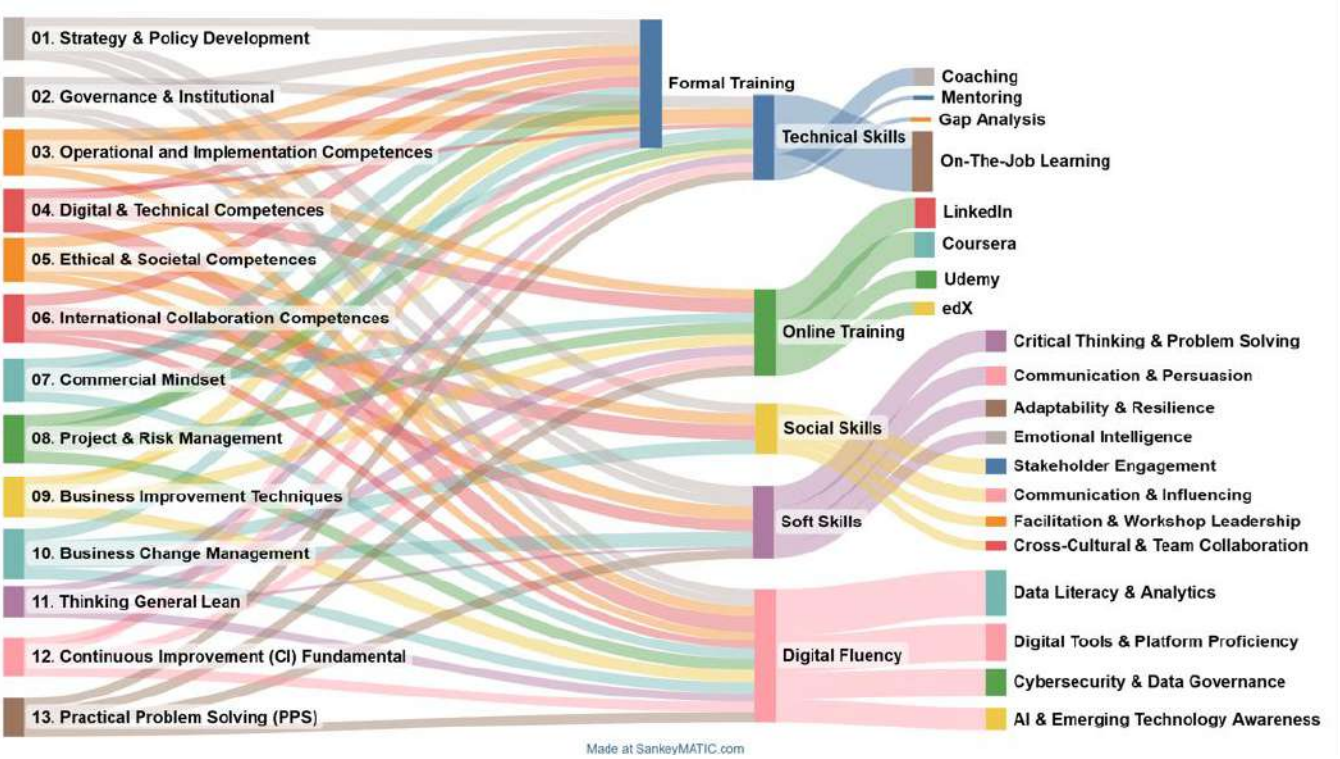
The deployment model will concentrate on 3CT as its main pillars, future proof Competences, Coaching, Culture and Training (with more emphasis on self-learning.)

## BUILDING POLICY AND GOVERNANCE SKILLS

### Competences

The competences are being constructed to ensure all aspects of learning is delivered through linking the required learnings to the competence. This will ensure strong proof points, with measurable activity tasks that can be monitored to assess the development of the staff. This will include the necessary skills needed to support the business. Prior to its deployment, assessment will be conducted to outline the areas for development.

In preparation for the workforce, ministry has produced a competence framework to outline its core skills as well as social skills. The aim is to develop Curriculum 4.0 that will link the competences to the learning, giving a clear correlation to assure effective delivery of the skillset. It includes, periodic assessments, learning ladder, transparent career path and solid proof points with measurable outcomes.




## *Digital Lean*

Lean principles have played a significant role in driving efficiency across industries through their emphasis on cost reduction, focus on waste elimination, and reliance on letting customer demands. Lean can work in whatever domain it is applied because it provides a data-based approach to decision-making, emphasizing the tracking of root causes. Lean is often considered optimal for identifying hidden issues and emphasizes continuous improvement.

Digital Lean is not a new set of lean principles, but it enhances lean principles to make their application more powerful. Digital Lean uses Industry 4.0 and other digital tools to provide more accurate, precise, and timely information about operations. It not only helps realize lean principles but also increases the impact of core lean tools, such as Kanban, which we will discuss later. Moreover, the increased availability of high-frequency data from Industry 4.0 technologies, coupled with growing processing power, has led to new analytics and insights that were virtually impossible several years ago. Though technology is playing a crucial role, the focus on value first, technology second.

## *Benefits of Digital Lean*

When digital lean is implemented successfully, organizations can expect to reduce costs and improve quality, in turn leading to better productivity and a stronger return on investment (ROI) when compared with individual digital or traditional lean improvement projects implemented in isolation.

Below shows the example on how digital lean complements and enhances traditional Lean.

| | LEAN / CONTINUOUS IMPROVEMENT | | ADVANCED ANALYTICS | |
|---|---|---|---|---|
| | **Techniques** | **Example** | **Description** | **Example** |
| **DIGITAL FUNDAMENTALS - (OPPORTUNITIES)** | LEAN principles have played a significant role in driving efficiency across organizations through their emphasis on cost reduction, focus on waste elimination, and reliance on letting customer demands drive processes. | **Overproduction**<br>Traditional lean mitigates the overproduction caused by the synchronization between demand and supply, including delayed demand signals and rigid processes constraints.<br><br>**Defects**<br>Poor product design and process control increase defects across the value stream, causing rework or scrap. Traditional lean can help reduce defects by establishing standards in the way assets are maintained, processes are defined, and products are designed. | Digital lean is not a new set of lean principles, but it enhances lean principles to make their application more powerful. While systems of record, such as enterprise resource planning, often report on operations as they impact company and plant financials, many digital lean systems of innovation produce detailed information on all aspects of a process. Digital lean uses Industry 4.0 and other digital tools to provide more accurate, precise, and timely information about operations. | **Overproduction**<br>Digital lean can provide real-time visibility into the value stream to proactively adjust capacity, avoiding the building of goods that are not required.<br><br>**Defects**<br>Digital lean helps identify the precise asset, process step, or product feature that is causing defects and reducing first-pass yield. |
| **DIGITAL TECHNOLOGIES (TECHNOLOGY)** | **Kanban**<br>A signaling mechanism used to control work and indicate the need for resource replenishment process status<br><br>**Heijunka**<br>A traditional scheduling methodology for multiproduct environments, where production is "leveled" by strategically alternating the product in a given period. | **Kanban**<br>Bins are filled with in- process components at a workstation. Once parts/raw materials or are consumed to a predetermined level, operators from previous manufacturing steps realize they have to replenish the bin.<br><br>**Heijunka**<br>Establishing the size of production runs on the Heijunka "wheel" is often done periodically due to the complication of calculating the ideal run size for each turn of the mix to be manufactured wheel. | IoT Plays a invaluable role in support the digital Lean in the introduction and adoption of smart sensors, equipment, factories etc.<br><br>AR/VR wearables allows simulation before the product is manufactured, run scenarios that aid the business visualize value. | **Kanban**<br>• Auto-ID technology such as RFID sensors can be applied to track unit-level parts/material consumption in real time, triggering replenishment activity automatically.<br>• Technologies, such as the digital twin and machine learning, can simulate and optimize Kanban bin quantities such as stock and delivery frequency.<br><br>**Heijunka**<br>Advanced analytics can stabilize planning by using historical data from previous production runs to create optimized schedules based on machine availability, process quality, and resource requirements. |

The policy and governance competence framework clearly outlines the focus areas. The approach will allow a focus to ensure skill adoption plan over the next 3 years. An assessment exercise has been conducted to the Policy and Governance staff which will drive the competence levels to reach maturity and its desired state. The Core and Support Competences that will cut across ministry ICT sector

