BUILD, BUY OR PARTNER
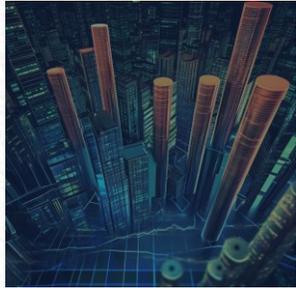
Making the Case for Technology Advancement

Lutz Beck, CIO of Daimler Truck North America

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In today's market, how we build technology dictates how well we compete

Changing market environment
with reduced margins, increased efficiency demands, new regulations and requirements

Rapid technological advancements
Including AI, automation, cloud data platforms, and digital ecosystems

65%
of digital transformation initiatives fail to meet their objectives.

#1 Priority
of executives is dealing with cost pressure and managing costs.

40%
faster time-to-market by digital leaders compared to incumbents.

20 touchpoints
Across the digital customer journey, up ~+9 from a decade ago.

44%
of companies don't use customer data for digital product innovation.

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The decision to build, buy, or partner hinges on key factors to achieve strategic differentiation

BUILD

BUY

PARTNER

Rationale

Develop proprietary capabilities in-house to create differentiation in customer experience, growth, and core business advantage.

Acquire proven, standardized capabilities from the market to achieve speed, scale, and reliability where differentiation is low.

Collaborate with external experts or ecosystems to accelerate growth, mitigate risk, and scale beyond internal limitations.

Application Areas

- Customer-facing digital experiences
- Proprietary algorithms, analytics, decision engines
- Software tightly coupled to business / product
- IP-driven platforms

- Enterprise platforms and "table-stakes" capabilities
- Cloud and data infrastructure
- Foundational AI and productivity tooling
- Commodity digital workflows

- Emerging fast-moving tech such as AI
- Capabilities requiring ecosystem scale
- Areas with scarce or rapidly evolving expertise
- Outcomes with uncertain demand profiles

DTNA Examples

DTNA build the **'Excelerator'** platform in-house to own and differentiate core customer experience.

DTNA buys standardized capabilities using a **plug-and-play approach** to ensure speed, reliability, and zero use-case lock-in.

DTNA partners with Volvo through the **Coretura joint venture** to co-develop the software-defined vehicle core.

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Partnership examples from Daimler Truck North America

Design Partner for Workflow Automation	Co-Development of Agentic AI Use Cases	Software-defined vehicle (SDV) platform JV
Description		
Early-stage design partnership; DTNA's complex use cases shaped the partner's product roadmap	Early-adopter collaboration to adapt a cutting-edge platform for Agentic AI	Coretura AB (50/50 JV Volvo + Daimler Truck) develops software-defined vehicle platform and truck OS
Success Factors		
• Embedded cadence (weekly CRM + tech sessions) • Near-unlimited consulting • Direct enablement of business users • Trust over fine print	• Joint backlog • Direct access to engineers • Fast PoC to scale path • Clear IP boundaries	• Shared SDV core with standardized HW/SW • Decoupled HW/SW cycles • Independent differentiation on top • Industry-standard ambition
Value Add		
• **DTNA**: Faster capability fit, lower integration friction, co-innovation without owning full build • **Partner**: Enterprise-grade use cases, product validation, broader PMF for future customers	• **DTNA**: Speed to a fit-for-purpose solution; specialized expertise without permanent cost • **Partner**: Real-world enterprise workloads; sharper product and credible reference wins	• **DTNA**: Investment share and faster rollout of digital vehicle capabilities; focus resources on differentiation • **Partner**: Scale economics, ecosystem leverage, and the ability to set an industry standard

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Guiding principles for sourcing decisions

BUILD

Build when value must stay inhouse.

BUY

Buy capabilities for speed and non-differentiate functionalities.

PARTNER

Partner when scale, investment cannot be done by yourself.

AI capabilities are advancing faster than internal teams can scale— speed requires buying foundations, not building everything in-house. Focus internal resources on the core competitive advantages of your business.

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Plug and Play by design: from static platforms to modular capabilities

Purpose

Ensure flexibility and potential reusability of use cases across platforms so DTNA can pivot with market and technology changes without rewrite or lock-in

Principles

Interfaces > implementations

Standard, documented APIs , events abstract vendors, and tools with no hard binds

Data > apps

Open formats plus data contracts with app-agnostic schemas and zero proprietary entanglement

Agility > monolithic

Small, domain-aligned services with independent lifecycles and no big-bang platforms

