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Trust in the Information Society

Is Regulation the Answer to the Rise of Over the Top (OTT) Services? An Exploratory Study of the Caribbean Market

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Outline

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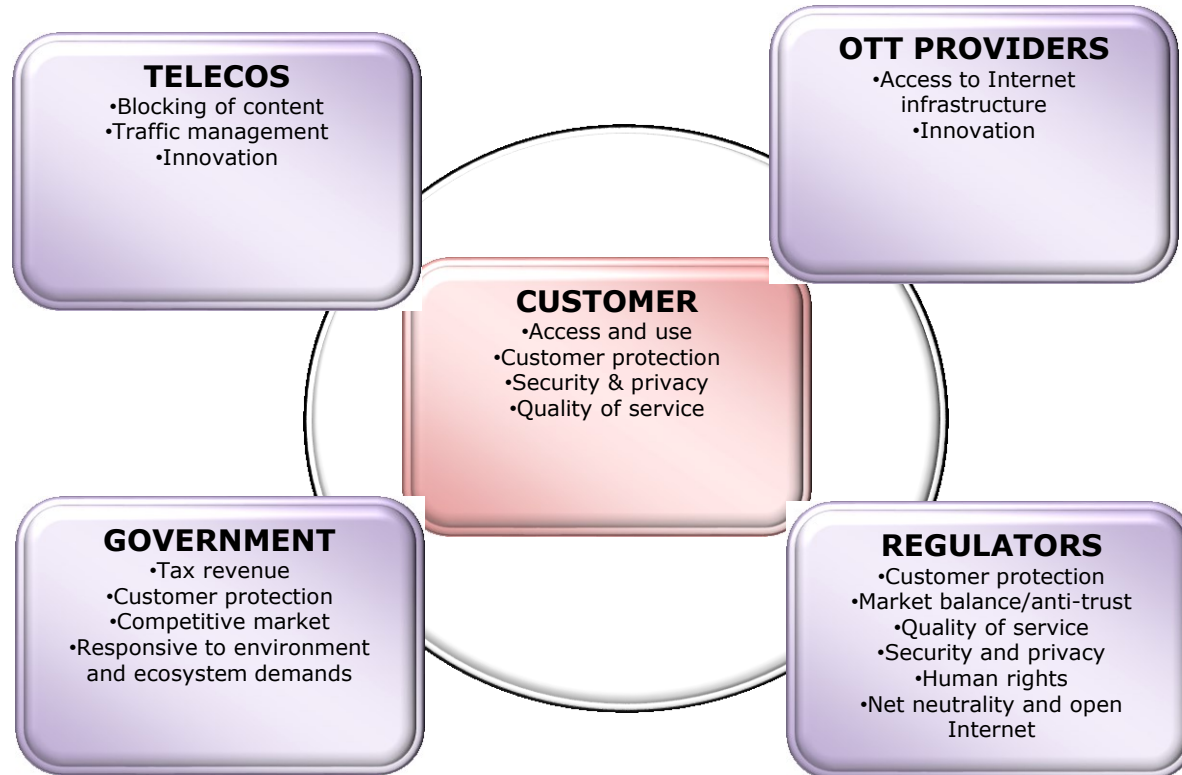- Concluding Remarks
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OTT Services

- The proliferation of access and use of the Internet has also seen the development of certain innovations targeted at meeting customers' instant *access anytime anywhere* to audio, text, video and other services

- The last decade has seen significant growth in VoIP subscribers worldwide and it is expected to reach 348.5 million in 2020 with revenue of USD 136.16 million [Prnewswire, 2015]

- Similarly, there has been significant growth in OTT subscribers

OTT Services

- Examples of the shift in subscriber demand(s) as a result of the growth of OTT [Ottsource,2014]:
  - Email replacing post;
  - Hulu or Netflix replacing regular TV or cable providers;
  - Facetime, Skype, replacing long distance telephone providers;
  - Youtube replacing videos, music television broadcasters;
  - Chat services including Whatsapp, Viber replacing SMS.

OTT Ecosystem

TELECOS
- Blocking of content
- Traffic management
- Innovation

OTT PROVIDERS
- Access to Internet infrastructure
- Innovation

CUSTOMER
- Access and use
- Customer protection
- Security & privacy
- Quality of service

GOVERNMENT
- Tax revenue
- Customer protection
- Competitive market
- Responsive to environment and ecosystem demands

REGULATORS
- Customer protection
- Market balance/anti-trust
- Quality of service
- Security and privacy
- Human rights
- Net neutrality and open Internet

Research Objectives

- To examine and report on the current forms of regulatory responses to OTT services in the Caribbean; and
- To introduce a regulatory framework
  - supports multi-stakeholder objectives and multi-dimensional issues
  - representative of the realities of the conditions of the marketplace and technological landscape
  - Help guide the process of regulatory development in the Caribbean

Research Motivation

- Increased adoption of OTT services have resulted in varied responses including complete ban by telecos and "wait and see" approach from regulators

- Little or no academic/policy studies that examine the state of practice in the Caribbean environment and assess the implications for available regulatory approaches

