ENABLING INNOVATION THROUGH CLOUD COMPOSITION

TRANSFORMING IT AT MERCEDES-BENZ RESEARCH & DEVELOPMENT

JOE LEAVER – INNOVATION ARCHITECT
<table>
<thead>
<tr>
<th>Traditional Enterprise</th>
<th>Digital Enterprise</th>
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<tbody>
<tr>
<td>Products</td>
<td>Software</td>
</tr>
<tr>
<td>Plans</td>
<td>Experiments</td>
</tr>
<tr>
<td>Channel Partners</td>
<td>Customers</td>
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<tr>
<td>Business Models</td>
<td>Market Tests</td>
</tr>
<tr>
<td>Size</td>
<td>Speed</td>
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</tbody>
</table>

**Competes**

**Disrupts**

Why Transform?
**Why Transform IT?**

<table>
<thead>
<tr>
<th>Traditional Enterprise IT</th>
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<tr>
<td>Standards</td>
<td>Experimentation</td>
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<tr>
<td>Stability</td>
<td>Resilience</td>
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<td>Governance</td>
<td>Autonomy</td>
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<td>Compliance</td>
<td>Agility</td>
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<tr>
<td>Risk Mitigation</td>
<td>Iterative Design</td>
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**Optimized for the Known**

- [Image of a vintage car]

**Optimized for the Unknown**

- [Image of a modern car]
An Innovation Lab for R&D IT

Startup Scouting
Emerging Trends
New Tooling
DevOps and Agile Training

“Bring Silicon Valley Culture to Germany and China.”
FOUR PILLARS OF IT TRANSFORMATION

1. Orchestrate
2. Scale
3. Hybridize
4. Optimize
ORCHESTRATE

- **Components, Not Infrastructure**
  - Containers
  - Applications
  - VMs
- **Deploy Anywhere**
  - Datacenter
  - Region
  - Cloud
- **Measure Value**
  - Know Cost-to-Run Before Deploying
  - Charge-Back to Correct Business Unit
SCALE

- **Fully-Automated Infrastructure**
- **No Human-Operator Bottleneck**
- **Self-Service**
- **Application-Controlled Infrastructure**
- **Immutable Infrastructure**
HYBRIDIZE

- **Private Cloud Not Enough**
- **One Cloud is Not Enough**
- **Jump from Private to Public**
- **Across Datacenters, Across Public Clouds**
OPTIMIZE

- **BEYOND LOAD BALANCING & AUTO-SCALING**
- **IDENTIFY AND SOLVE FOR COMPLEX CONSTRAINTS**
- **LATENCY REDUCTION**
- **COST REDUCTION**
Getting There
A CLOUD FOR INNOVATION