Architectural Guardrails

- **API-First** with versioned REST/GraphQL plus async event streams

- **Data Contracts** registered centrally with compatibility checks

- **Integrations** with retry and circuit-breaking patterns

- **Model & Tool Agnostic AI** with feature stores and pipeline portability

- **Infrastructure Agnosticism** via containerization and IaC baselines

- **Security by Default** with federated identity and zero trust

Partner Expectations

- **No lock-in by design** with public APIs and data escrow on termination

- **Integration kits** including SDKs and reference adapters

- **Roadmap alignment** for joint interoperability features

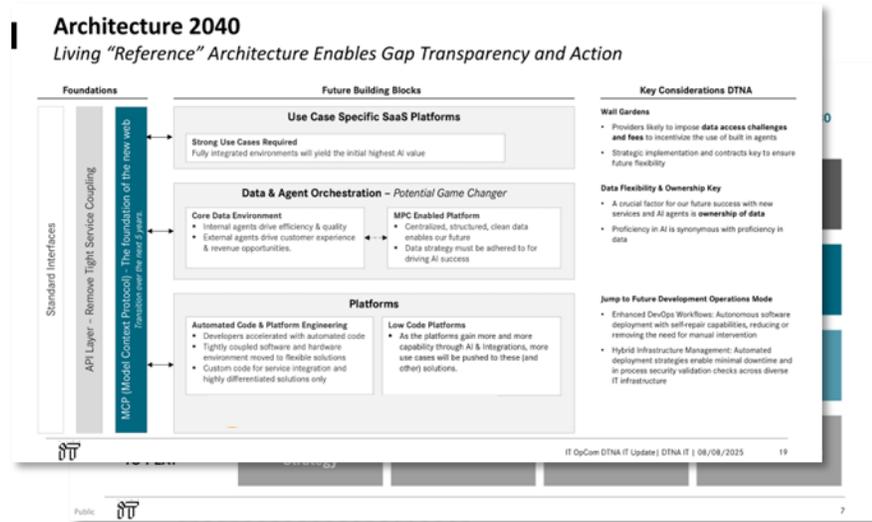- **Run-cost transparency** with clear unit economics

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Architecture 2040 blueprint guides technology setup and decisions

Architecture 2040 Blueprint

Purpose: Architecture 2040 is a future-focused, adaptable framework designed to support innovation, scalability and resilience in the DTNA IT landscape for the next 2 decades

Core Principles

Modularity & Composability
Systems must be built from modular, interchangeable components (microservices, APIs, data products). This allows faster integration of new tools, platforms and business capabilities without massive re-platforming.

AI-Native by Design
AI and agentic are foundations of the systems' architecture, not add-ons.
Enabling continuous adaptation, intelligence and new capabilities – providing dynamic value rather than static features.

Data As A Product
Treat data domains (e.g., customer, product, supply chain) as products with clear ownership, quality, and usability guarantees. Leverage data mesh principles and standard governance.

Interoperability & Open Standards
Avoid lock-in; prioritize open APIs, cloud-agnostic infrastructure, and standards-based integration. Ensure flexibility to integrate best-of-breed (AI) platforms in the future.

Scalability & Elasticity
Architect for elasticity — systems must scale automatically with data and compute demand. Cloud-native, containerized workloads, serverless computing.

Security, Trust & Compliance
Design security, compliance, and ethics into the architecture upfront incl. zero-trust security architecture, built-in monitoring of AI/agent actions, clear accountability and auditability for AI decisions.

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A decision blueprint for executives

Business Criticality
Strategic differentiation versus commodity capability assessment

Time-To-Value
Urgency window and opportunity cost of delayed deployment

Lifecycle Economics
Total cost, risk profile, and long-term adaptability analysis

Capability Readiness
Internal talent, skills, and ecosystem maturity evaluation

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Example: agentic workflow platform

SCOPE & EXAMPLES

- **Capability in scope:** Agentic automation of end-to-end workflows, where AI agents coordinate tasks, decisions, and handoffs across systems and teams

- **Example Use Cases:**
  - **Change orchestration** with AI agents coordinating approvals, validations, and exception handling across functions
  - **Supplier issue resolution** where agents detect deviations, trigger escalations, and propose corrective actions within defined guardrails
  - **Operational exception management** (e.g., delays, quality issues, compliance gaps) with agents triaging cases and routing to humans only when needed

BLUEPRINT APPLIED

Business Criticality
Foundational productivity capability; differentiation comes from how agents are applied, not from owning the orchestration engine.

Time-to-Value
Value required quickly to reduce manual coordination and cycle time.

Lifecycle Economics
High ongoing cost to build, train, and maintain agent frameworks and models.

Capability Readiness
Scarce expertise in agentic AI, orchestration, and governance. Internal capacity better focused on domain-specific logic and outcomes.

➡ Decision: BUY the Platform — BUILD Differentiation on Top

Buy a proven agentic workflow automation platform with orchestration, governance, and monitoring built in

Build specific business rules, system integrations, and tailored user experience

Preserve flexibility through plug-and-play architecture to keep agents, models, and vendors replaceable

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Key takeaways

Evaluate Roadmap Vs. Priorities

Align the technology roadmap to current business outcomes. Stop funding initiatives that do not clearly support growth, cost, or risk priorities.

Adopt the Four-Lens Blueprint

Apply a consistent decision lens (criticality, speed, economics, readiness) to make clear, repeatable Build / Buy / Build / Buy / Partner choices.

Invest in Complementary Partnerships

Use targeted partnerships to accelerate value outside core capabilities. Focus on outcome-driven, design-partner design-partner relationships.

Employ a Plug and Play Setup

Design for modularity and flexibility. Ensure use cases can move across platforms without lock-in or rework. or rework.

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Thank you for your attention!

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Lutz Beck
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Chief Information Officer

BIO

Lutz Beck, Chief Information Officer at Daimler Truck North America (DTNA), is shaping the future of IT. By directing cultural change through digital activation, his visionary IT strategy, "Building the Intelligent Company," guides digital transformation at DTNA, positioning the organization at the cutting edge of technology. Lutz champions IT Leadership with disruptive ideas and innovation by re-imagining the way business is done.

HISTORY

Before becoming the CIO at DTNA, Lutz was the CIO at Daimler Truck Asia (Mitsubishi Fuso in Japan and Bharat Benz in India). As CIO, Lutz was responsible for the overarching IT technology strategy Connected X. Under his leadership, connectivity and big data analytics for Daimler Truck Asia (DTA) were initiated, developed, and successfully established.

Before DTA, Lutz held various management positions at Daimler in Germany.