JOB FAMILIES FOR POLICY & GOVERNANCE

POLICY AND GOVERNANCE COMPETENCES

| | | | JOB FAMILY | P&G SPECIALIST | | | P&G TEAM LEADER | | | P&G DIRECTOR | | | P&G DIRECTOR GENERAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DESCRIPTION | The Digital Policy and Governance Specialist is responsible for developing and implementing digital policies, regulatory frameworks, and governance mechanisms that advance national digital transformation objectives. | | | The Team Leader for Digital Policy and Governance provides strategic leadership and direction in the formulation, implementation, and evaluation of national digital policies, frameworks, and governance mechanisms. | | | The Director of Digital Policy and Governance provides strategic leadership and oversight for the national digital policy and governance agenda. | | | The Director General for Digital Policy and Governance provides national-level leadership and strategic direction for the development, coordination, and governance of digital transformation policies, frameworks, and regulations. | | |
| | No. | Code | COMPETENCES / ASSESSMENT STAGES | Self Assessment | Assessor Evaluation | Required Competences | Self Assessment | Assessor Evaluation | Required Competences | Self Assessment | Assessor Evaluation | Required Competences | Self Assessment | Assessor Evaluation | Required Competences |
| POLICY AND GOVERNANCE | 1 | PG1 | STRATEGY & POLICY | K | K | K | K | K | S | S | S | M | M | M | M |
| | 2 | PG2 | GOVERNANCE & INSTITUTIONAL | K | K | K | K | K | S | S | S | M | M | M | M |
| | 3 | PG3 | OPERATIONAL AND IMPLEMENTATION COMPETENCES | K | K | K | S | S | S | S | S | S | S | S | S |
| | 4 | PG4 | DIGITAL & TECHNICAL COMPETENCES | K | K | K | S | S | S | S | S | S | S | S | S |
| | 5 | PG5 | ETHICAL & SOCIETAL COMPETENCES | K | K | S | S | S | S | S | S | S | M | S | M |
| | 6 | PG6 | INTERNATIONAL COLLABORATION COMPETENCES | K | K | K | K | K | S | S | S | S | M | S | M |
| CORE | 7 | CO1 | COMMERCIAL MINDSET | K | K | K | K | K | K | S | S | S | S | S | S |
| | 8 | CO2 | PROJECT & RISK MANAGEMENT | K | K | S | S | S | S | S | S | S | S | S | S |
| | 9 | SO1 | BUSINESS IMPROVEMENT TECHNIQUES | K | K | S | S | S | S | K | K | S | S | S | S |
| | 10 | SO2 | BUSINESS CHANGE MANAGEMENT | K | K | S | K | K | S | S | S | S | S | S | S |
| SUPPORTING | 11 | SO3 | THINKING GENERAL LEAN | A | A | K | A | K | K | A | A | K | K | K | K |
| | 12 | SO4 | CONTINOUS IMPROVEMENT (CI) FUNDAMENTAL | A | A | K | A | A | K | A | A | K | K | K | K |
| | 13 | SO5 | PRACTICAL PROBLEM SOLVING (PPS) | A | A | K | A | A | K | A | A | K | K | K | K |

POLICY AND GOVERNANCE Competence Model

Taking competence further by linking it to strong deliverables of proof points and scale down to work measurable tasks and activities. Below shows an example of the Policy and Governance team.

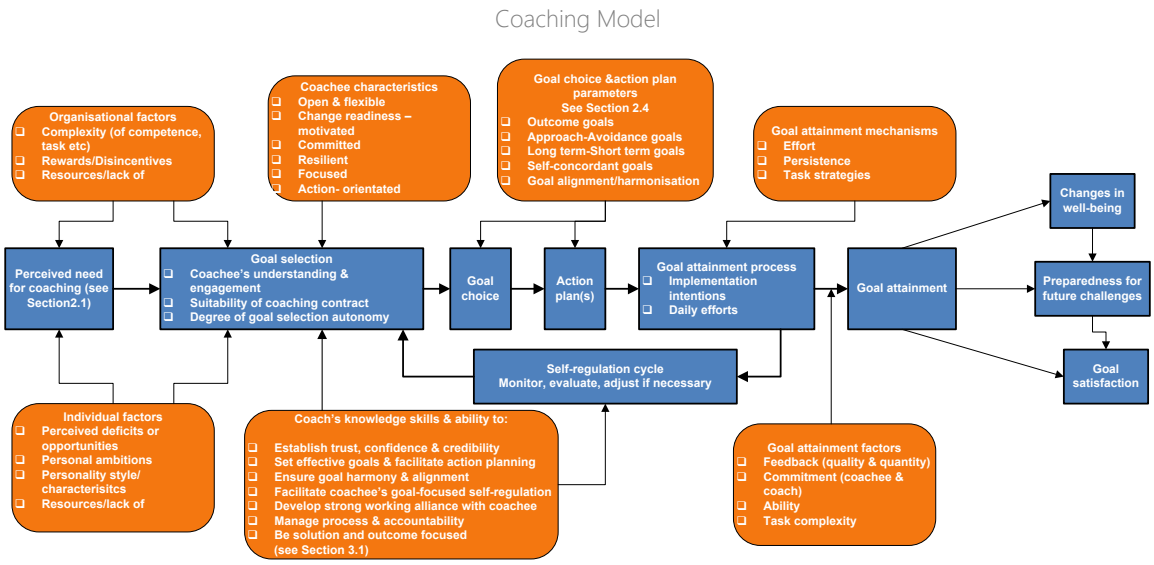
| | Competences | Criteria / Proof Points | Detailed Proof Points | Evidence Type |
|---|---|---|---|---|
| | **Strategy and Policy Development** | Clear problem definition | Well-articulated policy or strategy problem statements | Concept notes |
| | | Strategic alignment | Explicit linkage to mandate, vision, or national priorities | Strategy alignment maps |
| | | Design scope clarity | Defined boundaries, assumptions, and constraints | Design brief |
| | | Outcome orientation | Clear articulation of intended policy or strategic outcomes | Outcome logic model |
| | **Governance and Institutional** | Defined governance model | Clear reporting lines and oversight structures | Governance framework document |
| | | Decision-rights clarity | Formal RACI matrix for digital programs | Approved RACI matrix |
| | | Role accountability | Clear mandate descriptions | Organisational charter |
| | | Escalation mechanisms | Structured decision escalation protocols | Governance handbook |
| | **Operational and Implementation** | Implementation roadmap | Phased execution plan with milestones | Approved roadmap |
| | | Work breakdown structure | Defined deliverables and task ownership | Program charter |

| | | | | |
|---|---|---|---|---|
| | | Resource allocation | Budget, staffing, and capability assignment | Resource plan |
| | | Alignment to KPIs | Clear linkage between activities and policy objectives | KPI alignment matrix |
| | | Change management plan | Defined communication and transition roadmap | Change strategy document |
| | | Stakeholder engagement | Training and awareness sessions delivered | Training records |
| | **Digital and Technical** | Cyber risk awareness | Threat modeling and vulnerability concepts | Risk assessment document |
| | | Control framework integration | Reference to standards (e.g., ISO, NIST) | Security framework mapping |
| | | Incident governance | Defined response and reporting mechanisms | Incident response protocol |
| | | Regulatory enforcement linkage | Cyber compliance mechanisms | Regulatory enforcement guidelines |
| | | Platform governance | Oversight of digital platform ecosystems | Platform governance policy |
| | **Ethical and Societal** | Public consultation processes | Structured stakeholder engagement during policy design | Consultation records |
| | | Transparent reporting | Public dashboards and open reporting systems | Published annual report |
| | | Grievance mechanisms | Defined complaint and redress channels | Complaints registry |
| | | Independent oversight | External review or advisory committees | Oversight committee charter |
| | **International Collaboration** | Global benchmarking | Comparative analysis of leading digital economies | Benchmarking report |
| | | Participation in global forums | Engagement in international policy platforms | Delegation reports |
| | | Standards tracking | Monitoring ISO, ITU, OECD, WTO digital frameworks | Standards mapping document |
| | | Strategic advisory briefings | Regular updates to leadership | Executive briefing notes |

## Coaching

Ministry will follow the coaching framework that is intended to make such mind-set transitions easier by setting out exactly what is required by all parties involved in coaching, suggesting how to shape coaching activities and providing tools for evidence recording and outcomes measurement. Below is the coaching programme that will enable effective goal setting and clear outcomes.

Technical coaches will play a critical role to ensure on-the-job learning is effective and, with tangible results. Job tasks will be the main driver to measure the effectiveness of the program and how the learner is able to execute its delivery.




## Culture

A learning culture refers to a community of workers eager and interested in learning. It is one that "supports an open mindset, an independent quest for knowledge, and shared learning directed toward the mission and goals of the organization". Building a learning culture can help you transform your workforce's potential. A truly transformative learning culture improves employee engagement, resilience, and motivation. It supports creativity and innovation and helps your workforce keep pace with technological evolution. We identify how to nurture a learning culture to sustain our organizational learning strategy.

*"A learning culture is owned by everyone and built by everyone; it cannot be imposed."*

*Quote by Naomi Lockwood*

With the introduction of new skills and possible new jobs, rolling this model will rely heavily on managing cultural changes. The solution is not only reskilling on technical skills for a specific new job but focusing on longer-term employability by upskilling with more universally transferable skills. The changing nature of how learning requires that learning moves from the traditional mindset of “knowing it all”, with planned learning programs, to an agile culture of lifelong learning that is continuous and digitally enabled, self-driven and personalized.

| | | |
|---|---|---|
| "**Know it all**" mindset | > | "**Learn it all**" mindset |
| Planned learning programme | > | Lifelong learning culture |
| Periodic learning | > | Continuous, digitally enabled learning |
| Company-directed learning | > | Self-driven learning |
| Homogenous learning | > | Personalized learning |

## SUCCESION PLAN

An organizational succession plan is a governance-driven framework that evaluates capacity (future potential), achievements (performance), and relationships (leadership behavior) while incorporating structured capability gap analysis to design focused development pathways that prepare internal talent for future strategic roles.

The Succession Plan has identified Director and Director General roles as critical positions due to their direct impact on strategic delivery, governance oversight, operational performance, and institutional sustainability. These roles are pivotal in ensuring business continuity, driving transformation initiatives, and maintaining leadership stability.

Accordingly, the succession planning focus is concentrated on building a strong, ready leadership pipeline for these two levels.

