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In this Edition

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500 Km

Huawei Marine to build 5,500 Km subsea cable backbone network for the Papua New Guinea

October 12, 2016 - Dylan Bushell-Embling, telecomasia.net

Huawei Marine has secured a contract to build a national subsea cable backbone network for the Papua New Guinea government. The company will work with PNG DataCo, an operator established by the Papua New Guinea government, to construct a national backbone network linking major coastal centers and islands in the nation.

The 5,457km cable network will provide domestic connectivity across the nation's 14 largest cities, as well as international connectivity via a link to Jayapura in Indonesia.

With a design capacity of 8Tbps, the cable will be designed provide more than 70% of Papua New Guinea's domestic bandwidth requirements. Currently domestic telecoms capacity largely relies on satellite and microwave communications due to the country's unique geography.

"This new system is very important to Papua New Guinea as it not only includes a new submarine cable network but also provides internet gateways and data centers," DataCo managing director Paul Komboi said.
"This will improve the whole ICT infrastructure in the country and greatly increase network coverage, capacity and the availability of Internet and broadband services to end users."
He said Huawei Marine was selected for the project through a competitive tender process.

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Nokia calls on Europe to retake digital initiative

By Nick Wood, Total Telecom -- Wednesday 05 October 2016

Finnish vendor says governments, regulators must remove barriers to investment, innovation; urges industry to drive ecosystem growth. Nokia on Wednesday highlighted the widening gap between Europe and the rest of the world when it comes to tech investment and deployment, and called on industry players to do whatever it takes to regain the digital initiative.

In a keynote presentation at Total Telecom Congress in London, Markus Borchert, Nokia's senior vice president of Europe, and president of industry group DigitalEurope, discussed the I's that determine digital success: investment; infrastructure; and innovation. Unfortunately, Europe is lagging behind Asia and the U.S. in all of these areas, he said.
Europe is the only region where mobile service revenues are in decline, said Borchert, who also pointed out that capex in Europe has declined 40% over the last decade, whereas the rest of the world has seen a 20% increase.
"We don't need to be Nobel laureates to work out that these factors are leaving their mark" on Europe's digital development, he said. Touching on infrastructure, Borchert said that he is proud that the world's first LTE network went live in Europe, but also embarrassed about how slowly LTE coverage is rolling out across the continent.
It took North America and South Korea six-eight quarters to cover almost 100% of the population with LTE, he said. In Europe, it has taken 26 quarters to reach 81% coverage.

Taking into account the decline in European mobile revenues and capex, and the slower rollout of LTE, Borchert asked: "in which environment is innovation in new technologies likely to happen? Where would you put your money?" While he lauded London and Berlin for their tech hubs, he said that Europe needs more of them if it is to compete with Silicon Valley. In order to change the status quo, Borchert said governments and regulators must create predictable investment climates, and to accelerate the drive towards a digital single market (DSM).
"Europe cannot afford to continue with its present level of fragmentation," he said.
Blocking in-market consolidation has also "stalled the investment engine," he added.

Borchert also industry players have a responsibility to drive ecosystem development through collaboration. He highlighted the recently-launched 5G Automotive Association (5GAA) as a good example of different sectors working together towards a common goal.

"Europe must change in order to be at the forefront of the massive digital wave that's beginning to break," he said.

OTT Success Series:
Will your streaming video success break your OVP?

Achieving scale demands consistency, skill…and the right technology partner

With premium "over-the-top (OTT)" video continuing to gain serious marketplace momentum, an interesting phenomenon is arising: Seemingly any company that has transcoded a video, streamed an advertisement, built an iPhone app, attended a conference or used the acronym Digital Rights Management (DRM) is now a do-it-all expert in All Things OTT. Phrases like "Launch your OTT service in 30 days" are becoming more common despite the outrageousness of the claims.

Even so, it's easy to understand why the bandwagon is getting crowded. Juniper Research sees the annual revenue generated by online subscription video on demand (SVOD) services growing to $31.6 billion by 2019, representing a compounded annual growth rate of 31 percent from 2014.1

That's a growth trajectory virtually everybody wants to be part of – and the basis of many startups over the last few years.

