

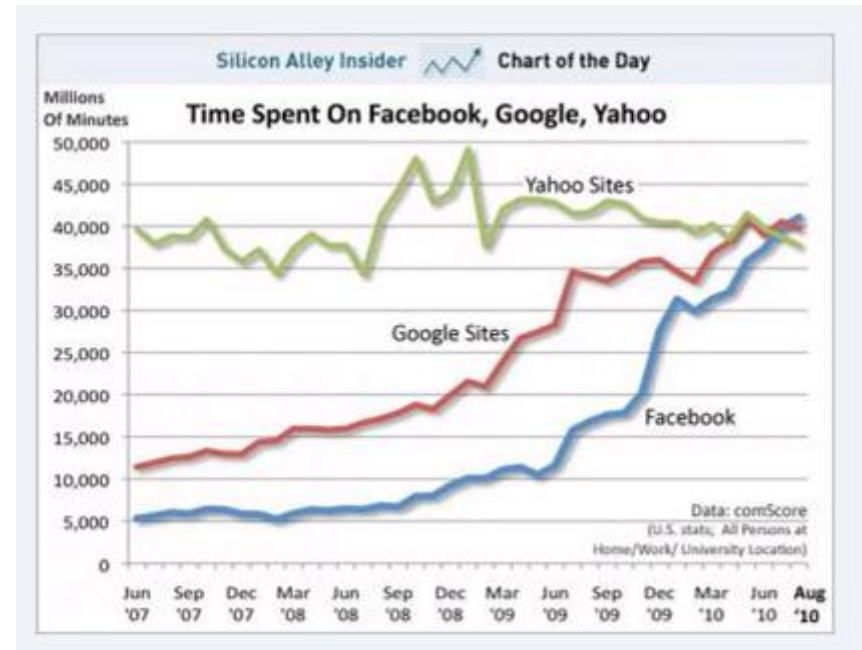
# Industry Landscape - when everything changes

**Malta, January 28<sup>th</sup> 2011**

**Alessandro Di Salvo**  
*Head of Sales, South Europe*

# The pace of disruptive changes in our industry accelerates - example Social Networking

- Facebook was just founded in 2005 – not long ago
- Time spent for Social networking surpassed Email in 11/07
- Social Networking Users surpassed Email in 07/09
- In the U.S. Facebook passes Google In Time Spent On Site in 08/10
- Social networking capabilities evolve rapidly: Chat, VoIP, Sharing, Location ...



- When will Social Networking surpass telecoms communication services?
- How can CSPs benefit from Social Networking?

Source: Morgan Stanley 2010, [www.businessinsider.com](http://www.businessinsider.com)