- Study provides an opportunity to continue/extend the debate on the policy and regulatory considerations for OTT services particularly in small developing states

- Provide an approach for effective regulatory development and monitoring

Regulatory Landscape

- The regulatory issues relating to the VoIP/OTT market are not monolithic.
- According to an ITU report [ITU, 2011], the issues may be categorized based on the maturity of the VoIP/OTT market in the respective countries.
- OTT services worldwide are predominantly unregulated.
  - 4 main approaches to combat OTT:
    - a **full ban**, in places such as China and some countries in the Middle East;
    - **operator restrictions**, such as what currently exists in Jamaica;
    - **primarily unregulated** such as environment that exists in Canada and USA; and a commercial approach where there is support, and
    - creation of **commercial versions** such as telecos providing their own versions of OTTs
  - Reports from ITU revealed that the incidences of the banning of VoIP services have been steadily declining although no known formal update since 2009.

Regulatory Landscape

	Treatment of VOIP/OTT
USA	•FCC has adopted a "light regulatory touch" •Does not consider VOIP a traditional telephone service but a computer-based "information service" •Telecommunications Act 1996, USA, the term `information service' means the *offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications*…
Canada	•The regulator (CRTC) is still engaging stakeholders to determine the best course of action to the question of regulation in the face of continued competition from a wide spectrum of OTT media services [Wirereport, 2014]. •Has no immediate plans to impose any regulatory obligations on OTT providers [Elder & Gwyer, 2011].
EU	Some countries have blocked OTT providers when offering voice services that connect to the PSTN [Detecon, 2014]
Jamaica	•Operators have threatened to block OTT services. Some OTT voice services were blocked •Treated by operators as bypass and therefore illegal •Section 9(1)(d) of the Telecommunication Act, 2000 stipulates that a person shall not engage in bypass operations. The Act further defines bypass operations and voice services where voice services may include VoIP
Trinidad	•Operators have threatened to block OTT services and blocked some voice services •Regulator asked operators to restore services •No mention of bypass operations in Act
Haiti	Same approach as Trinidad
OECS	Regulator asked operators to desist from blocking OTT services and commit to principles of Open Internet [Joseph, 2015]
BVI	Regulator turned down request from operator to block OTT services including whatsapp [Mills, 2015]

Regulation vs Non-Regulation

Regulation	Non-Regulation
Improved customer protection [ITU,2011]	Promotes innovation and competitiveness
Tax revenue opportunity for government	The Internet has largely remained unregulated which has helped fueled its growth
Provide structure and improved coordination to the market place, such as better security and governance	Promotes principles of net neutrality
Help to avoid market failure [ITU,2011]	
Increased access to technology and services [ITU,2011]	
Help to correct any market imbalances	

The Case for Regulation in the Caribbean

- The telecos are powerful and tend to operate as monopolies in some instances
- Countries are small with varying degree of maturity
  - OTT market
  - Technology regulation
- Customer protection, security and access to low-cost services are important concerns especially from a developing country/region perspective
- Current legislations are not reflective of the technological developments and user practices
- A regional approach to OTT services may be necessary

Key Issues for Regulators

- **Redefinition of bypass operation** especially in the context of the dramatic shift in how services are delivered to the customer as a result of the de-layering and convergence of the networks.

- The necessity of a **definition of voice services** within the context of the pervasive development and use of multiple OTT services where the provision of a distinction between telecommunication and information services, similar to the US approach may be required and the determination of whether these types of services are voice or data services.

- The provision of clear **distinction between VoIP and OTT services** especially in the context of current global developments;

- The issue of **net neutrality, open internet** and their implications for stakeholders in the telecommunications industry

Key Issues for Regulators

- The **rights of the consumer** in terms of access to services and competition in a dynamic environment.
- The **balance of revenue and market protection versus competition and innovation**.
  - Due consideration should be given on how to protect the revenues of the licensed telecos while promoting innovation, competition and consumer access and protection.
- The continued **development of telecommunications infrastructure and improved access to Internet services**, particularly where there is still inequality of access and quality of services issues in countries in the Caribbean;
- The movement towards **development of new business models** in response to changing markets as a result of technological developments.