Buyer beware

But there's more to achieving OTT success than building a mobile app. Launching a profitable OTT service takes an investment in marketing and business alignment as well as a comprehensive technology platform. As premium content providers migrate to an OTT 2.0 environment, moving from early-stage experimentation to full-blown, scalable business models, it's imperative to work with technology companies that fully understand the entire ecosystem and all of the underlying components required to power a successful, scalable and sustainable OTT platform. In the absence of this critical grasp of the varying intricacies, there can be danger of encountering the dismaying revelation that many of today's bright promises may be traps waiting to be discovered…after it's too late.

Some all-too-familiar headlines offer reminders of the risk:

ABC's Oscars streaming outage shows web limitations for TV networks - Wall St. Journal, March 3, 2014
STV apologizes over livestream crashes in Scottish independence debate - The Guardian, Aug. 6, 2014
NBC Sports Live Extra experiences first major outage with Premier League coverage - Realsoccertalk.com, Aug. 16, 2015

As content providers consider OTT 2.0 strategies, there are six areas where their attention should be focused. These areas reflect hard-learned lessons from some of the world's biggest media brands in an increasingly high-stakes OTT environment. Recognizing these considerations, and enacting a plan before any customer fallout occurs, can help put content providers many steps ahead in the fight to gain consumer confidence that's essential for driving subscriber growth and reducing churn – while keeping their brands out of the headlines.

Support for multiple monetization models. Increasingly, premium video straddles a range of economic models,including free-with-advertising; direct payment subscriptions; transactional streaming; and enabling payments and billing through third parties such as mobile providers or pay TV affiliates. Some providers choose one approach, while others intertwine multiple approaches. But no matter the model, there are intricate details to manage across all of the above. Multiple disciplines, ranging from direct billing and subscriber management to actionable analytics and robust interoperability with the payments and advertising ecosystems, are needed to support an OTT service. IBM

Cloud Video specializes in managing unified delivery for leading premium online video providers that operate across the monetization spectrum. From global subscription streaming platforms that support multiple geographies to ad-supported, high-profile professional sports streaming to the rental or purchase of individual shows, IBM Cloud Video knows and supports premium video economics for some the biggest brands in the business.

Scalability to match demand. Scalability is the watchword for success in online video, whether it involves meeting consumer expectations for an ever-expanding content offering or delivering high-quality experiences during peak usage times. Delivering high-quality experiences during low demand windows is very different from providing consistently satisfying results during sudden spikes, when it's not unusual for stream requests to multiply by 10-fold or more. Among the ingredients IBM Cloud Video applies to achieve optimum reliability for premium video providers are algorithmic publishing, advance capacity testing and verification, horizontally scalable infrastructure and constant monitoring of the entire platform from global Network Operations Centers.

Comprehensive security. Premium video is a high-profile category with exceptional exposure to malfeasance. As a result, maintaining security demands much more than just encrypting video. Instead, it's important to make sure your provider employs and maintains sweeping and effective security measures across the entire delivery ecosystem – starting with physical access to network facilities and extending to logical permissions and constant intrusion prevention. IBM Cloud Video works closely with leading third-party providers to achieve and sustain security-rich video delivery throughout the content lifecycle, so that premium video distributors can have confidence their content remains in the right hands. And on the right devices. **... to next page**

OTT Success Series:
Will your streaming video success break your OVP?
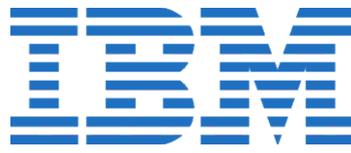
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Extending a personalized video experience across screens. The multiscreen world is increasingly complex. Premium video providers that have worked and invested to create superb user interfaces need to deliver high-quality experiences independent of the devices that will display them. Today's constant collision of differing screen dimensions, varied metadata requirements and devices and divergent format demands must remain invisible to the user – so the UI experience looks and plays the same way over a PlayStation or Apple TV as it does over an Android tablet or a laptop. IBM Cloud Video helps premium video distributors master the multiscreen UI challenge by intelligently distributing logic in the cloud, not the application. That means less authoring, more efficiency and predictable consistency with every user interaction.