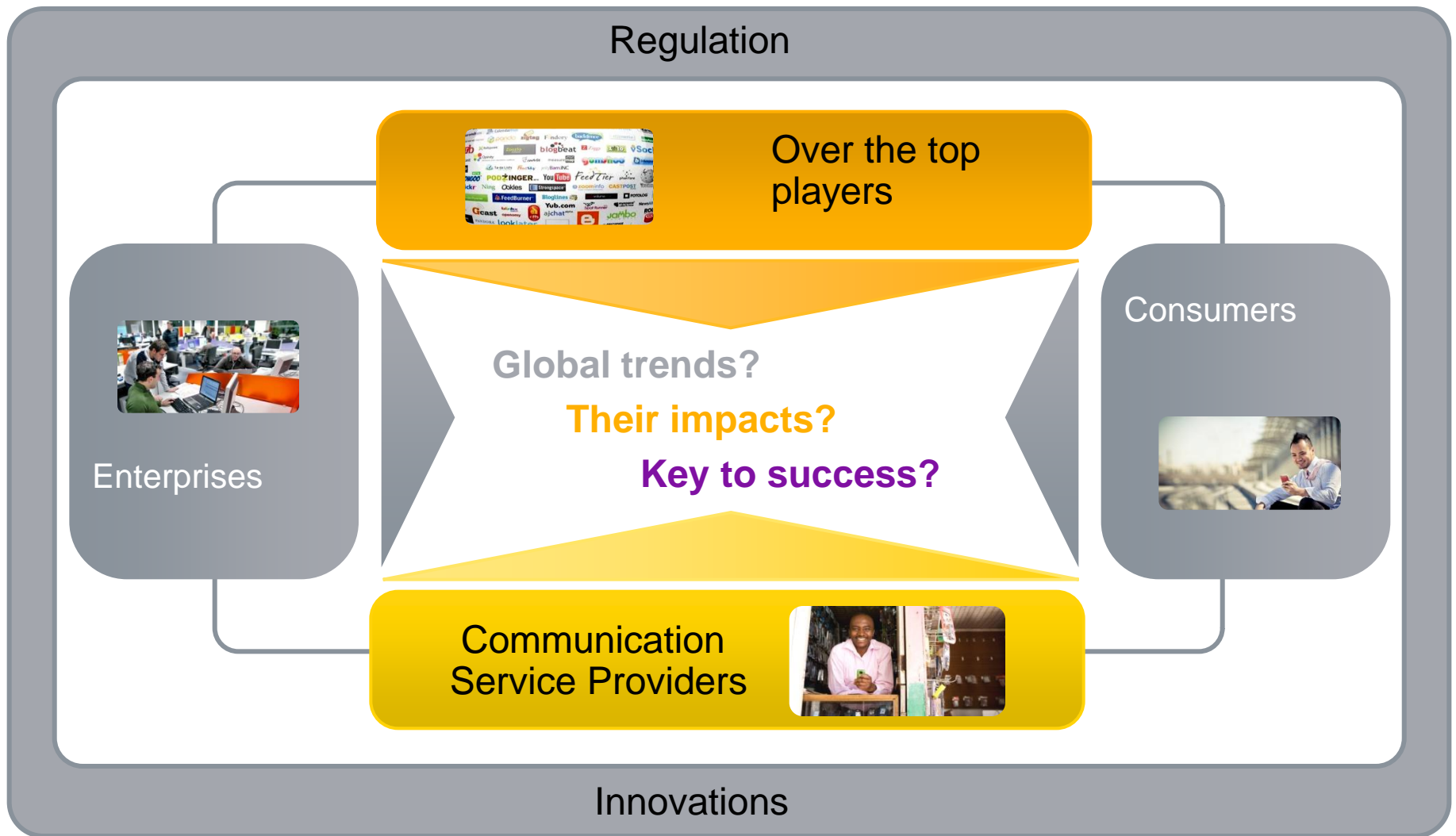
# A Provocative Statement

Where do innovations come from?

*“We watch Google very carefully; we watch Amazon very carefully; we even watch eBay very carefully, because the **learning will not come from watching AT&T and Telstra**”*

JP Rangaswami, Director of BT Design

# When everything changes



# Consumers

## - In search for a better experience



### Declining loyalty

- Less than 50% of customers are loyal
- Dissatisfaction drives churn
  - network & service quality becoming an issue

**Churn continues to hit margin**

### Multi-screen broadband

- Globally 32% of Internet users are „Everywhere users”
- Blurring boundaries - converged fixed mobile internet bundles gaining popularity

**New differentiated business models**

### Web x.0 drives behavior

- “Free” Internet communication and social networks substitute CSP services
- Individual media discovery and consumption lowers VAS revenue opportunities

**Inroad of Internet economics**

# Enterprises

## - In search for efficiency gains



### Cloud computing is taking off

- Software is considered as a service
- Data traffic security remains a concern

**Leapfrog in efficiency needed**

### Web2.0, Unified coms and mobility join

- Employees and enterprises are embracing web 2.0
- Mobile UC is seen as a mean for productivity

**Business beyond voice and broadband**

### Vertical services gain momentum

- Request for outsourcing and M2M managed services is increasing
- New players enter the market

**New skills & delivery model important**

# Communication Service Providers - In search of the sweet spot



## Indifferent broadband offers

- Accelerating capacity demand, at shrinking flat rates and ARPU
- Pricing disconnected from costs

