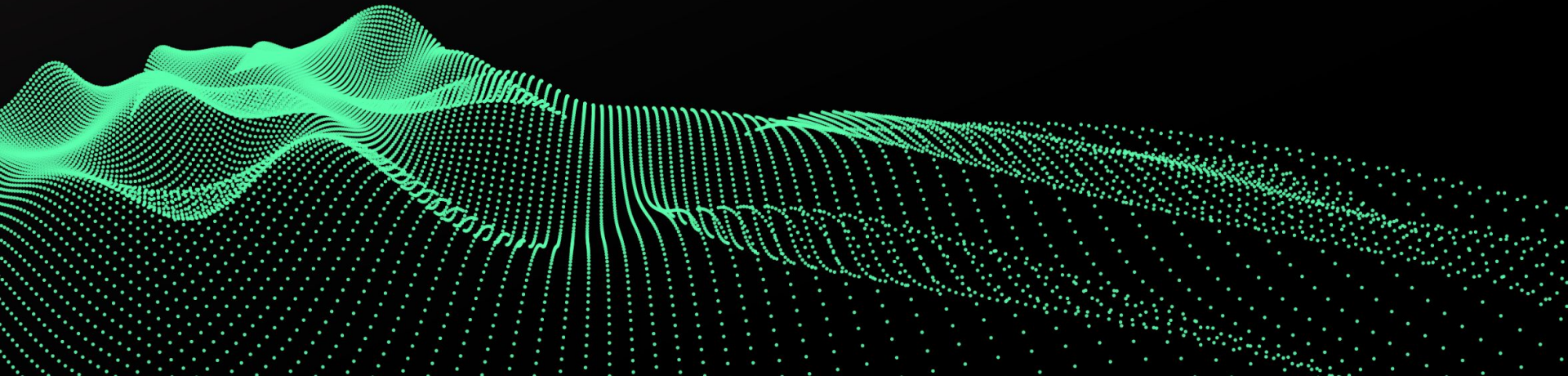


EVOLVING REGULATORY FRAMEWORKS

FOR A DIGITAL AGE

RS Sharma, 2017



BILLION DOLLAR QUESTION



Is This A Biscuit Or A Cake?

In 2001, McVities successfully argued that jaffa cakes are indeed cakes, despite their biscuit like appearance. This saved them hundreds of millions in taxes.

OTT SERVICE PROVIDERS HAVE THEIR CAKE AND EAT IT TOO

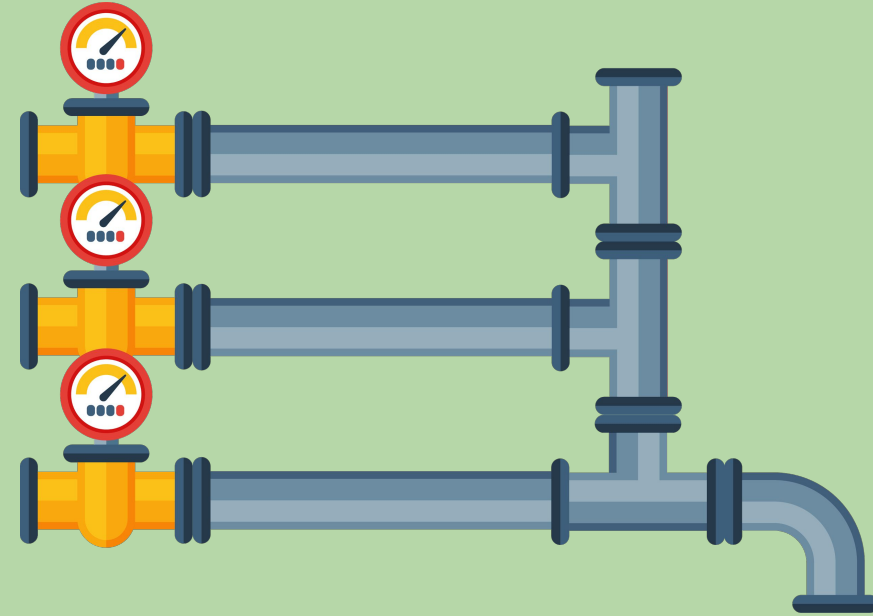


Is Facebook a media company?

Then how is it providing Voice and SMS like capabilities through Whatsapp?

