Telecom, Media & Technology

Jean-Philippe Poirault
Head of Telecom, Media & Technology,
Head of Southern Europe

Clay van Doren
Head of United Kingdom & Ireland
<table>
<thead>
<tr>
<th><strong>TELECOM, MEDIA &amp; TECHNOLOGY INDUSTRY ID CARD</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10 000 BUSINESS TECHNOLOGISTS, + 3 000 industry experts</strong></td>
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<tr>
<td>Present in 73 COUNTRIES</td>
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### TELECOM, MEDIA & TECHNOLOGY INDUSTRY MARKET TRENDS

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Percentage</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>People connected to mobile</td>
<td>7bn</td>
<td>80% of internet traffic is consumed today via video and TV</td>
</tr>
<tr>
<td>Users who find personalized advertising appealing</td>
<td>90%</td>
<td>X3 more IoT objects will be connected by 2025</td>
</tr>
<tr>
<td>SaaS market CAGR</td>
<td>25bn</td>
<td>of enterprise data will be processed outside data centers &amp; the Cloud by 2025</td>
</tr>
<tr>
<td>Operators with less than 10% of BSS/OSS in the cloud</td>
<td>74%</td>
<td>10%</td>
</tr>
<tr>
<td>Enterprises using software-defined networks</td>
<td>80%</td>
<td>of the sector’s AI spending go to network operations, management and new data monetization stream</td>
</tr>
</tbody>
</table>

Sources: Cisco, Ericsson, IDATE, IDC, GSMA, GlobeNewswire
TOWARDS SUBINDUSTRIES CONVERGENCE
ATOS INVESTMENT PRIORITIES & PORTFOLIO
**TELECOM, MEDIA & TECHNOLOGY**

**OUR STRENGTHS**

<table>
<thead>
<tr>
<th>OUR EXPERTISE</th>
<th>OUR SOLUTIONS</th>
<th>OUR EXPERIENCE</th>
<th>OUR PARTNERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TELECOMS</strong></td>
<td><strong>Customer</strong></td>
<td><strong>INTERNATIONAL</strong></td>
<td><strong>Google</strong></td>
</tr>
<tr>
<td><strong>OSS/BSS/ERP</strong></td>
<td><strong>Engagement</strong></td>
<td><strong>OLYMPIC</strong></td>
<td><strong>aws</strong></td>
</tr>
<tr>
<td><strong>Systems</strong></td>
<td><strong>Platform</strong></td>
<td><strong>COMMITTEE</strong></td>
<td><strong>Nokia</strong></td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td><strong>Telecom</strong></td>
<td><strong>Digital</strong></td>
<td><strong>servicenow</strong></td>
</tr>
<tr>
<td><strong>Supply Chain</strong></td>
<td><strong>Nextgen</strong></td>
<td><strong>partner of</strong></td>
<td><strong>MAVENIR</strong></td>
</tr>
<tr>
<td><strong>Nextgen</strong></td>
<td><strong>Telcom</strong></td>
<td><strong>the world’s greatest</strong></td>
<td><strong>think</strong></td>
</tr>
<tr>
<td><strong>Networks</strong></td>
<td><strong>Production</strong></td>
<td><strong>media &amp; sporting event</strong></td>
<td><strong>Analytics</strong></td>
</tr>
<tr>
<td><strong>Digital</strong></td>
<td><strong>Excellence</strong></td>
<td><strong>292</strong></td>
<td><strong>servicenow</strong></td>
</tr>
<tr>
<td><strong>Infra</strong></td>
<td><strong>Digital</strong></td>
<td><strong>CLIENTS SERVED</strong></td>
<td><strong>salesforce</strong></td>
</tr>
<tr>
<td><strong>IaaS/PaaS</strong></td>
<td><strong>Supply Chain</strong></td>
<td></td>
<td><strong>Vlocity</strong></td>
</tr>
</tbody>
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**OUR EXPERTISE**

- **IP in Telco**
  - BNCS+
    - IP on the end-to-end broadcasting platform
  - NFV Lab
    - to help CSPs test NFVs in a DevOps environment

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**OUR SOLUTIONS**

- Customer Engagement Platform
- Telecoms OSS/BSS/ERP Systems
- Media Content Supply Chain
- Nextgen Telcom Networks
- Digital Production Excellence
- Digital Infra, IaaS/PaaS
GROWTH STRATEGY
EXPORT OUR PLATFORMS AS OUR CUSTOMERS EXPAND TO NEW GEOGRAPHIES

TELECOMS
- Nextgen Telcom Network (5G)
- Telecoms OSS/BSS/ERP Systems
- Digital Infra, IaaS/PaaS (Bare Metal Services, Edge computing)
- Data Analytics (AI/ML)
- Cybersecurity

MEDIA
- Customer Engagement Platform
- Media Content Suppl Chain
- Digital Production Excellence
- Data Analytics (AI/ML)
- Cybersecurity

TECHNOLOGY
- Digital Infra, IaaS/PaaS (Bare Metal Services, Edge computing)
- Data Analytics (AI/ML)
- Cybersecurity

TOP CUSTOMERS
- Telefonica
- Orange
- T

PORTFOLIO
- Siemens
- BBC
- Rai

GEOGRAPHIES
- Potential Business
- Atos Business
# DIGITAL BUSINESS SUPPORT SERVICES FOR BBC