## Dynamic Landscape

- Strong launch activity in seven service areas
- Content services heavily launched

## Disruptive Strategies

- Advanced wholesale, such as reselling customer intelligence and access
- New multi-screen strategies

**Profit  
destruction**

**Service  
space crowded**

**Positions  
endangered**

# Over-the-top players - challenging CSP's foundation



## New ecosystems

Ecosystems around

- Video
- Social networking
- Search
- Device

drive industry and traffic

## New experiences

- Individualized and context specific
- Communication & media experiences

## New business rules

- User payments play a minor role
- Transaction based business dominates - e-commerce and advertising

**Accelerating network costs**

**New solutions for the digital life needed**

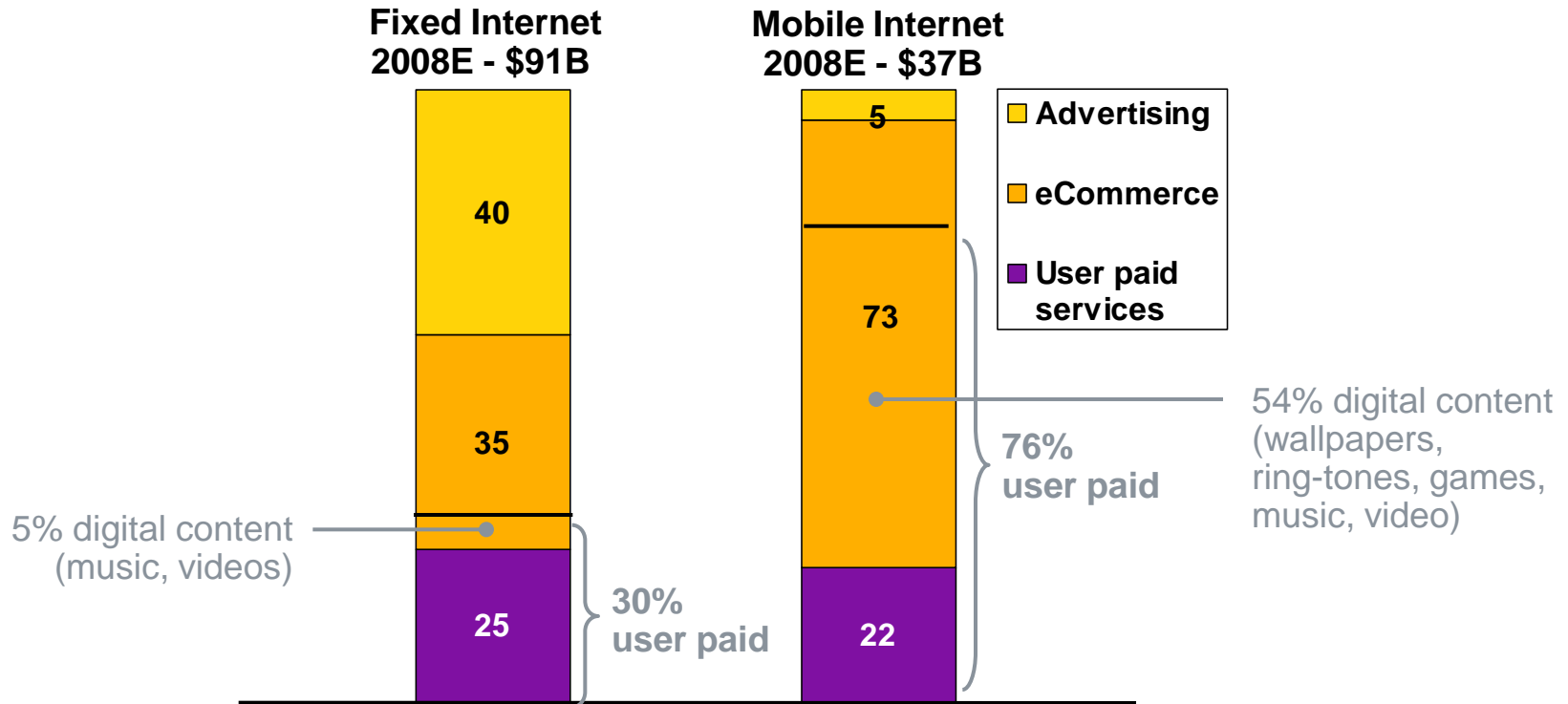
**Undercutting of traditional telco business models**



