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TRANSFORMATIONS IN TELECOMMUNICATIONS BUSINESS

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Abstract:

Driven by mobile broadband integration and the Internet, along with the increasing need for access to information on a real-time basis, technology disrupts all fields of industry. Disruption is severe in all markets and existing goods and services including business models are transformed. As protocol services are rapidly transferred to the internet, it is causing major disruption to the entire ecosystem of the telecommunications industry. Now it is about to be the next big revolution in telecom industry. Therefore, progress in telecommunications demands that companies be more flexible, agile and inventive to innovate innovative business models and to transform their internal processes. The active corporate restructuring would push important consumer and service projects and invest in ICT and related sectors directly. Most notably, the rivalry among mobile operators with so-called "over-the-top" (OTT) players is becoming increasingly strong. The mobile network provider faces a fresh challenge to market uncertainty faced by highly volatile competition. In order to address this danger, competitive mobile network operators need to adjust their policies and change their business models to face a wide range of disruptions and new market conditions. The purpose of this paper is to research the transition of mobile companies and to provide a transformation structure for mobile network operators. This paper uses primary and secondary qualitative evidence to develop the structure and strategies for market change in order to meet the goals of study.

Key Words: Transformation, Mobile, Framework, Strategy, Communication, Business **Introduction:**

By the end of 2016, [1] expected a 46% growth of the global population, led significantly by massive penetration in Africa and Asia, for mobile subscribers. Globally, more than 4.8 billion users are using a mobile device and more video and on demand applications are being used by customers on mobile devices. In the last five years, mobile data traffic has increased exponentially and growth continues to increase [2]. Mobile data traffic and further growth for the remainder of this decade will continue by increasing use of video on demand platforms and other rich multimedia material [3]. Figure 1 illustrates the projections of the world's yearly cell data traffic through many research studies.

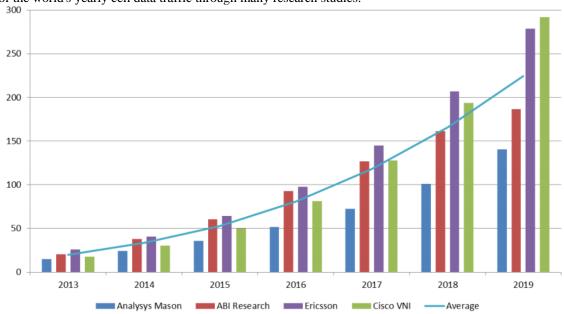


Figure 1: Annual global mobile data traffic (in Exabytes)

Cell network operators are also constantly competing with the so-called over-the-top (OTT) providers of Internet services. Big and small companies like Google, Microsoft, Facebook, Amazon, YouTube or Line are suppliers of OTT services. They have quickly matched the services and sales ecosystem of mobile network operators and have circumvented them. In numerous services, including gamering, on-demand, streaming services, cloud-based administration, video and courier [4], OTT services managed to place itself effectively globally in the internet. In ever more data-dominant networks as shown in Figure 2 [5], however, the revenues and traffic of mobile network providers are unbalanced. In the paper [6], video distribution has now increased by more than 50 percent.

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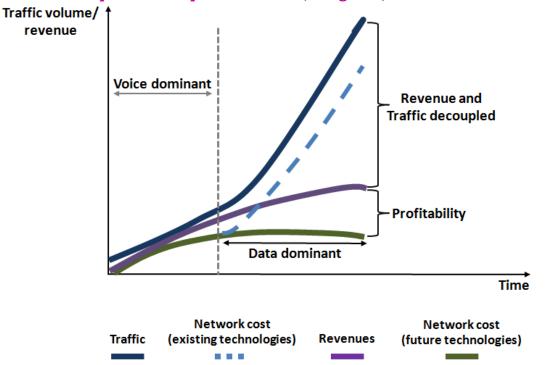


Figure 2: Revenue and traffic are disassociated in an increasingly data-dominant world

Digital revolution quickly and dramatically transforms market share. For example, the extreme effect of WhatsApp on the global SMM market gives mobile industry a powerful lesson (see Figure 3). WhatsApp was purchased in 2014 by Facebook. However, not just the telecoms market is disrupted by Facebook. Via the Facebook Messenger the company extends the service to 800 million users of WhatsApp for person-to-person transactions [7].