The succession framework is derived from four integrated assessment dimensions:

1. **Capacity (Future Potential)** – Evaluates the individual’s ability to assume broader responsibilities, manage complexity, lead transformation, and operate at higher strategic levels.
2. **Achievements (Performance Results)** – Assesses demonstrated delivery against targets, operational excellence, strategic contributions, and measurable value creation.
3. **Relationships (Leadership & Influence)** – Examines leadership behaviour, stakeholder engagement, collaboration, trust-building, and cultural alignment.
4. **Staff Development Gap Analysis** – Identifies competency gaps between current capability profiles and the requirements of Team Leader and Director roles, forming the basis for targeted development interventions.

**General Succusion Plan Template**

| Criteria | Definitions | Staff 1 | Staff 2 | Staff 3 | Staff 4 | Staff 5 | Staff 6 | Weight (%) |
|---|---|---|---|---|---|---|---|---|
| Sum Total | Assessment Results Agreegation | 32 | 36 | 53 | 37 | 39 | 37 | 50 |
| Capacity | Analysing & Strategic, Thinking<br>Developing Solutions | 8 | 12 | 16 | 12 | 16 | 16 | 20 |
| Acheivements | Delivering Results<br>Learning & Adaptability | 9 | 12 | 6 | 9 | 12 | 12 | 15 |
| Relatioships | Building Relationships<br>Teamwork & Values Difference | 6 | 9 | 12 | 6 | 9 | 6 | 15 |
| Total | Resuls aggregation with all dimensions above | 55 | 69 | 87 | 64 | 76 | 71 | 100 |
| Rank | Succesion plan priority based on the current status | 6 | 4 | 1 | 5 | 2 | 3 | |

The gap analysis serves as a core input into succession decisions by highlighting readiness levels and defining structured development pathways, including leadership training, stretch assignments, mentoring, and exposure to cross-functional responsibilities.

This integrated approach ensures that succession planning is not replacement-driven, but capability-driven — systematically preparing high-potential talent to assume critical leadership roles while aligning development investments with long-term strategic objectives.

In summary, the succession plan strengthens organisational resilience by:

- Securing leadership continuity for critical positions
- Aligning development with future capability requirements
- Building a sustainable leadership bench
- Supporting strategic transformation objectives

## TRANING PROGRAM

The Policy and Governance Staff Development Training Program is a structured capability-building initiative designed to strengthen the institutional capacity required to design, govern, and implement digital policies and regulatory frameworks. The program aims to equip staff within the Policy and Governance Directorate with the strategic, technical, and leadership competencies necessary to support national digital transformation and deliver effective governance outcomes.

The program is aligned with the evolving demands of the digital economy and focuses on building a future-ready policy workforce capable of addressing complex regulatory challenges, technological disruptions, and cross-sector collaboration requirements.

| Competences | Training Area | Example Training Program | Institution / Provider |
|---|---|---|---|
| **Strategy and Policy Development** | Digital Strategy & Transformation | Digital Transformation Strategy | MIT Sloan School of Management |
| | Digital Government Strategy | Digital Government Leadership Programme | Oxford Internet Institute |
| | Public Policy Design | Public Policy Analysis & Design | Harvard Kennedy School |
| | Technology & Policy | Technology and Public Policy Program | Stanford University |
| **Governance and Institutional** | Digital Governance Leadership | Digital Government Leadership Programme | Oxford Internet Institute |
| | Public Sector Governance | Executive Program in Public Leadership | Harvard Kennedy School |
| | Digital Government Transformation | Digital Government Transformation | OECD |
| | ICT Governance & Regulation | ICT Policy and Regulatory Training | International Telecommunication Union |
| | Public Sector Institutional Design | Governance and Institutional Reform | World Bank |
| | Digital Governance Strategy | Digital Transformation & Governance | MIT Sloan School of Management |
| **Operational and Implementation** | Digital Transformation Implementation | Leading Digital Transformation | MIT Sloan School of Management |
| | Public Sector Digital Implementation | Digital Government Transformation | OECD |
| | ICT Policy Implementation | ICT Policy and Regulatory Training | International Telecommunication Union |
| | Operational Excellence & Process Design | Operations Strategy and Execution | INSEAD |
| | Public Sector Program Delivery | Public Sector Leadership and Delivery | Harvard Kennedy |
| **Digital and Technical** | Digital Technology & Data Strategy | Data Strategy and Digital Transformation | Harvard Business School |
| | AI Policy & Technology Governance | AI Policy and Governance | Oxford Internet Institute |
| | Cybersecurity & Digital Risk | Cybersecurity for Policy Leaders | Stanford University |
| | Digital Infrastructure & Connectivity Policy | ICT Infrastructure and Digital Development | International Telecommunication Union |
| | Data Governance & Digital Economy | Data Governance and Digital Economy Policy | OECD |
| **Ethical and Societal** | Responsible Technology Governance | Ethics of Technology | University of Oxford |
| | Responsible AI Policy | Responsible AI: Ethics and Governance | MIT Sloan School of Management |
| | Data Ethics & Digital Rights | Data Ethics and Responsible Innovation | Harvard Kennedy School |
| | Inclusive Digital Transformation | Digital Inclusion and Digital Society | OECD |
| | Global AI Ethics Governance | AI Governance and Responsible Innovation | World Economic Forum |
| **International Collaboration** | International Public Policy & Diplomacy | Executive Program in Public Leadership | Harvard Kennedy School |
| | Digital Economy & International Policy | Digital Economy Policy Program | OECD |
| | ICT Regulation & Global Cooperation | ICT Policy and Regulatory Training | International Telecommunication Union |
| | Digital Development & Global Partnerships | Digital Development Program | World Bank |
| | Technology Policy & Global Governance | Technology and Public Policy Program | Stanford University |

## RESOURCING STRATEGY

The Resourcing Strategy is designed to strengthen capability while ensuring operational efficiency and long-term sustainability. It reflects the evolving maturity of the workforce within the Policy & Governance Directorate General, where foundational capabilities have been established and the focus is now shifting toward strategic depth, specialization, and leadership readiness.

### 1.Workforce Maturity in Policy & Governance

The Directorate General's workforce is transitioning from foundational capacity building to advanced policy leadership. As capability matures, emphasis is placed on:

- Strengthening strategic policy design and regulatory foresight
- Enhancing governance oversight and institutional coordination

### 2. Contracting Routine Tasks

To optimize resource allocation and improve agility, routine and repetitive operational tasks are strategically outsourced.

### 3. Cross-Posting & External Exposure

As part of staff development and succession readiness, cross-posting and external exposure are embedded into the resourcing model. This includes:

- Temporary secondments to other ministries or regulatory bodies
- Exposure to private sector and international best practices
- Participation in cross-government transformation initiatives
- Engagement in international policy forums

### 4. Short-Term Contract

Professional coaching is integrated into the staff development roadmap to accelerate leadership maturity. Embedding coaches ensures that development is continuous, personalized, and aligned with strategic objectives rather than ad-hoc training interventions. It is recommended to exercise short term contract for external coaches for duration of 1 to 2 years with an objectives of transferring knowledge to Policy and Governance seniors in order to embed coaching as the ways of working.

## RETENTION PROGRAM

The Retention Program is a strategic workforce sustainability framework designed to secure institutional knowledge, strengthen capability depth, and ensure long-term leadership continuity. It moves beyond traditional retention approaches by integrating four interconnected dimensions: **Retain, Retrain, Renew, and Recruit**.

### RETAIN - Protect & Motivate Critical Talent

Safeguard high-performing and high-potential employees, particularly in critical roles such as Team Leaders and Directors. Retention is not only about compensation — it is about ensuring employees see a future within the organization.

### RECRUIT

Attract external expertise where internal capacity or specialization gaps exist. Recruitment is strategic, not volume-based — focusing on future capability needs rather than short-term headcount expansion.

### RENEW - Refresh & Modernize Capability

Continuously modernize workforce skills, culture, and mindset to align with strategic transformation. Renewal strengthens adaptability and prepares leaders for emerging governance challenges.

### RETRAIN - Close Capability Gaps

Upgrade existing workforce capabilities to meet evolving strategic and policy demands. Retraining ensures internal talent remains relevant in the face of digital transformation and regulatory evolution.

| Dimension | Strategic Question | Impact |
|---|---|---|
| **Retain** | **How do we protect our critical talent?** | Stability |
| **Retrain** | **How do we upgrade existing capability?** | Readiness |
| **Renew** | **How do we modernize mindset and culture?** | Agility |
| **Recruit** | **Where do we need external expertise?** | Strategic Strength |

## DEVELOPMENT STRATEGY

The Staff Development Strategy aims to build a future-ready workforce capable of responding to rapidly evolving market dynamics, technological disruption, and stakeholder expectations, while delivering greater national value with optimized resources.

The strategy focuses on equipping staff with the competencies, mindset, and tools required to:

- Adapt quickly to market and industry changes

- Deliver more outcomes with limited financial resources
- Support national economic diversification and digital transformation
- Align with shareholder and government expectations of efficiency and value creation
- Build a workforce capable of continuous learning and innovation

Ultimately, the strategy transforms the workforce into a high-performance, agile, and digitally fluent talent pool capable of responding to industry dynamics and policy priorities.

