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14th Global Symposium for Regulators

Capitalizing on the potential of the digital world

The impact of data on ICT business models

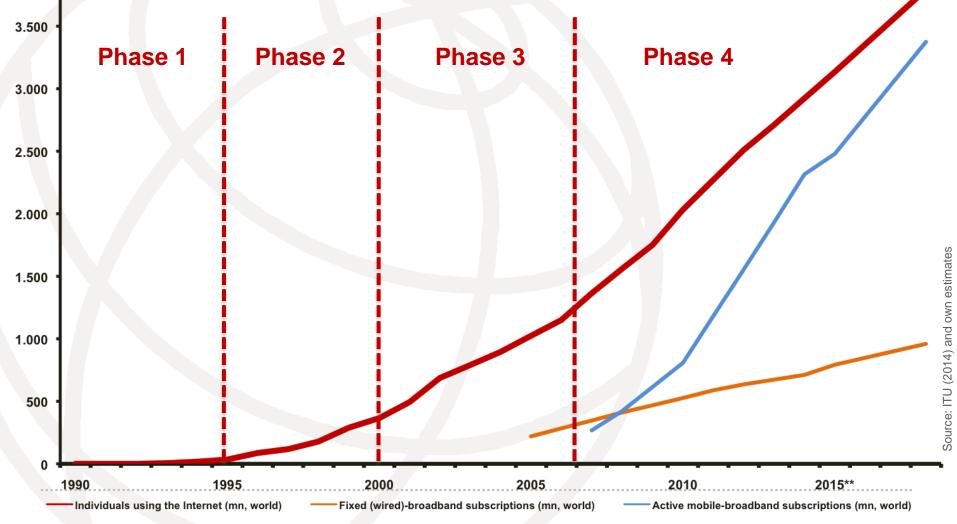
Dr. René C.G. Arnold Dr. Martin Waldburger

The views expressed in this presentation are those of the author and do not necessarily reflect the opinions of the ITU or its Membership.

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The evolution of ICT business models and a data-driven economy





The evolution of ICT business models and a data-driven economy

3.500					
0.000	Phase 1	Phase 2	Phase 3	Phase 4	
3.000					
		Comme	ercialisatio	n Phase	
2.500		• Rea	ach is still li	mited	
2.000			siness mod		
1.500		i i		and mortar I	
1.000		• Ear	ly steps in	online adver	tising
500					
0	+				
•••		995		2010	2015**
	Individuals using the Internet	(mn, world) Fixed (wire	d)-broadband subscriptions (mn, wo	orld) Active mobile-broadbane	d subscriptions (mn, world)



The evolution of ICT business models and a data-driven economy

3.500	Phase 1	Phase 2	Phase 3	Phase 4	
3.000			'Seek ar	nd Find' Phas	e
2.500			• Rea	ch grows rapic	dly
2.000			• Busi	iness models a	around
1.500				ch emerge	
1.000				y other busine	
500			mod	els are tried ou	ut
•••			000	2010	2015**



The evolution of ICT business models and a data-driven economy

3.500	Phase 1	Phase 2	Phase 3	Phase 4
3.000				'Always On' Phase
2.500				 Broadband and
2.000				flatrates appear
1.500				Business
1.000				models around
				data emerge
500				e.g. VoIP, P2P
	1990	1995 20	00	2010 2015**
	Individuals using the Interne	et (mn, world) Fixed (w	rired)-broadband subscriptions (mn, we	orld) Active mobile-broadband subscriptions (mn, world)



2015**

Active mobile-broadband subscriptions (mn, world)

The evolution of ICT business models and a data-driven economy

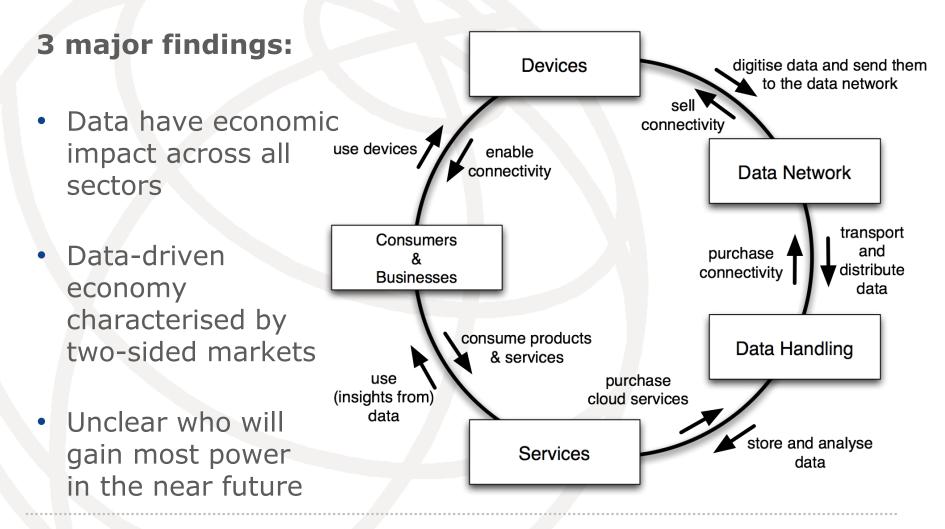
Fixed (wired)-broadband subscriptions (mn, world)