Messages sent per day (billions)

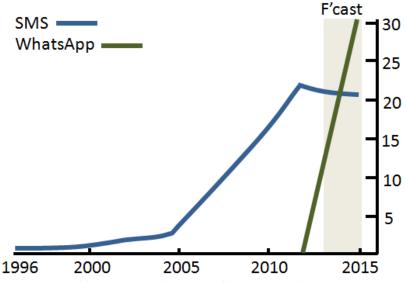


Figure 3: How WhatsApp Disrupted an Industry

This article is structured as follows in order to accomplish the aims of this study. The analysis technique is explained in Section 2. Section 3 presents an overview of the restructuring of businesses and primary factors for effective execution. Section 4 describes the results of the study and debate. In the last part, the conclusion is given.

Research Methodology:

The goals of this research are to provide the framework for market transformation and suggest the creation of an effective mobile network operator's business model. It is intended as a research of excellence, focused on detailed interviews and backed by contributions of secondary data from scholarly documents, reports on industry and best practises generated by respectable sources of reference. Its main data is derived from in-depth interviews with distinguished experts on the relevant areas, as seen in Figure 4.

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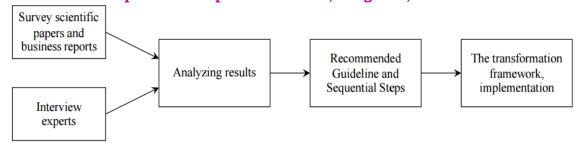


Figure 4: Research framework

Table 1 provides the corresponding profiles of our topic specialists. Based on their experience in telecommunications, economics, strategic management and marketing, we grouped subject matter experts into 4 groups. A total of 12 subject experts or respondents were divided into 3 out of each main area of focus.

Table 1: Number of experts in each key focus areas

Area of Expertise	Numbers	
Telecommunications	3	
Economics	3	
Strategic Management	3	
Marketing	3	

The input from the thorough interviews was processed and analyzed along with secondary details that are summarized in a draught conclusion to be transmitted for further observation to the 12 experts in order to streamline them into a similar path. The version evaluated and examined by the 12 experts will then be taken to formulate a market transition process with a roadmap to key points to ensure the mobile network operator has an effective and competitive change.

Transformation of Mobile Businesses:

Cross-industry applications, services and business models rapidly integrate digital services. Innovative smartphone, social media networks, OTT and big data-based digital solutions drive the demands of the market, create employment opportunities and enhance the competitiveness of the national economy [8]. Mobile network providers will be able to extend their features in the value chain [9].

Mobile network operators need to translate a conventional business model by replacing an open and agile digital infrastructure with a modern generation of network networks [10] in order to achieve sustainable competitive advantages and stimulate growth. It requires customer interaction, monetization of network properties, digital service innovation and the creation of new value chains [11].

The new business model of mobile network operators is being successfully developed by partnership, network capacity and versatility. The operators need the ability to co-create new services, share sales and respond to their client needs with their partners. When the consumer demands an interruption to the business, a provider must be willing, and implement a new operation plan, to move on to another market. The operators need to operate rapidly and sustainably in order to seize any possible opportunities [12]. Fig.5 illustrates the positioning possibilities system for telecommunications undertakings, detailed in [12].

CUSTOMERS

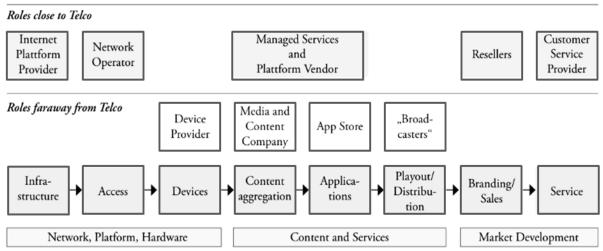


Figure 5: Positioning opportunities for telecommunications companies

There are three forces for network change, cost savings and consumer service, industry creativity as illustrated in Table 2 as per comparison [13]. Table 2 shows. Therefore, operators must make use of their costs, customers and innovations to foster strategic differentiation in well developed markets and to expand their position to include emerging markets and sectors beyond conventional mobile operator limits.