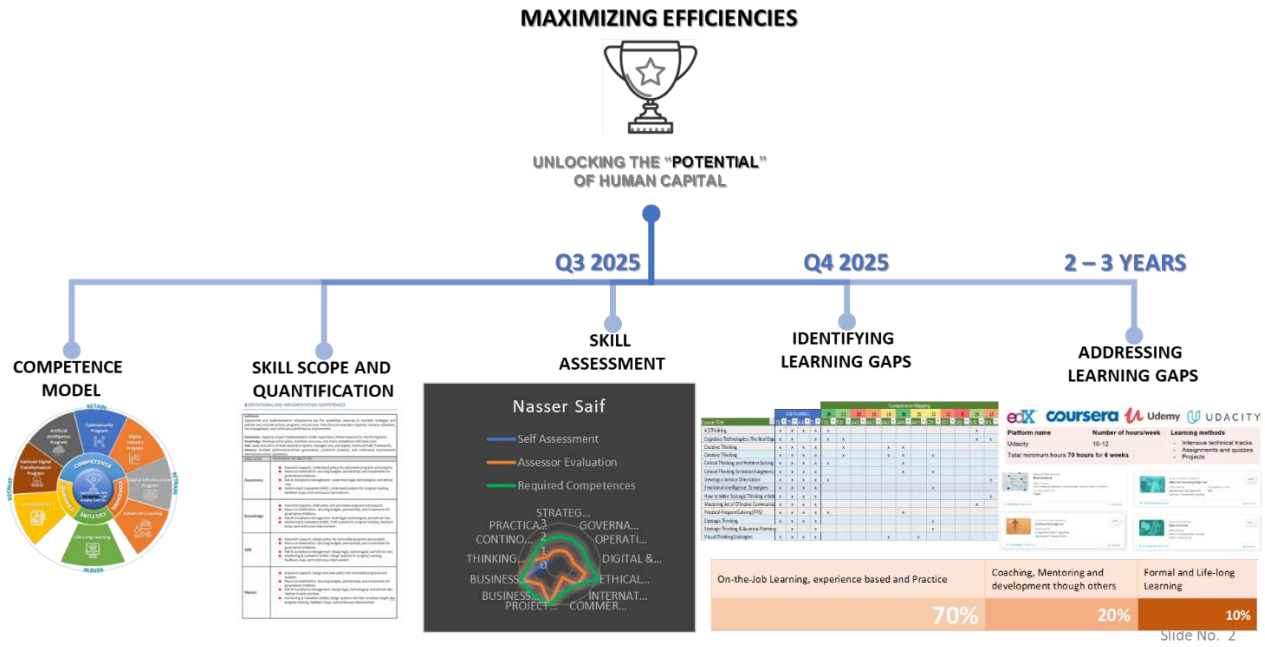
| Strategic Driver | Description |
|---|---|
| Adapting to Market Dynamics | Workforce must understand evolving market conditions, technology trends, and emerging digital business models. |
| Agility and Adaptive Competences | Staff must be able to respond quickly to policy, technological, and economic changes. |
| Delivering More with Less Resources | Institutions must improve productivity, efficiency, and value creation despite budget constraints. |
| Preparing Workforce for Industry Transformation | Employees must possess future skills aligned with digital economy, innovation, and emerging technologies. |

## DEPLOYMENT MODEL

The Deployment Model provides a structured and continuous approach to developing workforce capabilities that align with institutional strategy, market dynamics, and evolving industry requirements. The model ensures that organizations systematically build, assess, and enhance staff competences, enabling the workforce to adapt to technological change, economic shifts, and stakeholder expectations while delivering greater value with optimized resources.

The deployment model is built around five integrated stages that create a continuous improvement cycle for workforce capability development.

| Stage | Description | Key Outcomes |
|---|---|---|
| **Competence Creation** | Define the strategic competence framework aligned with institutional mandate, market dynamics, and industry transformation needs. | Clear capability framework aligned with strategic priorities |
| **Competence Assessment** | Evaluate current workforce capabilities through structured assessments, surveys, and performance evaluations. | Understanding of current workforce capability baseline |
| **Gap-to-Potential Analysis** | Identify the gap between existing competences and the required future capability levels. | Identification of priority capability gaps |
| **Capability Development Roadmap** | Develop structured development plans to close capability gaps through targeted initiatives. | Clear roadmap for workforce capability development |
| **Coaching and Advanced Training** | Implement development programs including coaching, mentoring, and specialized training programs. | Continuous workforce capability improvement |



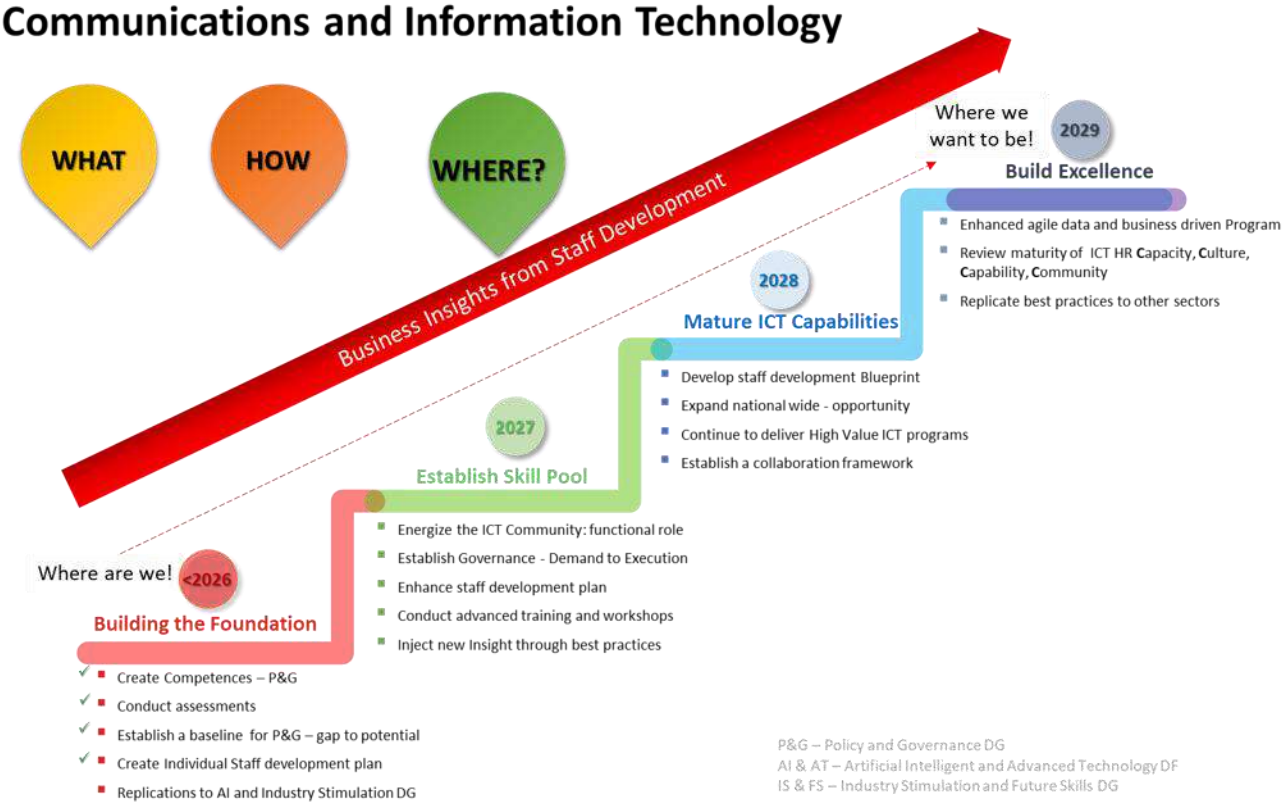

Slide No. 2

The Staff Development Framework adopts the internationally recognized 70–20–10 learning model, which emphasizes experiential learning, collaborative development, and structured training to build a highly capable, adaptive, and future-ready workforce. This framework ensures that staff development is embedded in daily work practices while also providing structured opportunities for coaching and continuous professional education.

This framework ensures that staff development becomes an integrated, continuous process embedded within everyday work practices, enabling the workforce to evolve alongside technological advancements, economic transformation, and institutional priorities

STAIRCASE AND ROADMAP

# Communications and Information Technology




P&G – Policy and Governance DG
AI & AT – Artificial Intelligent and Advanced Technology DF
IS & FS – Industry Stimulation and Future Skills DG

# APPENDIXES A: COMPETENCES

## 1.STRATEGY & POLICY DEVELOPMENT

**Definition:**
Strategy and policy competences refer to the ability of institutions and professionals to design, align, and implement evidence-based policies that support national priorities, address societal needs, anticipate future challenges in governance and digital transformation.