## SERVICE DELIVERY OF DIGITAL & BROADCAST OPERATIONS

### MANAGING COMPLEXITY FOR

### UK’S PUBLIC SERVICE BROADCASTER

<table>
<thead>
<tr>
<th>CHALLENGE</th>
<th>SOLUTION</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>New IP BBC and S4C broadcast facilities in Cardiff to provide TV, radio and online services</td>
<td><strong>Around 600 Atos expert working on broadcast infrastructure</strong> based on the Atos Broadcast Network Control System (BNCS): design, build and handover of technology and infrastructure</td>
<td><strong>Enabled efficient</strong>, converged support and maintenance</td>
</tr>
<tr>
<td>And create a <strong>wide range of programming</strong> for viewers across the UK and supporting Welsh language</td>
<td></td>
<td><strong>Faster</strong> and more <strong>flexible</strong> production workflows</td>
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<tr>
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<td></td>
<td><strong>Easier</strong> and more cost-effective content re-purposing</td>
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<tr>
<td></td>
<td></td>
<td>In our current contract with BBC, we are committed to a <strong>50% reduction in our energy</strong> usage in the services we provide to the BBC.</td>
</tr>
</tbody>
</table>
# Media Asset Mgmt./Media Workflow for INA

## French National Audiovisual Institute

### Innovate with a Data Lake

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modernize the information system</td>
<td>Data lake to centralize storage, correlation and media assets metadata enrichment automation</td>
<td>Better sourcing of media archives (17 millions hours of TV and radio)</td>
</tr>
<tr>
<td>Leverage latent asset</td>
<td>Segmentation and categorization of data formats (images vs videos...)</td>
<td>Possibility to develop new services (audio description...)</td>
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<tr>
<td></td>
<td>Migration of the Legacy data</td>
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<tr>
<td></td>
<td>AI/ML-driven audio-video analysis tools for face, image and sound automatic recognition, speech to text and text OCR.</td>
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</table>
CUSTOMER ENGAGEMENT PLATFORM FOR SFR
FRENCH TELECOMMUNICATIONS OPERATOR

ADDRESS EXPONENTIAL MOBILE DATA GROWTH

CHALLENGE

- Handle huge mobile data growth while revenue per subscriber are flat
- Reduce time & cost to deploy Large Edge DC for 5G
- Network Capex and Opex reduction
- Agility to deploy new VNF and services

SOLUTION

- Create a fully virtualized NFV infrastructure (private cloud) for 4G centralized DC and 5G decentralized DC
- ~15+ VNF onboarded (running either on Openstack or VMWARE on the same x86 infrastructure)
- Design, Build, Operate 24/7
- ANSSI R226 approved for security
- Network automation of main deployment use cases:
  - New Large Edge DC
  - DC resource extension
  - VNF onboarding

BENEFITS

- Reduction of deployment time and costs via innovation, industrialization and automation
- NFV DC deployment divided by 6 (from typically 12 months to 2 months)
- Industrial deployment of 5G DC
- 50% gain on some capacity extension
- Removing of several legacy virtual infrastructures in the network
# CUSTOMER ENGAGEMENT PLATFORM FOR T-MOBILE DUTCH TELECOMMUNICATIONS SERVICE PROVIDER

**AI POWERED CHATBOT TO INCREASE CUSTOMER SATISFACTION**

<table>
<thead>
<tr>
<th>CHALLENGE</th>
<th>SOLUTION</th>
<th>BENEFITS</th>
</tr>
</thead>
</table>
| Provide a more personalized customer care experience on the T-Mobile website and social medias channels | Multi-channel chatbot to streamline customer queries in a cost-efficient way:  
- Atos industry expertise  
- Latest AI/ML technologies from Google Cloud | Improved and more efficient service, with faster insights into customer data  
- Intent recognition increase of 300+% through machine learning only after 4 sprints in 4 weeks |
TMT PORTFOLIO
LAST WINS ALIGNED WITH NEW STRATEGY

CUSTOMER ENGAGEMENT PLATFORM
TELECOMS OSS/BSS/ERP SYSTEMS
MEDIA CONTENT SUPPLY CHAIN
NEXTGEN TELECOM NETWORKS
DIGITAL PRODUCTION EXCELLENCE
DIGITAL INFRASTRUCTURE, IAAS/PAAS

Cybersecurity, Data analytics, decarbonization
MEDIUM-TERM TARGETS FOR TMT INDUSTRY
REVENUE GROWTH AND OPERATING MARGIN

MAIN ORGANIC GROWTH DRIVERS
- Leverage Atos Digital Portfolio as our Top Customers grow
- Address B2B shifts to Cybersecurity, AI/Edge, IoT
- Enrich portfolio with strong partnerships

MAIN OPERATING MARGIN DRIVERS
- Business replication using mutualized platforms for Network function & Media
- Right-Shoring delivery and move to Agile
- High value services developing more IP with software partners

MAIN AREAS FOR ACQUISITIONS
- Online/Streaming and media platform
- NFV transformation & Media Ipfication expertise

*medium-term annual growth rate at constant currency
Q&A
Thank YOU