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Table 2: No	etwork	transformations	Actions	and Solutions
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Drivers	Actions/Solutions			
	Conduct a strategic report and make restructuring decisions			
Cost	To start new P/S efficiently implement the PLM/GTM			
Efficiency	Redesign of the network (core, transport, access, NOC)			
	Optimizing, converging and migration systems			
	Upgrade/Modernize Network			
Costumer	Implementation of customer service model			
Experience	Credit and loyalty			
	Excellence in service			
Business Innovation	Develop new product catalogue business models/strategy marketing			
	Implementing data mart, analysis, up-selling, cross-selling, and customized campaign			
	measures and promotional initiatives			
	Simplify network and processes, improve flexibility, scalability and reduce dependence			
	on technology.			

We take the principle of corporate change from analysis into this paper [14]. The change in [14] is discussed as follows:

"The transformation depends on value defects and entails the examination and modification of work processes. This review examines how trends are expected to impact the future of the company. In terms of value effects, potential impacts on business countries are analysed. The impact of projected expenditures and capital will and should affect the way they are distributed. If and how all this works and how much the problems solving and decision making skills in the field and the social environment impact." In Fig.6, the transition structure from [14] is shown.

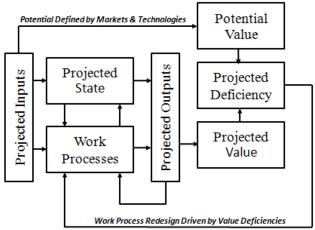


Figure 6: The transformation framework defined by [14]

The links between projects in six areas are summarized in Table 3 with the above-defined structure of state, labor, value and input. In the reference [15] the details of the relationships of the programs with the company model are explained.

Table 3: Relationships of Initiatives to Enterprise Model

Tuble 5. Relationships of initiatives to Enterprise Woder							
	Enterprise Input	Work Processes	Enterprise State	Enterprise Output			
Transformation	How the data, function, state, output and meaning of a company's history, current and future						
Method & Tools	can be represented, manipulated, optimized and presented.						
Emerging Enterprise		The influence on working, state and production, and the strategic /					
Technologies		policy ramifications of these effects of new business technology.					
Organizational		How job processes influence state and					
Simulation		business experience					
Investment Valuation	How capital resources			Affect the provided value,			
	are invested			e.g. produced options			
Organizational Culture		How values drive working practices, affect the atmosphere and					
& Change		transition of the organization and impact the state and production					
Best Practices	How past and present methods and improvements in supply, function, condition and						
Research	performance affect the production of value for business in the future, for better or worse.						

Results and Discussion:

Since data has been collected and analyzed during the interviews, a transition process has been created to meet the goals of the paper with a method guideline and a follow-up result:

Transformation Framework:

The study carried out in conjunction with the framework outlined in Section 2 indicates that virtually all experts have agreed to follow the concepts of corporate restructuring as alluded to in globally and academically accepted [14]. The 10-stage implementation mechanism from [16] in the proposed system would also be implemented. The findings of the study will allow us to suggest a structure for transformation as seen in Figure 7.

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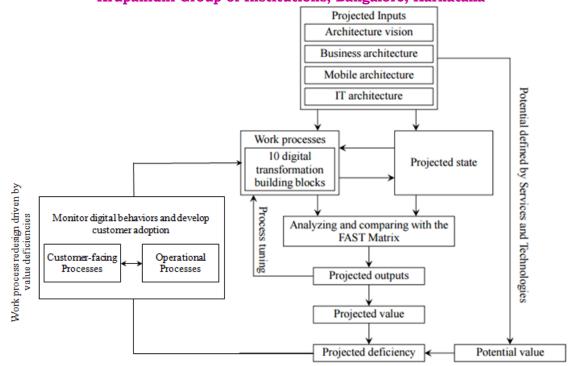


Figure 7: The proposed transformation framework

The proposed framework comprises four main inputs, which allow businesses, in architectural terms, business architecture, mobile and IT architecture, to harmonize their digital transformation efforts. The framework is based on a vision of how the business can change in the future helps shape the view of the employees. The 'internet behavior monitoring and consumer acceptance' is one of the major elements to accelerate the transition, and the process can also be seen in Fig.8. This element is about how business processes and customer-oriented processes are integrated and interacted. From the reference [17], we followed this model.