**Awareness**: Understands basic policy concepts and national strategies; relies on external guidance.
**Knowledge**: Drafts policies with some alignment to national priorities and conducts limited impact analysis.
**Skill**: Designs comprehensive, evidence-based, forward-looking policies that integrate benchmarks and KPIs.
**Mastery**: Shapes predictive, globally benchmarked policies; demonstrates thought leadership in anticipating emerging policy needs.

| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
|---|---|
| **Awareness** | ■ Policy Formulation: Aware of evidence-based policies aligned with national and sectoral priorities.<br>■ Vision & Strategy Alignment: Understand governance initiatives align with long-term digital transformation or socio-economic strategies.<br>■ Regulatory Foresight: Understand emerging issues (AI ethics, data sovereignty, cybersecurity, etc.) and integrating them into policy.<br>■ Benchmarking & Best Practices: understand international standards, ITU/UN recommendations, and peer practices to guide local policy. |
| **Knowledge** | ■ Policy Formulation: Ability to draft evidence-based policies aligned with national and sectoral priorities.<br>■ Vision & Strategy Alignment: Articulate governance initiatives align with long-term digital transformation or socio-economic strategies.<br>■ Regulatory Foresight: Anticipating emerging issues (AI ethics, data sovereignty, cybersecurity, etc.) and integrating them into policy.<br>■ Benchmarking & Best Practices: Using international standards, ITU/UN recommendations, and peer practices to guide local policy. |
| **Skill** | ■ Policy Formulation: Design evidence-based policies aligned with national and sectoral priorities.<br>■ Vision & Strategy Alignment: Demonstrate the governance initiatives align with long-term digital transformation or socio-economic strategies.<br>■ Regulatory Foresight: design with an anticipation of emerging issues (AI ethics, data sovereignty, cybersecurity, etc.) and integrating them into policy.<br>■ Benchmarking & Best Practices: design using international standards, ITU/UN recommendations, and peer practices to guide local policy. |

| | |
|---|---|
| **Master** | ■ Policy Formulation: Steer to design evidence-based policies aligned with national and sectoral priorities.<br>■ Vision & Strategy Alignment: Steer and demonstrate the governance initiatives align with long-term digital transformation or socio-economic strategies.<br>■ Regulatory Foresight: Steer with anticipation of emerging issues (AI ethics, data sovereignty, cybersecurity, etc.) and integrating them into policy.<br>■ Benchmarking & Best Practices: Steer using international standards, ITU/UN recommendations, and peer practices to guide local policy. |

## 2.GOVERNANCE & INSTITUTIONAL

| | |
|---|---|
| **Definition:**<br>Governance and institutional competences are the capabilities required to design, establish, and manage effective governance structures and institutional arrangements that ensure transparency, accountability, inclusivity, and coordination in policy-making and implementation.<br><br>**Awareness**: Recognizes governance structures but has limited involvement in institutional processes.<br>**Knowledge**: Contributes to defining roles and supporting stakeholder coordination.<br>**Skilled**: Manages governance structures, ensures transparency and accountability, and leads stakeholder engagement.<br>**Mastery**: Designs adaptive governance systems, fosters institutional resilience, and advises on global governance frameworks. | |
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Awareness** | ■ Governance Structures: Understanding clear bodies (committees, regulators, agencies) with mandates and accountability.<br>■ Stakeholder Coordination: Understand mechanisms for government–private sector–civil society–academia collaboration.<br>■ Transparency & Accountability: Understand decision-making and reporting mechanisms are open, auditable, and trusted.<br>■ Legal & Regulatory Frameworks: Describe and understand laws/regulations for ICT and digital economy. |
| **Knowledge** | ■ Governance Structures: Draft clear bodies (committees, regulators, agencies) with mandates and accountability.<br>■ Stakeholder Coordination: Map mechanisms for government–private sector–civil society–academia collaboration.<br>■ Transparency & Accountability: Knowledgeable decision-making and reporting mechanisms are open, auditable, and trusted.<br>■ Legal & Regulatory Frameworks: Competence in drafting, interpreting, and updating laws/regulations for ICT and digital economy. |
| **Skill** | ■ Governance Structures: Design clear bodies (committees, regulators, agencies) with mandates and accountability.<br>■ Stakeholder Coordination: Design mechanisms for government–private sector–civil society–academia collaboration. |

| | |
|---|---|
| | ■ Transparency & Accountability: Demonstrate decision-making and reporting mechanisms are open, auditable, and trusted.<br>■ Legal & Regulatory Frameworks: Competence in designing, interpreting, and updating laws/regulations for ICT and digital economy. |
| **Master** | ■ Governance Structures: Steer with global view of clear bodies (committees, regulators, agencies) with mandates and accountability.<br>■ Stakeholder Coordination: Steer with best practices insights mechanisms for government–private sector–civil society–academia collaboration.<br>■ Transparency & Accountability: Demonstrate decision-making and reporting mechanisms are open, auditable, and trusted.<br>■ Legal & Regulatory Frameworks: Competence in designing, interpreting, and updating laws/regulations for ICT and digital economy with industry insights. |

## 3.OPERATIONAL AND IMPLEMENTATION COMPETENCES

| **Definition:**<br>Operational and implementation competences are the capabilities required to translate strategies and policies into concrete actions, programs, and services. They focus on execution capacity, resource utilization, risk management, and continuous performance improvement.<br><br>**Awareness**: Supports project implementation under supervision; limited exposure to monitoring tools.<br>**Knowledge**: Develops action plans, mobilizes resources, and tracks compliance with basic tools.<br>**Skill**: Leads execution of multi-sectoral programs, manages risks, and applies structured M&E frameworks.<br>**Mastery**: Embeds performance-driven governance, predictive analytics, and continuous improvement mechanisms across operations. | |
|---|---|
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Awareness** | ■ Execution Capacity: Understand policy into actionable programs and projects.<br>■ Resource Mobilization: Securing budgets, partnerships, and investments for governance initiatives.<br>■ Risk & Compliance Management: Understand legal, technological, and ethical risks.<br>■ Monitoring & Evaluation (M&E): Understand systems for progress tracking, feedback loops, and continuous improvement. |
| **Knowledge** | ■ Execution Capacity: Draft policy into actionable programs and projects.<br>■ Resource Mobilization: Securing budgets, partnerships, and investments for governance initiatives.<br>■ Risk & Compliance Management: Draft legal, technological, and ethical risks.<br>■ Monitoring & Evaluation (M&E): Draft systems for progress tracking, feedback loops, and continuous improvement. |
| **Skill** | ■ Execution Capacity: Design policy into actionable programs and projects. |

| | |
|---|---|
| | ■ Resource Mobilization: Securing budgets, partnerships, and investments for governance initiatives.<br>■ Risk & Compliance Management: Design legal, technological, and ethical risks.<br>■ Monitoring & Evaluation (M&E): Design systems for progress tracking, feedback loops, and continuous improvement |
| **Master** | ■ Execution Capacity: Design and steer policy into actionable programs and projects.<br>■ Resource Mobilization: Securing budgets, partnerships, and investments for governance initiatives.<br>■ Risk & Compliance Management: Design legal, technological, and ethical risks relative to best practices.<br>■ Monitoring & Evaluation (M&E): Design systems with best practices insights for progress tracking, feedback loops, and continuous improvement |

## 4.DIGITAL & TECHNICAL COMPETENCES

| | |
|---|---|
| **Definition:**<br>Digital and technical competences are the capabilities required to understand, regulate, and leverage digital technologies within governance systems. They enable policymakers and institutions to address data, cybersecurity, interoperability, and emerging technologies while ensuring resilience and innovation in public policy<br><br>**Awareness**: Has basic awareness of ICT policy issues (e.g., broadband, e-government).<br>**Knowledge**: Applies policies on data governance, cybersecurity, or interoperability in specific contexts.<br>**Skills**: Integrates emerging technologies (AI, IoT, 5G) into comprehensive policy frameworks.<br>**Mastery**: Anticipates disruptive technologies (quantum, space, bio-digital) and designs globally adaptive regulatory systems. | |
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Awareness** | ■ Data Governance: Understand competence in data protection, open data, privacy, and cross-border flows.<br>■ Technology Awareness: Understanding enabling technologies (cloud, 5G, AI, IoT) and their policy implications.<br>■ Cybersecurity & Resilience: Understand the Integration security-by-design principles into governance.<br>■ Interoperability & Standards: Understand systems and institutions can work across borders and sectors. |
| **Knowledge** | ■ Data Governance: Draft competence in data protection, open data, privacy, and cross-border flows.<br>■ Technology Awareness: draft enabling technologies (cloud, 5G, AI, IoT) and their policy implications. |

| | |
|---|---|
| | ■ Cybersecurity & Resilience: Integrating security-by-design principles into governance.<br>■ Interoperability & Standards: Ensuring systems and institutions can work across borders and sectors. |
| **Skill** | ■ Data Governance: Design in data protection, open data, privacy, and cross-border flows.<br>■ Technology Awareness: Design enabling technologies (cloud, 5G, AI, IoT) and their policy implications.<br>■ Cybersecurity & Resilience: Integrating security-by-design principles into governance.<br>■ Interoperability & Standards: Ensuring systems and institutions can work across borders and sectors. |
| **Master** | ■ Data Governance: Embed best practices competence in data protection, open data, privacy, and cross-border flows.<br>■ Technology Awareness: Steer the enabling technologies (cloud, 5G, AI, IoT) and their policy implications.<br>■ Cybersecurity & Resilience: Integrating security-by-design principles into governance with industry insights.<br>■ Interoperability & Standards: design systems and institutions can work across borders and sectors. |