OTT Regulatory Framework

Figure : **OTT Regulatory Framework (Generic)**
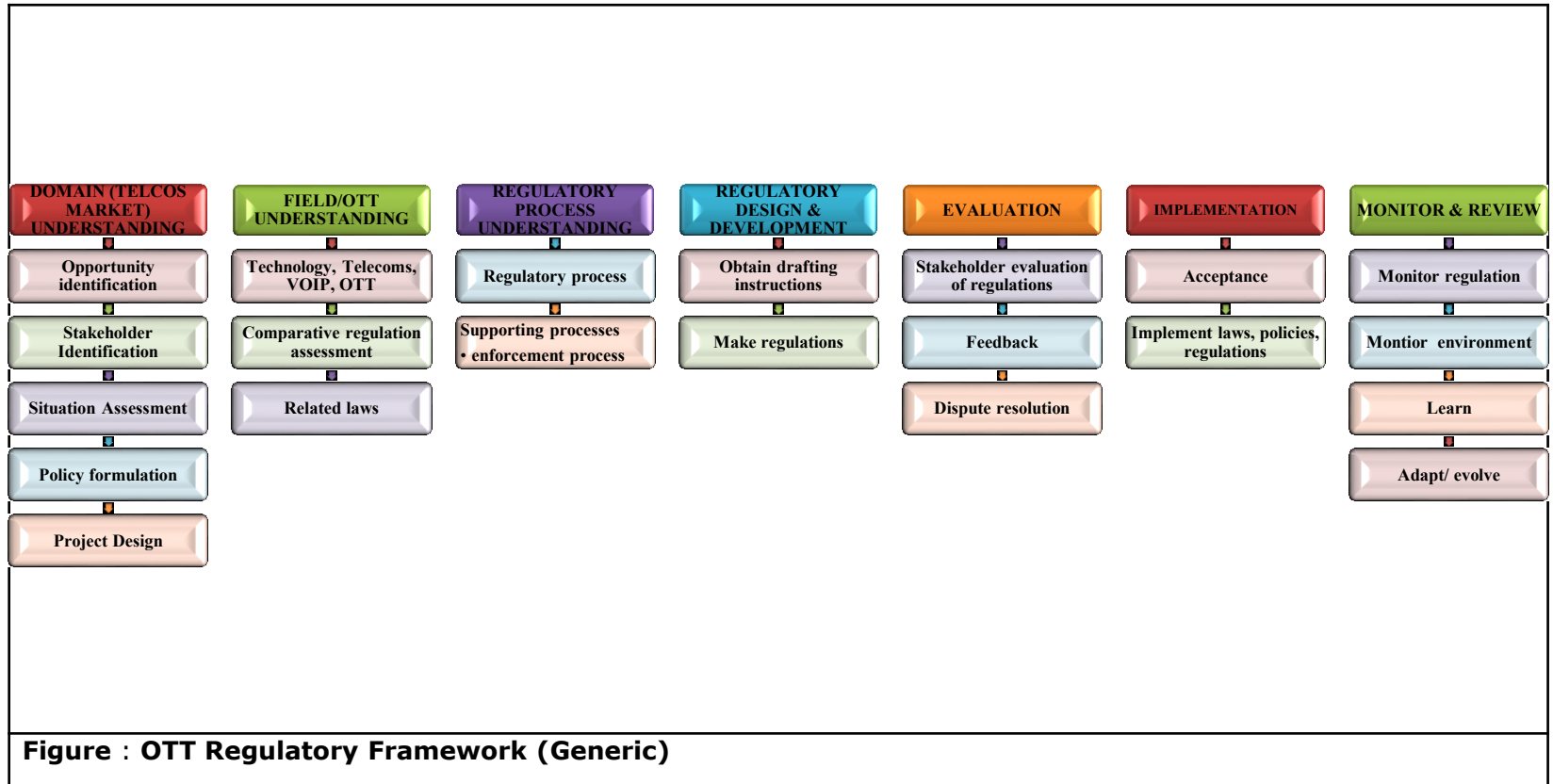
Recent Developments in the Region

- Eastern Caribbean Telecoms Authority (ECTEL) has asked service providers to desist from the practice of blocking OTT services and be committed to the principle of Open Internet [V. Joseph, 9/2015]
  - Member states includes Grenada, St. Vincent & the Grenadines, St. Lucia and Dominica
  - Advised public to report instances of blocking of OTT services
- Telecommunications Regulations Commission (TRC) has turned down request from teleco provide to block whatsapp and other VOIP services [H. Mills, 8/2015]
  - Adopting a "piggybacking on larger jurisdiction in the Caribbean" approach
- TATT has developed a consultative document on the treatment of OTT services [TATT, 2015]
- Jamaican government had signaled its intention to regulate VOIP in late 2014 however no update on status of regulation is available to the public to date
- In October, Digicel has deployed mobile ad blocking technology against Google, Facebook in Jamaica (Bennett, 2015)

Future Research & Policy Directions

- Conduct comparative assessment of OTT services and regulatory responses across all countries in the Caribbean

- Extend analysis to Latin America

- Develop policy paper(s) that addresses proposed strategies to deal with the growth of OTT services for countries and region as a whole

- Refine the proposed regulatory framework and assess its usability and efficacy in specific contexts

- Establish a roadmap for the region for the effective management of OTT services within the context of customer protection, security and access

Conclusion

- The research is on-going
- Involves legal technology, telecommunications and policy considerations.
- Offers several benefits potential contributions.
  - reports on the current regulatory environment in the Caribbean with respect to OTT services.
  - findings highlight that there is little or no regulation and underline that there are opportunities for regulation particularly where the legislations are not keeping pace with the technological development.
  - While there may be salient arguments for no regulation, the nature of the Caribbean market may require a more structured path, i.e. some level of regulation to better monitor the telecos' activities, help protect customers while fostering innovation and promote rights and access to global services.
  - Offers a regulatory framework that can assist in the management of the process to yield better and more suited regulations