TRAI'S 4 BROAD LEVERS TO REGULATE TELECOM

1. Who can get a license to build telecom companies
2. The interaction between large telecom companies
3. What kind of pricing interaction they have with consumers
4. Ensure Quality of Service



Regulations derived from laws made in the era of the physical,
tend to be inadequate in the age of the digital.

THEN CAME THE INTERNET

The internet changed the regulatory landscape, in three important ways.



All services are reducible to data. Voice, Video are just special forms of data.

But data isn't subject to the same regulations as These services

Convergence



Large Tech products tend to be “for free”

Regulators are used to pricing control. How do you regulate zero?

Illusion of Zero



Physical location has very little meaning in digital services

Transactions take place across borders, creating issues of taxation

Geography

WE'RE IN THE AGE OF NON-LINEAR BROADCASTING



We've moved away from multiple independent networks for each service to **unbundled services atop a common growing broadband network.**

THE INTERNET IS DEMOCRATIC (ONLY IN THEORY)



The early internet was a democratic platform. Anyone, anywhere can create a global website.

But this is only good in theory, in practice, a few companies are now the gatekeepers of distribution, because they control our data.

Data creates an insurmountable challenge for newcomers,
because they can't recreate this data.



Instead of thinking consumers get services for free,
we should instead ask

how cheaply are we giving away our data?

THE 12-DIGIT KEY TO YOUR PRIVATE LIFE

Many have expressed concern that there is a 12 digit number,
that can link multiple databases together
and create a deep profile about you.



OR



THE 12-DIGIT KEY TO YOUR PRIVATE LIFE

+91 XXX XXX 6789

That 12 digit number is
not your Aadhaar, but
your mobile number.

"Investigators find that a cellphone number is often even more useful than a Social Security number because it is tied to so many databases and is connected to a device you almost always have with you."

Austin Berglas
Former FBI agent

Your **mobile number** is in ~100X more **databases** than your Aadhaar.
And there is **no law on disclosure of mobile number**, but there is one on Aadhaar.

DO LARGE TECH FIRMS HAVE YOUR BEST INTERESTS IN MIND?

Google fined record €2.4bn by EU over search engine results

Brussels claims tech giant abused market dominance by manipulating its search engine results to favour its own comparison shopping service



Google denies EU claims that it 'systematically favours its comparison shopping service in its search result pages'. Photograph: Dado Ruvic/REUTERS

The [European Union](#) has handed Google a record-breaking €2.42bn (£2.14bn) fine for abusing its dominance of the search engine market in building its online shopping service, in a dramatic decision that has far-reaching implications for the company.

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future  tense THE CITIZEN'S GUIDE TO THE FUTURE JULY 26 2017 3:38 PM

Trump's FCC Chairman Is Misleading Congress About Net Neutrality



भारतीय दूरसंचार विनियामक प्राधिकरण

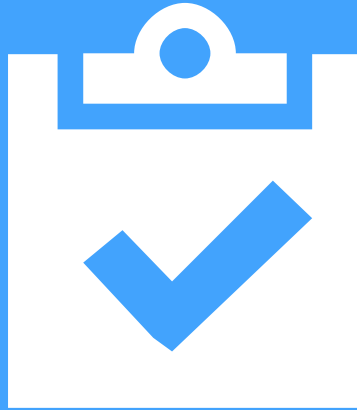
Telecom Regulatory Authority of India

(IS/ISO 9001-2008 Certified Organisation)



Home Notifications Press Release TRAI releases the Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016

TRAI releases the Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016



THE MESSAGE IS CLEAR...

A strong, independent, capable and farsighted regulator
is not an impediment, but a necessity
to counter the growing concentration of power.

EXAMPLES OF CHALLENGES IN DIGITAL AGE

1.

DND

Mobile Operating Systems prevent users from accessing their own data

2.