A deeper view of analytics. Paramount to every OTT and SVOD service provider is the goal of increasing customer acquisition and reducing churn to drive revenue. IBM Cloud Video understands and supports this vision by enabling deep intelligence that can transcend traditional OTT business metrics to enable entirely new levels of personalization and customer interaction. Drawing from both customary and non-traditional data sources to produce fresh business insights, IBM Cloud Video empowers a new era of cognitive video analytics that produces meaningful business insights and can create critical competitive advantage.

A global view. Premium streaming video is increasingly a global force, as content providers establish a presence in nearly every region of the world. This international expansion makes it doubly important to work with companies that can manage intricacies involving geographic content rights, languages and subtitle associations, currency conversions and business model variations. As IBM Cloud Video has demonstrated in the international video marketplace, the sports video category and elsewhere, having fluency across borders is a critical enabler of global online video success.

In the emerging Premium Video 2.0 environment, the rewards are much greater. And so are the risks. Identifying a single provider that understands the entire ecosystem and has mastery over the underlying technologies is critical not just for moving into this new world, but rising up as a leading player within it. IBM Cloud Video is here to help you get there.

Join IBM Cloud Video to examine each of these topics in depth. Visit www.ibm.com/cloud/video to subscribe to the IBM Cloud Video mailing list and receive key insights and tips on launching a successful OTT solution.

About IBM Cloud Video
IBM Cloud Video delivers reliable and scalable video streaming services globally. Combining robust video functionality and exceptional cognitive abilities, IBM Cloud Video provides one of the most comprehensive video offerings available today.

For more information on IBM Cloud Video, please visit www.ibm.com/cloud/video

THE GLOBAL PAY-TV INNOVATION LANDSCAPE:
INDUSTRY PERSPECTIVES ON CHALLENGES AND OPPORTUNITIES
WHITE PAPER (44 pages) - SEPTEMBER 2016

INTRODUCTION

The Pay-TV Innovation Forum is a new global research programme for senior pay-TV executives, developed by NAGRA to explore and catalyse innovation across the pay-TV industry at a time of unprecedented change.

This report summarises the findings from the 2016 programme of research and analysis, providing an overview of the pay-TV innovation landscape and setting out the views of industry executives around the world – in Europe, Asia Pacific, Latin America and North America. It provides a snapshot of industry perspectives about the innovation challenges and opportunities facing the industry and outlines a set of innovation priorities for the pay-TV operators.

What do we mean by innovation? Innovation can be defined in various ways: it can encompass improvements to internal business processes, incremental extensions to existing products and services, and new business models. Although all of these are important, our focus is narrower – on the creation of viable new customer-customer facing products and services that can deliver value to the pay-TV enterprise.

The findings in this report were developed between March and September 2016 and are based on MTM research and analysis and extensive engagement with pay-TV industry executives from around the world. Unless otherwise attributed, all quotations used in the report come either from in-depth interviews or seminars with senior pay-TV industry executives held across the four regions. All sessions were completed under the Chatham House Rule (no attribution without prior permission), with participants speaking as individuals and not as company representatives. Inevitably, this paper provides only a partial view of a highly complex industry: it represents a snapshot of industry perspectives at a particular moment in time.

MTM and NAGRA would like to thank all those who have contributed to the research for their input and insights:

EXECUTIVE SUMMARY

HOW INNOVATIVE IS THE PAY-TV INDUSTRY AND WHO ARE TODAY'S INNOVATION LEADERS? WHAT CHARACTERISTICS AND CAPABILITIES DISTINGUISH THE INDUSTRY'S INNOVATION LEADERS? WHAT OPPORTUNITIES ARE OPENING UP FOR PROVIDERS AND WHAT STEPS SHOULD THEY TAKE TO PURSUE THEM?

The pay-TV industry is a global success story, exceeding a billion subscribers and US$200 billion in global revenues earlier this decade and widely expected to reach US$250 billion in global industry revenues by 2020. The industry has driven innovation in TV markets round the world, providing additional choice flexibility for consumers and supporting investment in content and advanced new services.