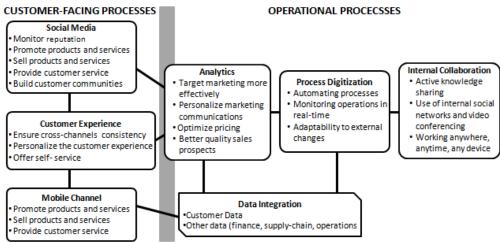


Figure 8: Monitor digital behaviors and develop customer adoption

Recommendations and Discussions:

This study focuses on evidence-based approaches from a range of reliable secondary sources. The findings of the study are concluded as follows from these sources:

- Mobile network providers need to refine their services diversification plans and improve network costs. They need to
 build more players interested in the service distribution supply chain, as well as looking for a potential rentable business
 opportunity. Operators need to turn their legacy networks into agile IT infrastructure and network [18] in order to
 innovate their services supply. Around the same time, the end-to-end utility supply chain is being active in increasing
 numbers.
- Moving to an all-IP LTE network, operators build scalable, simpler networks, reducing costs, reducing latency and
 enhancing reliability. For two key purposes, LTE is then essential for operators. Firstly, the e-cienzy of the whole
 network would be increased. Secondly, it would facilitate and simplify their activities. LTE has two major explanations
 for changing the telecommunications landscape. LTE and LTE-A first improve the mobile network's spectral
 performance. Secondly, upgrading and managing their activities would be quicker and less costly.

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- The interaction of mobile, social networks, big data, analytics and cloud technology allows for creative operator offerings and makes consumers affordables [19]. With these technology, systems, suppliers and requirements being integrated into mobile network operators, their transformations now include a number of qualifications, skills, know-how and competencies.
- Mobile network operators are pressurised into creating fresh, competitive models for their market and sales sources to boost their place in the value chain, and are generating more benefit from increasing video traffic around the board. Mobile network providers rely on OTT players to decide whether they collaborate or cooperate outside the data stream. The development of a content strategy has four approaches[20]:
- Retail content portal: Manage content by way of producer relationships; host and send it to pay-per-view consumers) or sponsoring (advertising).
- Content host: The network provider is responsible for obtaining delivery content, fulfilling retail partnerships, or both. The network operator is a Content Delivery Network provider (CDN). This approach can be used as a method of monetization.
- Critical content distribution additional services: Content decision management and parental supervision are the emphasis
 of this approach. In this group, the following services provide identity management, digital right management,
 localization services.
- Premium content distribution paths for customers: This strategy's offerings provide quick delivery or special quality (QoS) content as a cost-effective choice charged either by consumers or suppliers of content.

Different considerations are the form of content policy and models, but regulatory needs set out by the jurisdictions in which companies function are the most important.

Conclusion:

The biggest catalyst for digital transition is mobile broadband Internet. Telecommunications helps combine various markets and develop new value chains and resources which cannot be offered by conventional company. As mobile Internet progress continues to remove time and distance, businesses are emerging, developing and interrupted more quickly than ever before. The battle for mobile business would accelerate the integration of technology and redefine the ICT environment. Mobile network operators are transformed to dominate their rival and to prosper in the ICT market through their existing networks, activities and companies. Core components in change are innovation, harmonisation and consumer attention. Shift, individuals, systems, policies, frameworks and competitive dynamics are central to the transformation. Transformation The paper presents a study of the transition of industry and the key reasons to succeed. The suggested transition structure for a mobile network provider as set out in this study is based in depth on the principle of company transformation. Recommendations are defined in this research in some important areas.

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