# New business rules - changing revenue sources



## Revenue Mix (ex. connectivity)



- Mobile Internet service revenues still dominated by end user payments – but for how long as Internet economics move into mobile?
- Multi-sided revenue streams needed – ATPU complementing ARPU and AMPU

# Regulation

## - bringing limits and opportunities

### Net neutrality

- Service providers cannot block usage of Over-the-top (OTT) services (e.g. Skype and Google)
- Traffic prioritization is not always allowed

### Roaming fees

- Regulators want to reduce roaming and interconnections fees
- EU plans to stop roaming fees in 2015 in the biggest roaming market

### Environment

- Government pressure drives industries to reduce their ecological footprint
- ICT seen in key role when moving to low-carbon economy

**Additional shift towards OTT**

**Drop in roaming fees directly hit CSPs bottom line results**

**Opportunity for CSPs helping other industries to become greener**

# Net neutrality removes entry barriers

- Blocking of lawful services not allowed
- Traffic prioritization sometimes allowed
- Consumers must be informed about prioritization
- Regional differences
  - EU:  
No final decision yet, but neutrality supported
  - Chile:  
First with net neutrality law in Latin America
  - USA:  
Neutrality proposed only in wireline

- CSPs cannot limit competition from Internet players
- Co-operate to create better customer experience

*"I am committed to keeping the internet open and neutral"*  
Neelie Kroes,  
European Commission  
Vice-President for the  
Digital Agenda



# Technology

## - taking a holistic view

### Chain reaction

- One technology drives another technology or business model
- A catalyst, like iPhone, is often needed for service take-off
- Soft issues can hinder take-off

### Cloud computing

- Enterprises looking for flexibility and reducing fixed costs
- Cheap bandwidth drives cloud services
- Security, performance and availability are key

### Mixed networks

- Various technologies running in parallel
- Number of devices to explode (e.g. M2M)

**Disruptive impact on the business**

**Importance of the network increases**

**Automation and self-organizing networks important**

# Pure Network Infrastructure View

## Key Trend

- Mobile broadband boost by Smartphones
- Video consumption acceleration by reducing digital dividend
- Smart cities call for “internet of things”

## Challenge

- Signalling traffic explosion generated by mobile Apps
- IP Core processing power demand exploding
- IP addresses, signalling and data traffic increase, security, identity management

## Solution

- Internet HSPA, smartphones optimization features
- Multi-layer optimization, i.e. combined OTN switching and MPLS-TP adoption
- IPv6, flat architecture, unified subscriber database, policy control

# Put the customer in the center – evolve to the Network of One

One  
Simplified  
network

One  
Flexible  
service delivery

One  
Agile  
operation



## Holistic approach to efficiency and experience

# One day in a connected life

Personalized news is streamed to the home's 3D HDTV wall

Peter is already working, controlling an assemble line remotely from his home office

The doorbell rings, and all screens switch to door cam view

Linda gets into her e-car, and downloads the latest air travel information

Linda reserves an e-car 'park & charge' space at the airport

At the office, Linda joins an HD video conference with her team

The Smart grid recognizes the home's energy need in real time



Linda is now in a shop, paying for goods via her Smartphone

... and then she uses her tablet device to turn the oven on

She notices tourists nearby using augmented reality glasses for sightseeing

Linda uses her tablet device to start up the cleaning robot

Linda's car navigation directs her to the reserved e-car parking space

Linda is woken up by her tablet device, and checks her social networking pages

She is checked in automatically and her Smartphone receives the latest flight updates



Linda now can relax and watch a movie streamed from her personal library

Time for a workout - body sensors transmit vital signs to Peter's personal trainer