Blue Whale Phenomenon

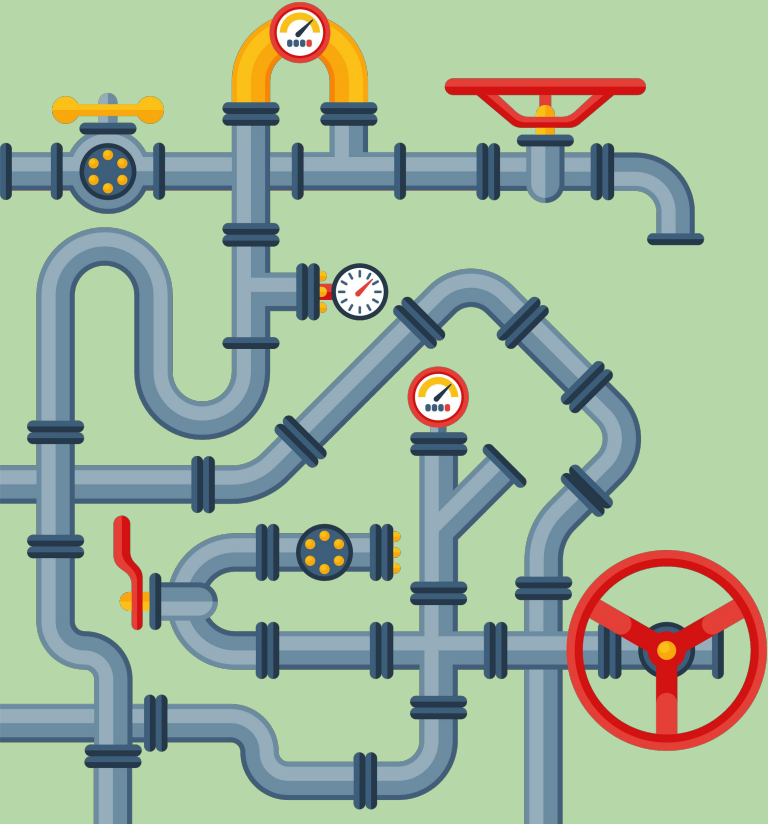
Regulators unable to take swift action in urgent issues that put lives at risk

3.

Communications in Driverless Cars

How do we regulate in an age where machines are talking to machines?

PRINCIPLES UNDERLYING TRADITIONAL REGULATION



Based on Guarding the “Large Pipes”

Any regulator must maintain balancing acts:

- Be fair to everyone protect consumers, but also service providers.
- Ensure quality of service, but also maintaining affordability
- Encourage innovation, but also competition to ensure choice.

An abstract visualization of a network or data flow. It features a dark blue background with numerous thin, curved lines in orange and light blue. These lines originate from a central horizontal band and fan outwards, creating a sense of expansion and connectivity. Small dots, also in orange and light blue, are scattered along the lines, representing nodes or data points. The overall effect is one of dynamic, interconnected digital activity.

REGULATING IN A DIGITAL WORLD

MONEY IS NOT THE ONLY WAY TO MEASURE HARM



Money



Anti-Trust




Choice



Privacy

Money can't be the only way to measure harm, we need the law to be concerned about anti-trust, consumer choice & privacy **even for free products.**



The old way of regulating
large pipes **WILL NOT**
WORK
in the world of platforms

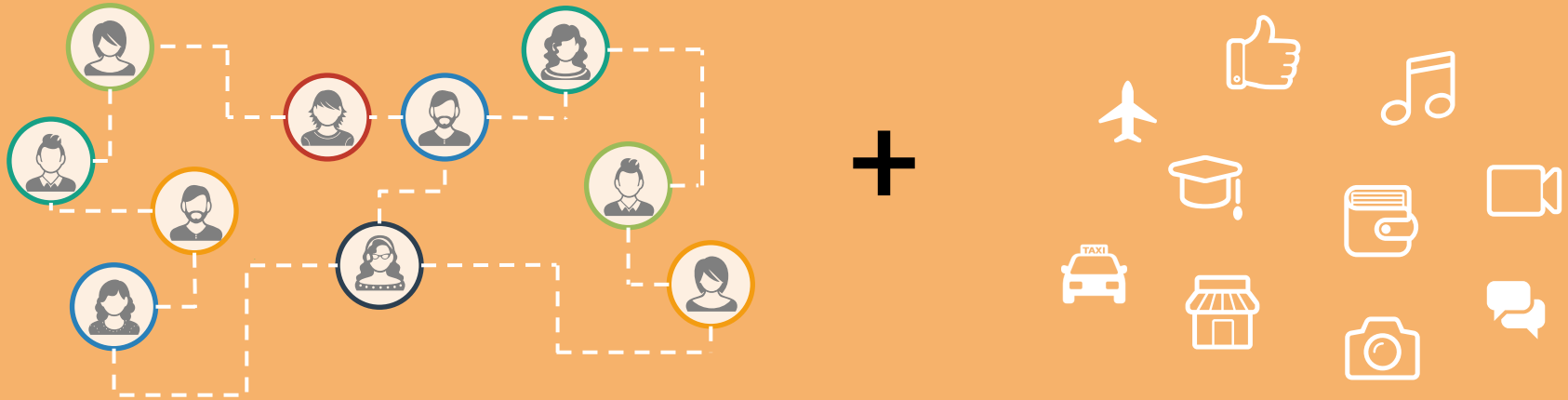
We need
**TECHNOLOGY-ENABLED,
GRANULAR REGULATION**

