The Impact of the World Wide Web on Carrier Networks – an Historic Opportunity

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TDM Voice Network

To Other Networks

TDM Trunks Over Transport (SDH / PDH) Network
### From the Familiar World

<table>
<thead>
<tr>
<th>Historical</th>
<th>Modern</th>
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<tbody>
<tr>
<td>Low Bandwidth Growth</td>
<td>Rapid Bandwidth Growth</td>
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<tr>
<td>Shared Facilities</td>
<td>Variable, always on</td>
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<tr>
<td>Network Aware User</td>
<td>User Aware Network</td>
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<tr>
<td>People to People</td>
<td>People, Content &amp; Autonomic</td>
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<tr>
<td>Nodal Services</td>
<td>Network, device &amp; web services</td>
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<tr>
<td>Integrated Nodes</td>
<td>Separation of control and bearer</td>
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<tr>
<td>Proprietary &amp; Closed</td>
<td>Open with Gateways</td>
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<td>Separate Networks</td>
<td>Converged</td>
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<td></td>
<td>Enabled</td>
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**The networks become an infrastructure for the WEB**
Infrastructure Virtualization Brings Profound Change
New Business Models, Customers, Opportunities

Voice Networks & Services
- Broadband
- IP networking
- Network intelligence

Data Networks & Services

Internet

Services (multimedia – anywhere, anytime, any device)
- Yahoo
- Bell
- Google
- Virgin Mobile
- eBay

Network (connectivity – anywhere, anytime)
This Generation’s Place in History but....

> Exploitation of the Capability of the WEB is the Driver
  • will only happen if it is Simple, Secure and Reliable

> Technology and Standards are the Enablers
  • Technologies and architectures must enable substitution and evolution
  • Standards prevent Isolation

> Realisation = Revenue + Regulation
  • What gets built will be guided by rational business models
  • Regulation determines the viable business models

> Critical to Economic Performance
Korea – Some of the World’s Most Advanced Service Offerings

- Commercial transactions made via mobile devices – subway passes, tickets, groceries, e-Money, credit card purchases, ATMs
- Remote digital home services – home monitoring, digital picture frames, visitor surveillance, heating control, door control, lighting control
- Location-based services
- Mobile stock trading
- Mobile banking
- Security
- Convenience
- Transactions
In Conclusion

> The WEB has profoundly changed the Topology of carrier Networks

> The WEB has Undermined the old and is creating New Business Models.

> The Power of the WEB in conjunction with the Network infrastructure is a significant component of a competitive economy

> Will not happen by osmosis
> BUSINESS MADE SIMPLE

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