

2024 - Data and AI Theme Charter

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1. Theme Information

* indicates that this field is required

Theme Name*	Data & AI
IPR Mode*	RAND  Explanations of each mode is available at http://www.tmforum.org/IPRPolicy/11525/home.html
Strategic Program	Zero Touch Operations
Theme Website Link	AI, Data & Insights - TM Forum Confluence <i>please rename to AI & Data</i>
Theme Lead	Yvonne Kuimba
TMF Project Manager	Alan Pope and Stuart Dunn

2. Theme Overview / Executive Summary

Mission	<ul style="list-style-type: none">Enabling our industry to understand the practical potential of AI and to build the foundations for long term success by overcom the bold choices needed to re-ignite growth and seize the opportunities presented by AI.
Value	<ul style="list-style-type: none">The critical technology for driving telecoms' growth is AI, with its ability to transform business models, deliver a step-change inAI-driven operations are predicted to save the telecoms industry \$27 billion in the coming decade, reduce time to market by le and improve life-time value through effective use of AI and help operators invest wisely to get the right results with AI by embr
Implementation	<ul style="list-style-type: none">Covering:<ul style="list-style-type: none">Composable AI-enabled AutomationData democratization for AI Use-cases through Open standardsValue-based Management of AI-enabled Operations, catering for GenAI and LLMReduction of risk through well-governed AI and Data to support monetization of AI opportunities at scale

Theme Projects	ODA-enabled Automation realizes REAL	
	GOVERNANCE OF AI-ENABLED AUTOMATION	IMPLEMENTATION
	<p>The AI & Data Theme works with members on how to govern ODA consumer value and regulate AI-enabled applications, keeping costs under control as we scale up to fully automate operations</p> <p>AI & Data Governance: The industry relies on AI to effectively augment and automate decision-making that would overwhelm human operators. It is estimated that by 2025 there will be 30+ billion connections worldwide. Employ TMF AI & Data Governance frameworks and APIs for enhanced safety and compliance, for reduced business risks as an AI-Native Telco</p> <p>Measuring and Managing Autonomy: Apply Autonomous Operations methodologies to enable Predictive maintenance and self-healing domains to reduce downtime and improve resilience.</p> <p>Open Digital Experience: Embed TM Forum Models intrinsically in your enterprise governance engine to maximize the impact of ODA to your stakeholders</p>	<p>The AI & Data Theme works with potential from AI today and in the future</p> <p>AIOps: Use TM Forum AIOps to support the entire lifecycle of AI, from Design and Development, through Deployment, Monitoring, and Decommission.</p> <p>AI Closed-loop Automation: Ensure AI can operate autonomously, with energy cost reduction and ROCI integrated into the system.</p> <p>Digital Twin for Decision Intelligence: Create a digital twin of the network and vehicles to sensor data, as well as data from other sources, and AI to convert data into actionable insights.</p>
	<p>The AI & Data Theme works with members on how to unlock our data to increase the power of AI applications</p> <p>Modern Data Architecture: ODA's Modern Data Architecture (MDA) aims to break down data silos and democratize data access so that stakeholders running on ODA can improve personalization, customer retention and grow new services. MDA also aims to ensure Operators can scale flexibly and are able to handle the continuous processing of increasing data volumes, responding with real time information updates from the network and IT systems for to AI usecases such as predictive analytics, fault detection, disaster management, climate change, etc.</p>	<p>The AI & Data Theme works with members on how to unlock our data to increase the power of AI applications</p> <p>Autonomous Networks: TM Forum has developed reference architectures and deployment guidelines for closed loop automation help with the integration of AI into the network. This includes connecting AI holistically across all layers of the network and accumulation of technical debt to support the development of artificial intelligence (AI), which are critical for meeting the demands of the future.</p>

3. Project Chairs

This section identifies the team leads, chair and co-chairs.

