PAC’s View on Digital Transformation

SAP HANA Journey, Amsterdam, September 1, 2015

Frank Niemann, Vice President Software & SaaS Markets
Agenda

• Key trends in digital transformation
• Opportunities & challenges for companies
• Impact on IT requirements
• Impact on IT architecture
• Relevance of in-memory systems
• Q & A
Key trends in digital transformation
Strategic business imperatives in the digital age

Customer centricity

Strategic business imperatives in the digital age

Agility and innovativeness

Data intelligence
The three stages of digital transformation

**Digital frontend transformation**
- Projects focused on customer-facing areas
- Driven by individual LoBs, e.g. sales, marketing, or customer service
- Omni-channel strategies, customer analytics
- Implementation of specific innovation teams

**Digitally integrated enterprises**
- Integrated end-to-end customer centricity
- Digitization and integration of backend and frontend processes
- Cross-functional data intelligence, integrated analytics
- Company-wide innovation culture

**Digital ecosystems**
- Collaborative business models and service networks
- Cross-industry value creation
- Innovation and co-creation networks
From value chains to service networks and collaborative business models
Opportunities & challenges for companies
Opportunities

**Innovation**
- Digitize value chains
- New business models
- Build or join new ecosystems

**Efficiency**
- Better integration of business processes
- Merge analytics and IT-driven processes
- Collaboration to manage unstructured processes

**Increase business**
- Connect existing and new channels, extend your reach
- Simplify customer access
- Create new products & services

**Competitiveness**
- Tap into new markets, increase customer intimacy
- React faster to customer demands, competition
- Improve brand recognition in the traditional & digital worlds
- Become an attractive employer
Challenges

IT
- Implementation of new business processes/new requirements
- Total cost of change
- Integration of processes & analytics, data integration
- Overcome siloed IT & analytics
- Integration of mobile, Web, devices/sensors, etc.

Corporate strategy
- Definition of an overall strategy
- Corporate culture (team players versus competitors)
- Perception of digital transformation in LoBs, IT, management board

Business organization
- Collaboration between LoBs (silos)
- Alignment & communication between business and IT
- New incentive systems beyond money and position

People
- Collaboration between people, staff and management
- Skills, willingness to change
- Attract and retain talents, experts, etc.
Impact on IT requirements
Customer-centricity & data intelligence across the value chain

Planning & strategy

Removal of silos

Analytics

Innovation & product dev’t.

Production

Logistics

Distribution

Supply chain & operations

Billing/invoicing

Inventory

... 

Finance & controlling

IT & technology

Sales & marketing

Customer service

Cross-functional analytics, end-to-end customer centricity, cross-functional collaboration
The digitally integrated enterprise requires ...

Data & process integration at different levels

- **Frontend**: sales, marketing, service, customer feedback
- **Backend**: finance, supply chain, shipping, inventory
- **R&D**: product development, planning and product strategy
- **Internet of Things**: devices, products and machines

Even more security

- Secure data access, sharing and integration across company borders
- **Identity management** for people, systems and devices
Impact on IT architecture
New technological environment

- Industry 4.0
- Customer Experience Management
- Hybrid
- Intelligence
Traditional IT

Employees
- Efficiency, automation

Customers
- Internal processes, workflows

Suppliers/partners
- Incremental innovation

Traditional IT
- ERP
- Operational data
- System management
- Structured processes
- DWH/reporting

System of record

“Structured”

“Mature”

“Manageable”
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#### Digital transformation goes beyond traditional IT

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<th>Employees</th>
<th>Customers</th>
<th>Suppliers/partners</th>
<th>Traditional IT</th>
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#### System of record
- Efficiency, automation
- Operational data
- DWH/reporting

#### System of engagement
- Incremental innovation
- System management
- Structured processes

#### People, networks & ecosystems
- Big data predictive
- Agile development
- Real-time decisions

#### Radical innovation
- Unstructured, data- & event-driven
- Personalized customer experience

#### Ecosystems
- IT, Web & IoT
- Mobility, cloud
- Personalized customer experience

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Impact on Business Value Chain

IT Architecture provides Framework for Digital Business

- Sales, Marketing & Service
- HR/Workforce
- Procurement, Supply Chain, Business Partner Integration
- IoT „Industry 4.0“
Relevance of in-memory systems
In-memory systems – PAC’s findings

From niche technology to mainstream
- Broader industry adoption
- Becomes an integral part of application & analytics software, middleware and databases

For traditional AND new IT requirements
- Transactional workloads
- Operational reporting & analytics workloads
- Big data analytics
- Structured & unstructured data, data streams
Next-generation IT architecture and in-memory systems

Bridge the gap with new IT architecture!
Q & A
APPENDIX
### Focus areas in the three stages of digital transformation

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<td>Omni-channel customer experience</td>
<td>Marketing and sales analytics</td>
<td>Dedicated innovation teams/labs</td>
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<td>Digitization of processes</td>
<td>Integrated analytics solutions</td>
<td>Agile processes</td>
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<td>Frontend-backend integration</td>
<td>IoT infrastructures</td>
<td>Process innovation</td>
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<td>Cross-industry service platforms</td>
<td>Collaborative analytics platforms</td>
<td>Co-innovation networks</td>
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<td>Shared data access</td>
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Traditional IT architecture – definition process

strategic

Enterprise architecture  Process architecture  Information architecture  Technical architecture

Products

Technology portfolio management

tactical

System of record

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Extended IT architecture – extended definition process

- Strategic
- Process architecture
- Information architecture
- Technical architecture

- Tactical
- Products
- Technology portfolio management

New, alternative business models
Big data analytics
Mobility, cloud
Agile development

System of engagement
System of record

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Next-generation IT architecture – definition process

- Enterprise architecture
- Process architecture
- Information architecture
- Technical architecture

- New, alternative business models
- Big data analytics
- Mobility, cloud
- Agile development

Governance

Products

Technology portfolio management

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IT architecture – evolution with in-memory systems

Complexity!

Data and process integration of SoR & SoE

System of record (SoR)

System of engagement (SoE)

Bridge the gap with new IT architecture!

SoR, SoE share one in-memory system

Just more speed!

SoR, SoE with in-memory DB

Level of integration

Flexibility & speed
About PAC

Founded in 1976, Pierre Audoin Consultants (PAC) is part of the CXP Group, the leading independent European research and consulting firm for the software, IT services and digital transformation industry.

The CXP Group offers its customers comprehensive support services for the evaluation, selection and optimization of their software solutions and for the evaluation and selection of IT services providers, and accompanies them in optimizing their sourcing and investment strategies. As such, the CXP Group supports ICT decision makers in their digital transformation journey.

Further, the CXP Group assists software and IT services providers in optimizing their strategies and go-to-market approaches with quantitative and qualitative analyses as well as consulting services. Public organizations and institutions equally base the development of their IT policies on our reports.

Capitalizing on 40 years of experience, based in 8 countries (with 17 offices worldwide) and with 140 employees, the CXP Group provides its expertise every year to more than 1,500 ICT decision makers and the operational divisions of large enterprises as well as mid-market companies and their providers. The CXP Group consists of three branches: Le CXP, BARC (Business Application Research Center) and Pierre Audoin Consultants (PAC).

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