THE LAW MUST EMPOWER REGULATOR



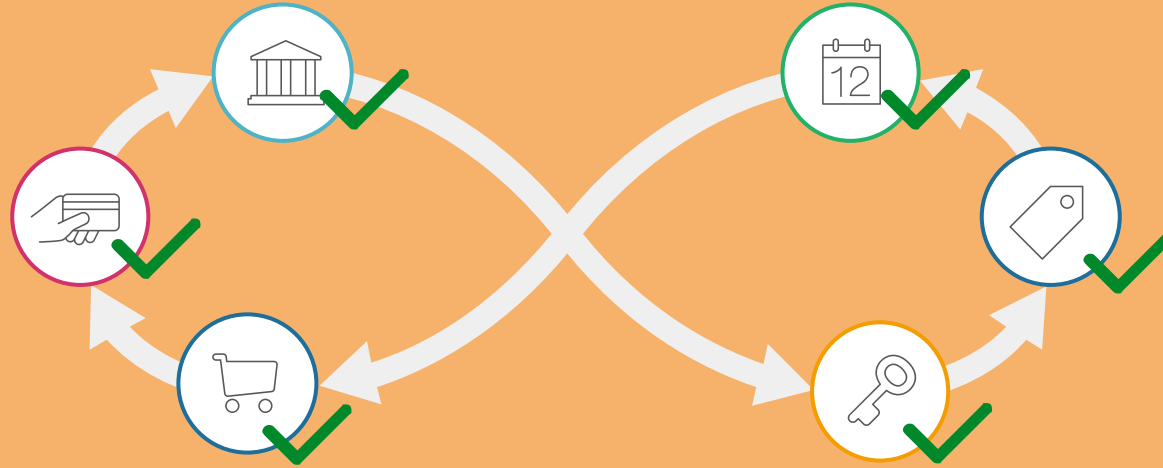
A regulator needs new laws that frees it from getting into cake/biscuit kind of debates, and is **more attuned to the principles of regulation in a digital world.**

CONVERGED SERVICES NEED CONVERGED REGULATING



By looking at regulating networks and the services that ride on them separately, we create jurisdiction lacunae where violators operate with impunity.

REGULATING THE FLOW OF DATA NOT SERVICE PROVIDERS



In the age of distributed computing, we need distributed regulating. A way of ensuring that **every transaction with the user**, at every level, **is in line with their interests**.

PRINCIPLES FOR REGULATION IN THE DIGITAL AGE

1.

Functional

Look at the problem holistically,

Not be tied down by fallacious cake/biscuit arguments.

A converged service needs a converged regulator.

2.

Flexible

Be able to adapt to the market, and shifts in technology.

A regulation that did good yesterday, could do bad today.

Needs to encourage innovation, not stifle it.

3.

Fast

Technology enables disruption at great speed.

Uber entered India in August 2013. In 4 years it has disrupted public transit

Regulators need to use technology to keep up.

HOW TRAI IS ENTERING THE DIGITAL AGE



New initiatives such as WANI, operate in a regulatory sandbox.

Provides safe space for entrepreneurs to innovate. Scale if successful.



Data by the consumers, for the consumers

Crowd-sourced Analytics of call quality and data speeds made available on TRAI Portal and Mobile Apps



TRAI has been in battle against consumer harms like fake financial tips, and OTP phishing. As malevolent fraudsters **adopt digital**, we cannot protect consumers by ignoring digital.



We cannot content ourselves with only looking under the street light, when we know that larger **dangers lurk in the shadows.**

THANK YOU