## 5.ETHICAL & SOCIETAL COMPETENCES

| | |
|---|---|
| **Definition:**<br>Ethical and societal competences are the capabilities required to ensure that governance and policies are inclusive, fair, rights-based, and socially responsible. They emphasize public trust, citizen-centric approaches, and the long-term societal value of governance decisions.<br><br>**Awareness**: Understands inclusion concepts but applies them superficially.<br>**Knowledge**: Designs initiatives considering accessibility and basic rights.<br>**Skills**: Embeds ethics, human rights, and equity principles into policies and governance systems.<br>**Mastery**: Shapes societal trust and digital sovereignty frameworks, balancing innovation with long-term public value. | |
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Awareness** | ■ Inclusivity & Accessibility: Understand policies bridge digital divides (rural, gender, disability, socio-economic).<br>■ Ethics & Human Rights: Understand safeguarding fairness, privacy, and freedom of expression in governance.<br>■ Public Value Orientation: Centering governance on citizen trust, service quality, and societal impact. |

| | |
|---|---|
| | ■ Change Management: Support cultural adaptation in institutions and society. |
| **Knowledge** | ■ Inclusivity & Accessibility: Draft policies bridge digital divides (rural, gender, disability, socio-economic).<br>■ Ethics & Human Rights: Safeguarding fairness, privacy, and freedom of expression in governance.<br>■ Public Value Orientation: Centering governance on citizen trust, service quality, and societal impact.<br>■ Change Management: Driving cultural adaptation in institutions and society |
| **Skill** | ■ Inclusivity & Accessibility: Design policies bridge digital divides (rural, gender, disability, socio-economic).<br>■ Ethics & Human Rights: Safeguarding fairness, privacy, and freedom of expression in governance.<br>■ Public Value Orientation: Centering governance on citizen trust, service quality, and societal impact.<br>■ Change Management: Driving cultural adaptation in institutions and society. |
| **Master** | ■ Inclusivity & Accessibility: Ensuring policies bridge digital divides (rural, gender, disability, socio-economic).<br>■ Ethics & Human Rights: Safeguarding fairness, privacy, and freedom of expression in governance.<br>■ Public Value Orientation: Centering governance on citizen trust, service quality, and societal impact.<br>■ Change Management: Driving cultural adaptation in institutions and society. |

## 6.INTERNATIONAL COLLABORATION COMPETENCES

**Definition:**
International collaboration competences are the capabilities required to engage effectively with regional and global partners, harmonize policies with international standards, and shape global governance frameworks. They emphasize cross-border cooperation, negotiation, and alignment with international best practices to strengthen national and global digital ecosystems.

**Awareness**: Follows international developments but engages passively.
**Knowledge**: Participates in regional/global forums and contributes to negotiations.
**Skills**: Aligns national governance frameworks with international standards and builds global partnerships.
**Mastery**: Leads international negotiations, shapes global norms, and represents thought leadership in digital governance.

| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
|---|---|
| **Awareness** | |

| | |
|---|---|
| | ■ Global Engagement: Understanding international organizations (ITU, OECD, WTO, etc.) and treaties.<br>■ Cross-border Coordination: Harmonizing standards, spectrum, data flows, and cyber cooperation.<br>■ Diplomatic & Negotiation Skills: Balancing national interests with global governance frameworks.<br>■ Partnership Development: Building alliances with private sector, development banks, and NGOs. |
| **Knowledge** | ■ Global Engagement: Participation in international organizations (ITU, OECD, WTO, etc.) and treaties.<br>■ Cross-border Coordination: Harmonizing standards, spectrum, data flows, and cyber cooperation.<br>■ Diplomatic & Negotiation Skills: Balancing national interests with global governance frameworks.<br>■ Partnership Development: Building alliances with private sector, development banks, and NGOs. |
| **Skill** | ■ Global Engagement: Participation in international organizations (ITU, OECD, WTO, etc.) and treaties.<br>■ Cross-border Coordination: Harmonizing standards, spectrum, data flows, and cyber cooperation.<br>■ Diplomatic & Negotiation Skills: Balancing national interests with global governance frameworks.<br>■ Partnership Development: Building alliances with private sector, development banks, and NGOs. |
| **Master** | ■ Global Engagement: Participation in international organizations (ITU, OECD, WTO, etc.) and treaties.<br>■ Cross-border Coordination: Harmonizing standards, spectrum, data flows, and cyber cooperation.<br>■ Diplomatic & Negotiation Skills: Balancing national interests with global governance frameworks.<br>■ Partnership Development: Building alliances with private sector, development banks, and NGOs. |

## 7.COMMERCIAL MINDSET

**Definition:**
A digital commercial mindset refers to the strategic and practical ability to convert digital transformation investments into sustained economic value by enhancing cost competitiveness, applying market intelligence, and building digital solutions that evolve from internal enablement to commercial digital services, platforms, and new revenue streams
**Awareness**: Understands basic concepts, terminology, and examples
**Knowledge**: Applies tools with guidance; supports initiatives

| **Skills**: Independently delivers outputs and measurable value<br>**Mastery**: Leads portfolios/programs; optimizes value and scalability, Shapes strategy, ecosystems, and new revenue industries | |
|---|---|
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Awareness** | ■ Understands market intelligence concepts, trends, and competitors<br>■ Understands customer journey and product-thinking basics<br>■ Understands ROI, payback, cost-benefit logic<br>■ Understands cost competitiveness and productivity levers<br>■ Understands commercialization concepts and digital business models<br>■ Understands Agile/MVP basics<br>■ Understands governance, privacy, and cyber principles<br>■ Understands key stakeholder roles and communication basics<br>■ Understands dashboards and data basics |
| **Knowledge** | ■ Collects competitor/market data using templates<br>■ Supports journey mapping and user research<br>■ Contributes to business cases and benefit estimates<br>■ Identifies basic efficiency opportunities<br>■ Supports pilots and early monetization approaches<br>■ Participates in Agile teams; supports delivery activities<br>■ Applies policies/templates; escalates risks<br>■ Supports stakeholder communication and coordination<br>■ Uses dashboards for basic reporting |
| **Skills** | ■ Produces opportunity assessments (TAM/SAM/SOM), prioritizes opportunities<br>■ Designs customer-centric digital services/products with clear value proposition<br>■ Builds business cases (ROI/NPV/IRR), defines benefits realization KPIs<br>■ Quantifies cost-to-serve, builds productivity baseline and improvement plan<br>■ Designs monetization models (subscription/transaction/API/data products)<br>■ Runs MVPs and experiments; iterates based on user/data insights<br>■ Designs governance controls for digital products; manages vendor SLAs<br>■ Leads alignment workshops and cross-functional delivery<br>■ Applies analytics for customer/value decisions and experiments |
| **Mastery** | ■ Shapes national/enterprise market intelligence direction and future digital industry positioning<br>■ Sets product strategy, platform direction, and ecosystem product standards<br>■ Shapes investment strategy; drives sustainable revenue growth and economic value outcomes<br>■ Defines long-term cost competitiveness strategy and transformation economics |

| | |
|---|---|
| | ■ Establishes digital industry ecosystems; drives exportable digital services and national/enterprise digital economy growth<br>■ Institutionalizes Agile-at-scale and continuous improvement culture<br>■ Shapes governance frameworks enabling innovation + trust + commercialization<br>■ Creates strategic alliances; shapes public-private ecosystem and investment attraction |

## 8.PROJECT & RISK MANAGEMENT

| | |
|---|---|
| **Definition:**<br>The management of a project which includes initiating, planning, executing, monitoring & controlling and closing by acquiring and utilizing the necessary resources and skills, within agreed parameters of cost, time and quality to meet identified business objectives. Methods, techniques and knowledge for the assessment and management of business risk aligned to information assets that support business processes. | |
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Knowledge** | ■ Demonstrate your understanding of Agile verses Waterflood.<br>■ Demonstrate knowledge of project management terminology, processes, standards, and tools, and apply them under supervision.<br>■ Participate in scope definition and management.<br>■ Participate in defining, sequencing, and estimating activity durations.<br>■ Participate in total project cost estimation, and associated approval and monitoring processes.<br>■ Participate in quality management planning.<br>■ Draft a resource plan, acquire resources, and assign to tasks.<br>■ Explain the methods and techniques of risk assessment and management<br>■ Identify the potential impact of known risks.<br>■ Identify threats and vulnerabilities that may expose assets to disruptions and incidents, describe and select internal mitigating controls. |
| **Skill** | ■ Develop detailed scope description and agree via formal scope acceptance process.<br>■ Create and follow a Project Management Plan that breaks the agreed scope of work into executable components and time frames.<br>■ Define, sequence and estimate required resource and activity durations to form a baseline schedule; subsequently estimate total project costs.<br>■ Monitor status and manage baseline schedule changes.<br>■ Obtain authorized budget; monitor project status to manage baseline cost changes.<br>■ Define project quality requirements; follow audit quality compliance processes.<br>■ Assess project environment to establish & implement an appropriate project management governance framework.<br>■ Conduct risk assessments & perform risk analysis to identify & anticipate risks.<br>■ Plan risk responses and monitor & control risks for the project.<br>■ Proactively identify new threats and vulnerabilities. |

| | |
|---|---|
| | ■ Decide on risk management responses across the business.<br>■ Manage business risk and internal control evaluation activities.<br>■ Act as role model to others on identifying and managing business risk. |