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0 •				
	surg	es		
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2.500	• Devi	ces enabl	e access	
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3.000	'On Eve	rywhere'	Phase	
3.000	1 11050 1	1 11d5C 2	1 11036 5	1 Hase
0.000	Phase 1	Phase 2	Phase 3	Phase
3.500				

Individuals using the Internet (mn, world)

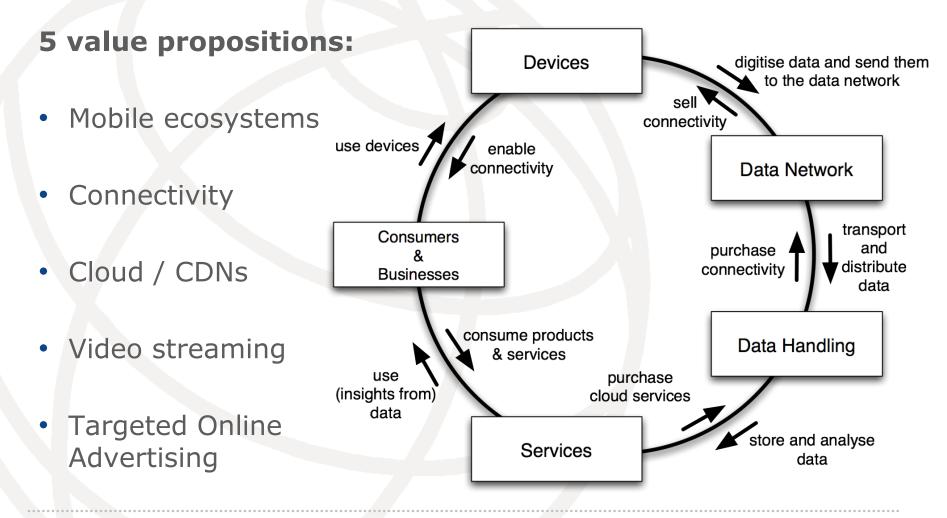


The Data Value Circle





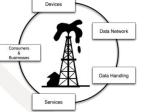
ICT business model analysis



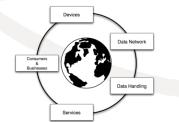


ICT business models - major findings

- Everyone seeks control over the full data value circle
 - Partnerships can be a powerful alternative to entering other parts oneself



Data are the oil of the 21st century – every drop counts!



Data know no borders



Everyone seeks control over the full data value circle

Data Network

Data Hand

- Extending to other parts of the Data Value Circle increases actor's influence
 - Extending to other parts of the Data Value Circle gives access to more data
 - Increase in online advertising may be a challenge for other media sectors
 - Policy-makers need to closely monitor this development



Partnerships can be a powerful alternative to entering other parts oneself

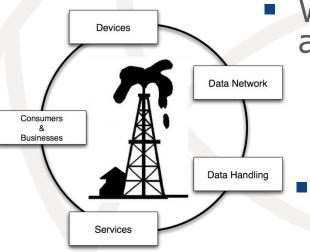
Partnerships can enable win-win situations (also for consumers)

Data Network

- Partnerships can enable a strong impact on competition
 - Issues of net neutrality need to be addressed
 - Lock-in effects may impede competition



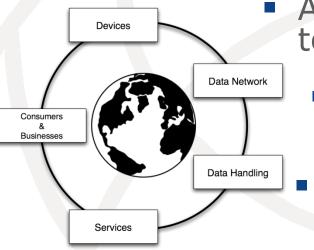
Data are the oil of the 21st century – every drop counts!



- With data across all devices even anonymous data can be personalised
 - On the other hand, a paradigm shift to data prosperity may be beneficial
 - What do consumers understand about this?
- Implications of the "right to be forgotten" for the data-driven economy
- How can network operators join the oil hunt?



Data know no borders



- All the issues mentioned so far have to be addressed globally not locally
 - Consumers face barriers in terms of language and dispute resolution

General terms and conditions often conflict with national laws

- Who would be in a position to develop international guidelines, rules, etc.?
- Who would be in a position to enforce them?

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Thank you for your attention.

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