Historically, pay-TV providers pursued a distinctive business model, characterised by investment in end-to-end distribution platforms and consumer premises equipment, content aggregation and packaging, and the acquisition and management of subscribers. This model worked well for many years and provided successful providers with significant competitive advantages.

57% OF EXECUTIVES AGREE THAT "PAY-TV SERVICE PROVIDERS IN THEIR COUNTRY WILL STRUGGLE TO GROW THEIR BUSINESSES OVER THE NEXT 5 YEARS."

However, it also had important limitations – pay- TV platforms were expensive to build, maintain and upgrade, were geographically constrained, often to a very limited footprint, and were often very inflexible. Few operators maintained large in-house innovation or R&D functions, with most leaning heavily on their technology suppliers.

Today, the industry is experiencing a period of change and disruption, with operators in many markets facing a perfect storm of slowing growth, intensifying competition and business model disruption. New entrants – telcos and OTT providers – have intensified competition in many markets, while the deployment of advanced broadband networks has eroded many of the traditional competitive advantages enjoyed by pay-TV providers.

Although these changes are unevenly distributed internationally, most industry executives believe that innovation is becoming ever more important to the pay-TV industry, as providers look to drive future growth, remain competitive and satisfy the increasing expectations of customers and investors. At the same time, opportunities to innovate are proliferating and becoming more accessible to many operators: TV platforms are becoming more flexible and capable, advances in broadband are creating opportunities to extend services beyond traditional operator footprints, and there are new opportunities to partner with technology providers and suppliers.

However, innovation remains challenging for many pay-TV businesses, with executives citing a lack of skills, difficulties measuring ROI, and corporate risk avoidance as important barriers. Today, the most advanced portfolios are generally offered by major pay-TV operators and telcos in North America (AT&T / DIRECTV, Comcast Cable, DISH Network, Rogers, Time Warner Cable, and Verizon), Europe (Deutsche Telekom and Sky), and Asia Pacific (StarHub). However, nearly all providers are well advanced in deploying advanced functionalities on their core TV platforms and providing advanced multi-platform services, but only a small number of large-scale providers, generally operating in larger, wealthier markets, are currently addressing significant business adjacencies, such as advanced advertising, IOT and technology licensing.

Looking forward, the majority of executives believe that their innovation priority is to evolve the core pay-TV offer, developing new ways to price and package content, bringing new kinds of content onto their TV platforms, and continuing to invest in multiscreen TV everywhere offerings. Other areas appear less commercially attractive, although over half of executives see attractive opportunities in advanced advertising and data.

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on backhaul usage from the Radio Access Network to the existing application server.

By 2018, it is estimated that 84% of all IP traffic in the US will be made up of gaming, video and streaming web content, with users demanding low latency and improved QoE. With Edge Cloud Architectures, it is estimated that latency will be reduced by 50%.

ADLINK's SETO-1000 is a specialized server designed for extreme, harsh outdoor environments. This SETO-1000 is a one of a kind compute device powered by two of the latest Intel® Xeon® E5 processors. It supports up to 96Gb of memory, features multiple I/O options and dual swappable SATA storage bays.

The SETO-1000 provides a powerful common platform architecture for virtualized Radio Access Equipment for 2G, 3G and LTE. It enables consolidated security, remote management, open applications and reduction of hardware footprint.

Designed for Harsh Environments

-40°C to 55°C operation

NEBS shock & vibration (design))

IP65 intrusion protection

Server Grade Performance

Dual 10-core Xeon® E5-2400 v2

6x DDR3L RDIMM sockets

Dual 10G SFP+ optical ports

Dual GbE RJ-45 ports

Intel® Communications Chipset 8920 crypto engine

Dual swappable SATA storage bays

IPMI 2.0 management interface

48VDC nominal input

Operators can utilize the SETO-1000 to implement a virtualized Cloud Radio Access Network by integrating 2G, 3G and LTE RAN gear onto a virtualized cloud server. This enables the reduction of proprietary build gear by utilizing an ETSI standardized MEC server, saving both OPEX and CAPEX for the operator. The SETO-1000 provides a powerful common platform architecture for virtualized Radio Access Equipment and enables consolidated security, remote management, open applications and reduction of hardware footprint.