## 9.BUSINESS IMPROVEMENT TECHNIQUES

| **Definition:**<br>Use Business Analysis Techniques to discover and model information to appropriately understand and document the business operations and its needs. | |
|---|---|
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Knowledge** | ■ Describe process design with respect to the overall process lifecycle (Design, Manage, Improve, Sustain).<br>■ Conduct a structured assessment of a business process and relate it to the organizational or strategic context.<br>■ Conduct an "as-is" process assessment, establish requirements for the "to-be" process<br>■ Explain when and how to use different types of business analysis techniques.<br>■ Apply basic business analysis, process modelling and design techniques.<br>■ Understand different modelling techniques and tools; can explain how they are applied.<br>■ Employ relevant standards and methodologies to define business requirements.<br>■ Articulate the distinction between functional and non-functional requirements.<br>■ Routinely apply process improvement tools (e.g., LEAN or Six Sigma) to business processes.<br>■ Evaluate a situation and can brainstorm multiple potential solutions under direction.<br>■ Present relevant information and make low complexity decisions.<br>■ Contribute to the development of a change plan, intervention, or solution. |
| **Skill** | ■ Employ a range of business analysis techniques across a variety of projects.<br>■ Facilitate stakeholder meetings.<br>■ Lead business analysis teams.<br>■ Select best techniques for discovering stakeholder requirements; explain to business partners how and why these techniques are being used.<br>■ Apply multiple modeling techniques to analyze and document business requirements.<br>■ Review requirements with stakeholders.<br>■ Able to align and secure the buy-in of multiple stakeholders to deliver the recommended business process improvements.<br>■ Create solution acceptance criteria and validate solution with the business; define necessary supporting materials.<br>■ Evaluate a situation, seek multiple potential solutions, think creatively.<br>■ Be a certified Lean Practitioner.<br>■ Analyze relevant information, form comparisons and tradeoff between options.<br>■ Make medium-complexity decisions. |

| | |
|---|---|
| | ■ Apply process modelling and design techniques to deliver measurable business value.<br>■ Successfully lead and deliver significant process improvement projects. |

## 10.BUSINESS CHANGE MANAGEMENT

| **Definition:**<br>Understands and applies change concepts, principles, processes, tools and methodologies, behaviours, and skills necessary to effectively identify, initiate, manage, and influence the people-side of change to achieve required business results. | |
|---|---|
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Knowledge** | ■ Recognizes importance off and the need for change management.<br>■ Recognizes critical business issues leading to change and acknowledges how change impacts organizational capabilities including organizational structure, processes, culture (and behavior's), people and leadership.<br>■ Can describe and explain the concept of change and change management.<br>■ Can explain how change management should be implemented (principles, planning, or managed to realize business benefits.<br>■ Contributes to the development of change strategies (including scoping and approach), and the design/delivery of change plans and interventions.<br>■ Understands the range of stakeholder engagement and communication channels and can explain and assist in using tools and techniques as appropriate for the audience and/or initiative.<br>■ Recognizes the importance and understands value of identifying and analyzing and subsequently engaging and influencing stakeholders being impacted by change.<br>■ Conducts training needs analysis and identifies specific training needs resulting from change programs.<br>■ Can facilitate development of stakeholder inventory (including leaders/sponsors), contribute to stakeholder analysis and is aware of the need for different approaches for different leadership/stakeholder groups. |
| **Skill** | ■ Anticipates major changes affecting the organisation and successfully develops and implements change strategies and plans to achieve desired business results.<br>■ Initiates the business implementation plan, including all the activities that the business needs to do to prepare for a change.<br>■ Applies change concepts, methodologies and techniques and experience to design, plan and implement appropriate change strategies.<br>■ Anticipates alignment/integration requirements within programme (or across multiple programs / projects) and coordinates/intervenes as required to mitigate unnecessary business disruption.<br>■ Able to manage central programme and simultaneously direct, coordinate and/or influence associated regional change initiatives<br>■ Conducts impact assessments to identify change gaps and subsequently defines change strategy, scope, and implementation plans.<br>■ Assesses business change track record and change readiness to assess business's ability (saturation level) to absorb upcoming change. Defines activities to close any gaps prior to implementation.<br>■ Can competently apply the behaviour's and skills necessary for managing change. |

| | |
|---|---|
| | ■ Involves the right people at the right time throughout the programme by developing, managing, and delivering stakeholder engagement strategies and plans.<br>■ Determines why, with whom, how and when to intervene (individual, team and organisation).<br>■ Recognizes the dual role of leaders in managing change as well as recipients of change and ensures engagement plans reflect appropriate engagement approaches.<br>■ Identifies stakeholder expectations and concerns and incorporates these into planning and decision-making processes.<br>■ Effectively uses a variety of media and communication methods to reinforce key messages and engage audiences.<br>■ Prepares detailed communication plans (including communication governance; objectives; target audiences; key messages; timing/frequency; delivery channels; media; etc.).<br>■ Develops detailed training plans and coordinates delivery of (or delivers) training.<br>■ Identifies areas (and individuals) that are resistant to change and implements specific plans to facilitate buy-in, understanding, and commitment.<br>■ Monitors and reports progress on change interventions, including business readiness targets, business engagement activity, deployment activities, and key operational metrics.<br>■ Coaches and challenges others on behaviour's and actions to support change.<br>■ Maintains and communicates understanding (and demonstrates application) of trends and developments in the field of change management. |

## 11.A3 THINKING GENERAL LEAN

**Definition:**
Lean is a management philosophy and methodology focused on maximizing customer value while minimizing waste. It seeks to deliver more value with fewer resources by streamlining processes, eliminating non–value-adding activities, and empowering people to continuously improve operations.

Lean A3 is commonly used as a structured problem-solving and continuous improvement tool used in Lean management, traditionally used to document the process. It provides a standardized, visual, one-page format for defining a problem, analyzing root causes, developing countermeasures, and tracking implementation
**Awareness**: Understands Lean/A3 concepts and terminology
**Knowledge**: Applies A3 with templates and coaching
**Skills**: Independently delivers A3s with measurable results
**Mastery**: Institutionalizes Lean management system and CI culture

| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
|---|---|
| **Awareness** | ■ Knows what A3 is and why it's used<br>■ Understands "go see" and data collection basics<br>■ Understands VOC and customer value<br>■ Knows common RCA tools<br>■ Understands targets/KPIs conceptually<br>■ Knows difference between solution and countermeasure<br>■ Understands PDCA cycle<br>■ Understands standard work basics |

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| | ■ Understands benefits categories (time, cost, quality)<br>■ Understands A3 narrative flow<br>■ Understands team roles |
| **Knowledge** | ■ Uses A3 structure to describe a problem<br>■ Collects baseline data with guidance<br>■ Helps gather VOC and simple requirements<br>■ Performs 5 Whys with coaching<br>■ Defines basic targets with help<br>■ Proposes countermeasures from known patterns<br>■ Runs small PDCA steps with support<br>■ Documents simple standard work<br>■ Tracks benefits with basic reporting<br>■ Presents A3 using template<br>■ Participates in workshops<br>■ Uses digital forms/tools for data capture |
| **Skill** | ■ Frames problems clearly (what/where/when/impact) and aligns scope<br>■ Maps current state (process, flow, constraints) using facts<br>■ Translates VOC into CTQs/service levels and measurable targets<br>■ Confirms root causes with evidence; avoids “jump to solution”<br>■ Sets SMART target condition tied to baseline and value<br>■ Selects countermeasures with impact/effort and risk logic<br>■ Executes implementation plan with owners, dates, controls<br>■ Creates control plans (process controls, audit checks)<br>■ Quantifies benefits (before/after), verifies sustainability<br>■ Communicates logically, aligns stakeholders, handles objections<br>■ Facilitates A3 sessions; manages conflict constructively<br>■ Integrates dashboards, analytics, workflow automation into A3 |
| **Mastery** | ■ Sets org-wide problem-solving standards and cascades strategic A3s<br>■ Builds a culture of fact-based management and visual performance<br>■ Establishes enterprise customer-value standards and service governance<br>■ Builds RCA discipline across the organization; audits RCA quality<br>■ Sets strategic KPI architecture linked to strategy deployment (Hoshin)<br>■ Defines standard countermeasure libraries and decision governance<br>■ Institutionalizes PDCA management cadence and learning system<br>■ Builds Lean management system (LMS) with auditing and governance<br>■ Drives enterprise CI portfolio value and continuous improvement maturity<br>■ Establishes A3 as the standard language for leadership decisions<br>■ Builds cross-functional CI operating model and capability building<br>■ Builds “digital Lean” ecosystem for enterprise-wide CI at scale |

## 12.CONTINOUS IMPROVEMENT (CI) FUNDAMENTALS

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| **Definition:**<br>Continuous Improvement is a systematic, ongoing effort within Lean management to identify, reduce, and eliminate waste while improving processes, products, and services. It focuses on making small, incremental changes driven by employees at all levels to increase efficiency, enhance value for customers, and sustain long-term organizational growth.<br>**Awareness**: Understands CI concepts and basic Lean language<br>**Knowledge**: Applies CI methods with guidance; participates in initiatives<br>**Skills**: Independently leads CI improvements with measurable results<br>**Mastery**: Institutionalizes Lean Management System; drives culture & strategy deployment | |
| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
| **Awareness** | ■ Knows Lean purpose (customer value, waste reduction)<br>■ Understands customer value concept<br>■ Understands process mapping basics<br>■ Recognizes common wastes<br>■ Knows 5 Whys / Fishbone<br>■ Understands Kaizen concept<br>■ Understands standard work idea<br>■ Understands KPIs and baselines<br>■ Understands PDCA cycle<br>■ Knows common tools by name<br>■ Understands leader role in CI<br>■ Knows CI links to strategy<br>■ Understands digital can support CI |
| **Knowledge** | ■ Uses Lean language (waste, flow, pull) in daily work<br>■ Collects VOC and service issues<br>■ Builds simple process maps<br>■ Identifies wastes with checklists<br>■ Applies RCA with coaching<br>■ Participates in Kaizen workshops<br>■ Documents basic work steps<br>■ Tracks KPIs in a simple way<br>■ Runs small PDCA steps with support<br>■ Applies 1–2 tools with guidance<br>■ Supports team CI actions<br>■ Contributes to CI plans<br>■ Uses basic digital tools (dashboards, forms) |
| **Skill** | ■ Demonstrates CI behaviors; applies principles to decisions<br>■ Translates VOC into CTQ/service levels and targets<br>■ Leads end-to-end value stream mapping (VSM) and identifies bottlenecks<br>■ Quantifies wastes (time, rework, backlog) and removes root causes<br>■ Validates root causes with data; avoids “solution jumping”<br>■ Facilitates Kaizen; delivers quick wins with KPIs<br>■ Creates standard work + visual controls; trains users<br>■ Builds KPI trees (input→process→output→outcome) and verifies benefits<br>■ Executes PDCA with owners, timelines, risk controls<br>■ Selects and applies the right tool for the problem |