Note - Please review the [Team Roles & Responsibilities RACI here](#) which also indicates which roles are mandatory or optional

Projects	Project Team Chairs	Project Manager	Subject Matter Expert	Comments
AI & Data Governance	Rob Claxton Sarah Ness Radek Odrobina	Stuart Dunn		
Measuring and Managing Autonomy	Emmanuel A. Otchere Rohit Chowdhary	Alan Pope		
Open Digital Experience	Derek Chen Abinash Vishwakarma	Stuart Dunn		
AIOps	Luca Franco Varvello Ke Zhang	Stuart Dunn		
AI Closed-loop Automation	Emmanuel A. Otchere Satishkumar Sadagopan Mathew Thomas	Alan Pope		
Digital Twin for Decision Intelligence	Luca Franco Varvello Rifat Mahammod	Stuart Dunn		
Modern Data Architecture	Anthony Behan Cathal Kennedy Ahmed Saady Yaamin Tomas Sadauskas	Stuart Dunn		

4. Roadmap

DTW24

Timeline												
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Governance:	MAMA Developer Toolkits	MAMA:GB1042A AOMM (Beta)	MAMA:IG1291 v3.0 AO Val Stream w/eTOM Process Mapping		MAMA: GB1042E v1.0.0 AOMM Benchmark Methodology & Data							
• AI & Data Governance	IG: 3rd Party Integration	WP: Safe & Secure AI		IG: Managing AI Model IP & Asset Traceability								
• MAMA	IG: GenAI Checklist	IG: GenAI Metadata Checklist										Industry Advocacy & Party Mgmt Guides
Implementation: Autonomous Operations: Self-governing ICT services providing Zero-X experiences	IG: CLA & Intent											DTOps / CLA + Digital Twin... Exploratory Walks
• CLA with Intent	GenAI and CLADRA + KPIs.											CLA Mgt. & Orchestration
• AIOps	WP: DT4DI Whitepaper				IG: LLMOps – AIOps uplift		GenAI Prompt Engineering in AI Ops					AIOps & DT4DI Webinar
• Digital Twin for Decision Intelligence	AIOps Knowledge Centre				Decision Intelligence & CLA							AIOps & CLA Framework
	AISeCops Capability				IG: DIOps Lifecycle and Integration with AIOps							DT4DI & AIOps Process Suite / (Online ML Training, AIOps Risk Mgt....)
	AIOps Lifecycle Marketecture Release 2											Requirements for Federator API for Multi-Model Ecosystems
												Federator API/s for Multi-Twins Data Ecosystems
ODAI Solutions: Open Digital Experience	ODX Use-case: Sustainability				DMMI / DMM v 5							
• Open Experience												
• DMMI - Putting Data and AI at the centre of Transformation:												
• Modern Data Architecture (MDA) for Operators	ODX Framework: AI / AN & Data in ODA				IG: Valuating AI Experience for ODA Consumers							Data Democratisation Webinar
					ODX Use-cases: GenAI for Hyperpersonalisation							
	Modern Data Architecture 1				Modem Data Architecture 2							Modern Data Architecture 3
												Modern Data Architecture 4
												Kick-off East / West MDA Calls
ODAI Solutions: Autonomous Operations	AN Map v1 (alpha)	TIO HTML Website			AN Technical Whitepaper		AN Component Mapping (Beta - GA)					AN Framework (IG1218F + IG1218 G Re-write)
• Autonomous Networks					WP: GenAI for AN							
• Model Repository: Library of GenAI Usecases and Business Cases												
					Intent in Service Mgt: API & Demo		Autonomous Networks Solution (Self-Healing)					TMF AI & Automation Solutions on MODA
												Autonomous Product & Service Management
												Data Democratisation
Quarterly goals	GenAI for AN - Whitepaper				AN Technical Whitepaper		DT4DI Maturity Model Update					AI Model IP Mgt.
	Modern Data Architecture – Alpha WP				MDA: Start East / West-zone Sessions		LLMOPs & GenAI Prompt Engineering					AN & CLA Map (GA)
	AI/AN & Data in ODA - Whitepaper				Multi-Party Data/Twin Ops Framework		DI and CLA / AIOps and CLA					Modern Data Architecture (GA)
	WP: Trustable AI & 3rd Party Integration				AIOps Lifecycle Model Marketecture (B)		Requirements for Federator API for Multi-Models Ecosystems					DMM V5 (GA)
	AI Security Ops Capability (Alpha)				Modern Data Architecture (Beta)		DI & AI Ops Process Mapping (A)					AIOps Webinar
	AN & CLA Component Maps (Alpha)				GenAI Checklists & Meta Data							Data Democratisation Webinar

Q1

Q2

Q3

Q4

5. Legal Notice

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