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| | ■ Leads CI teams; develops capability in others<br>■ Manages CI backlog/portfolio aligned to KPIs<br>■ Uses data/automation to remove waste and improve flow |
| **Mastery** | ■ Shapes CI culture and behaviors across the organization<br>■ Establishes enterprise service standards and customer-value governance<br>■ Sets value stream governance and operating model<br>■ Builds organization-wide waste visibility and prevention system<br>■ Establishes enterprise problem-solving standards (A3 as default)<br>■ Institutionalizes Kaizen cadence and CI communities of practice<br>■ Establishes Lean management routines and visual performance governance<br>■ Drives enterprise CI portfolio value and performance management system<br>■ Institutionalizes learning system and continuous improvement engine<br>■ Defines organization tool standards; integrates with strategy and governance<br>■ Builds enterprise CI academy and leadership model<br>■ Designs CI governance model and Hoshin system for the organization<br>■ Builds integrated CI + digital transformation operating model |

## 13.PRACTICAL PROBLEM SOLVING

**Definition:**
Lean Practical Problem Solving (PPS) is a structured, step-by-step method used in Lean management to identify the root cause of a problem, implement effective countermeasures, and sustain improvements. It emphasizes a logical, visual, and team-driven approach that applies Lean principles to eliminate waste and create lasting solutions.
**Awareness**: Understands basic Lean problem-solving concepts and terms
**Knowledge**: Applies tools with templates and coaching
**Skills**: Independently solves problems with verified results
**Mastery**: Institutionalizes problem-solving as the management system standard

| SKILL LEVEL | PROFICIENCY OR ABILITY TO: |
|---|---|
| **Awareness** | ■ Recognizes problems vs symptoms<br>■ Understands what “good problem statement” is<br>■ Understands “go see” principle<br>■ Knows baseline and KPI terms<br>■ Knows RCA tools<br>■ Understands process steps<br>■ Understands countermeasure concept<br>■ Understands PDCA<br>■ Understands action plans<br>■ Understands standard work<br>■ Understands A3 layout and visuals<br>■ Understands team roles<br>■ Understands “benefits” concept |

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| | ■ Understands coaching importance |
| **Knowledge** | ■ Logs issues using basic criteria<br>■ Writes basic problem statements<br>■ Participates in gemba walks<br>■ Collects data using check sheets<br>■ Performs 5 Whys with coaching<br>■ Draws simple process maps<br>■ Suggests countermeasures from known patterns<br>■ Runs small PDCA with support<br>■ Creates simple actions with owner/date<br>■ Documents simple standard work<br>■ Uses A3 template to present<br>■ Supports workshops<br>■ Tracks basic before/after<br>■ Shares basic knowledge |
| **Skill** | ■ Prioritizes using impact, frequency, risk<br>■ Defines clear scope, boundaries, and constraints<br>■ Leads gemba; captures facts (time, defects, flow)<br>■ Establishes baseline, measures variation, validates data<br>■ Confirms root causes using evidence<br>■ Maps process end-to-end; identifies constraints/bottlenecks<br>■ Selects countermeasures using impact/effort, risk, feasibility<br>■ Designs tests/pilots; validates improvements with data<br>■ Delivers implementation, manages dependencies and risks<br>■ Creates control plan, visual controls, audit checks<br>■ Communicates problem logic end-to-end; makes decisions easier<br>■ Facilitates sessions; manages conflict constructively<br>■ Quantifies benefits (quality, cost, time) and verifies<br>■ Mentors peers on tools and discipline |
| **Mastery** | ■ Establishes enterprise problem portfolio and escalation model<br>■ Aligns problem statements to strategy (Hoshin) and policy objectives<br>■ Institutionalizes gemba as leadership routine; builds transparency culture<br>■ Sets performance measurement architecture and governance<br>■ Sets RCA quality standards and audits; prevents “blame culture”<br>■ Defines value stream governance and systemic flow improvement<br>■ Establishes standard countermeasure libraries and approval governance<br>■ Institutionalizes experimentation and learning system at scale<br>■ Establishes execution discipline and accountability management<br>■ Builds Lean Management System with audits, routines, and governance<br>■ Makes A3 the organizational language for decision-making<br>■ Establishes cross-functional problem-solving operating model<br>■ Drives portfolio value, reporting, and strategic impact tracking<br>■ Establishes CI academy and certification pathways |

## APPENDIX B – SOCIAL SKILLS

These courses outline below designed to complement the technical competences to maximize it knowledge throughput.

| Social Skill Training | Definition | Objectives | Example Training Providers |
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| **Analytical Thinking and Innovation** | Ability to systematically analyze information, identify patterns, and develop innovative solutions that create organizational and societal value. | • Strengthen analytical reasoning and structured thinking<br>• Improve data-driven decision making<br>• Encourage innovative solutions for complex challenges<br>• Enhance evidence-based policy development | Massachusetts Institute of Technology, Stanford University, INSEAD, Coursera |
| **Active Learning and Learning Strategies** | Capability to continuously acquire new knowledge, apply learning strategies, and adapt skills in response to evolving work environments. | • Develop continuous learning capabilities<br>• Improve learning agility and adaptability<br>• Promote lifelong learning culture<br>• Strengthen knowledge acquisition and retention | Harvard University, edX, LinkedIn Learning, IE Business School |
| **Complex Problem-Solving** | Ability to analyze multifaceted problems, evaluate multiple variables, and develop integrated strategic solutions. | • Improve structured problem-solving capability<br>• Enhance cross-disciplinary thinking<br>• Strengthen systemic analysis<br>• Support strategic decision making | London Business School, University of Cambridge, Duke University, Boston Consulting Group |
| **Critical Thinking and Analysis** | Ability to objectively evaluate information, challenge assumptions, and make sound judgments based on | • Strengthen analytical evaluation skills<br>• Improve evidence-based decisions<br>• Enhance strategic reasoning capability<br>• Develop sound policy judgement | University of Oxford, Yale University, The Open University, Coursera |
| **Creativity, Originality, and Initiative** | Ability to generate original ideas, innovate solutions, and proactively initiate improvements and new | • Encourage innovation culture<br>• Improve creative thinking capability<br>• Support entrepreneurial mindset<br>• Enhance opportunity identification | IDEO U, Stanford d.school, Royal College of Art, MIT Sloan School of Management |
| **Leadership and Social Influence** | Ability to guide, inspire, and influence individuals and teams to achieve shared goals and organizational transformation. | • Develop leadership capability<br>• Improve communication and influence<br>• Strengthen stakeholder engagement<br>• Support change management | Harvard Business School, INSEAD, IMD Business School, Center for Creative Leadership |
| **Technology Design and Programming** | Ability to design digital solutions and develop systems using programming, digital technologies, and software engineering | • Improve digital technology literacy<br>• Develop programming and system design capability<br>• Support digital innovation<br>• Enable technology-driven solutions | Massachusetts Institute of Technology, Stanford University, Udacity, Pluralsight |
| **Resilience, Stress Tolerance and Flexibility** | Ability to adapt to change, manage pressure effectively, and maintain productivity in uncertain environments. | • Strengthen resilience and adaptability<br>• Improve stress management capability<br>• Enhance flexibility in dynamic work environments<br>• Promote wellbeing and sustainable productivity | University of Pennsylvania, Harvard Medical School, MindGym, Deloitte Leadership Academy |
| **Emotional Intelligence** | Ability to recognize, understand, and manage one's emotions while effectively interacting with others. | • Improve interpersonal communication<br>• Strengthen empathy and collaboration<br>• Enhance leadership effectiveness<br>• Promote positive workplace culture | Yale Center for Emotional Intelligence, Six Seconds, Harvard Business School, Daniel Goleman Emotional Intelligence Programs |
| **Reasoning, Problem-Solving and Ideation** | Ability to logically analyze problems, generate ideas, and develop structured solutions to complex | • Improve logical reasoning<br>• Enhance ideation capability<br>• Strengthen strategic thinking<br>• Support innovative problem-solving | Stanford University, MIT Sloan School of Management, IDEO U, Coursera |

# GLOSSARY

| Acronyms and Abbreviations | |
|---|---|
| 3CT | Competence, Coaching, Culture, Training |
| 4R | Retain, Retrain, Recruit, Renew |
| 4IR | Fourth Industrial Revolution |
| AI | Artificial Intelligence |
| AR | Augmented Reality |
| CI | Continuous Improvement |
| CI | Competitive Intelligence |
| DL | Deep Learning |
| DM | Data Management |
| E2E | End to End Process |
| FTE | Full Time Equivalent |
| IP | Intellectual Property |
| KDP | Kernel Density Plot |
| ML | Machine Learning |
| PaaS | Platform as a Service |
| SME | Subject Matter Expert |
| VR | Virtual Reality |