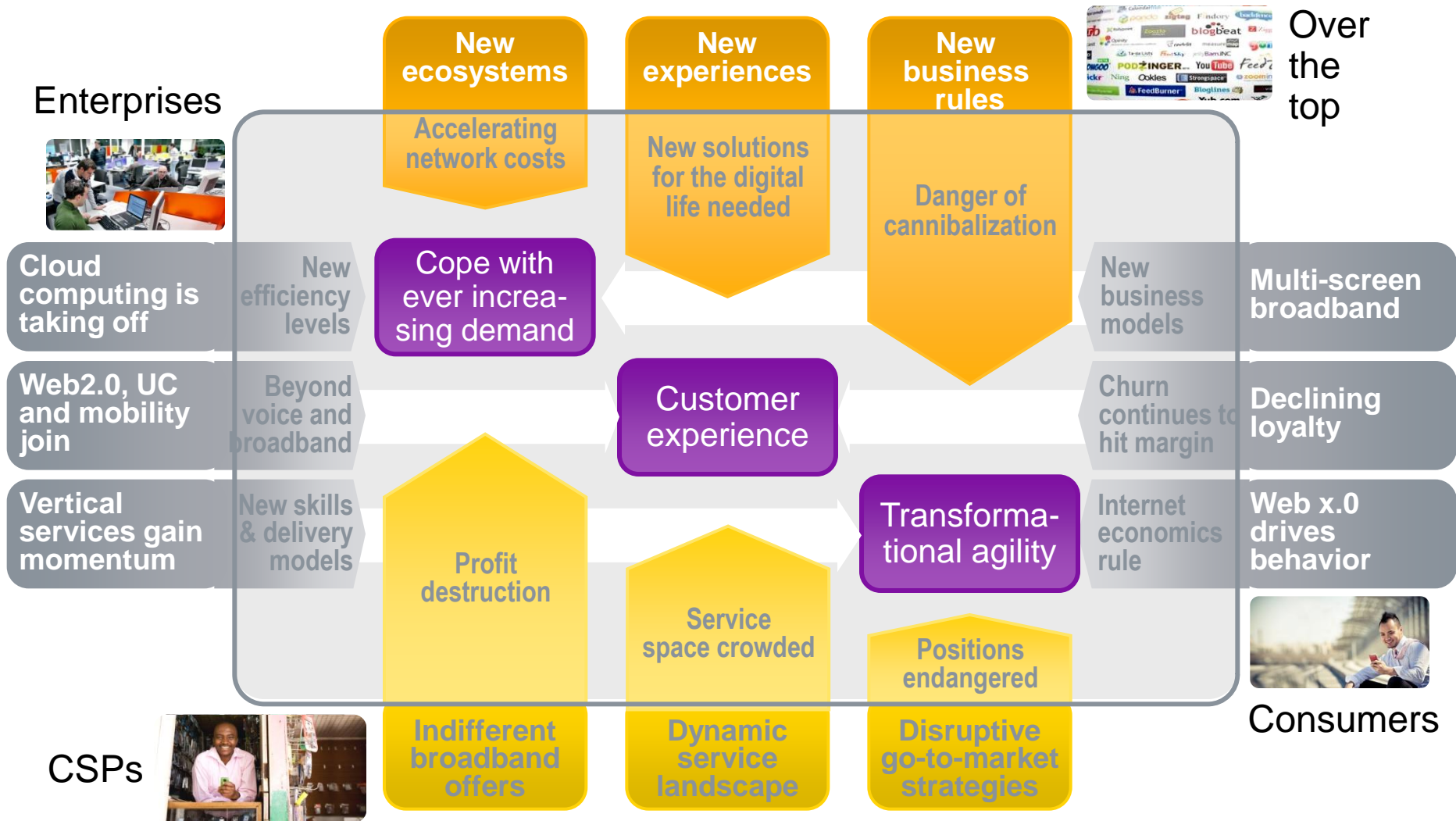
The weather is great, so Peter continues to work in the park, using his tablet device

Peter shares a video of their daughter with Linda using his Smartphone

Linda rejoins the video call with her global team via her tablet device

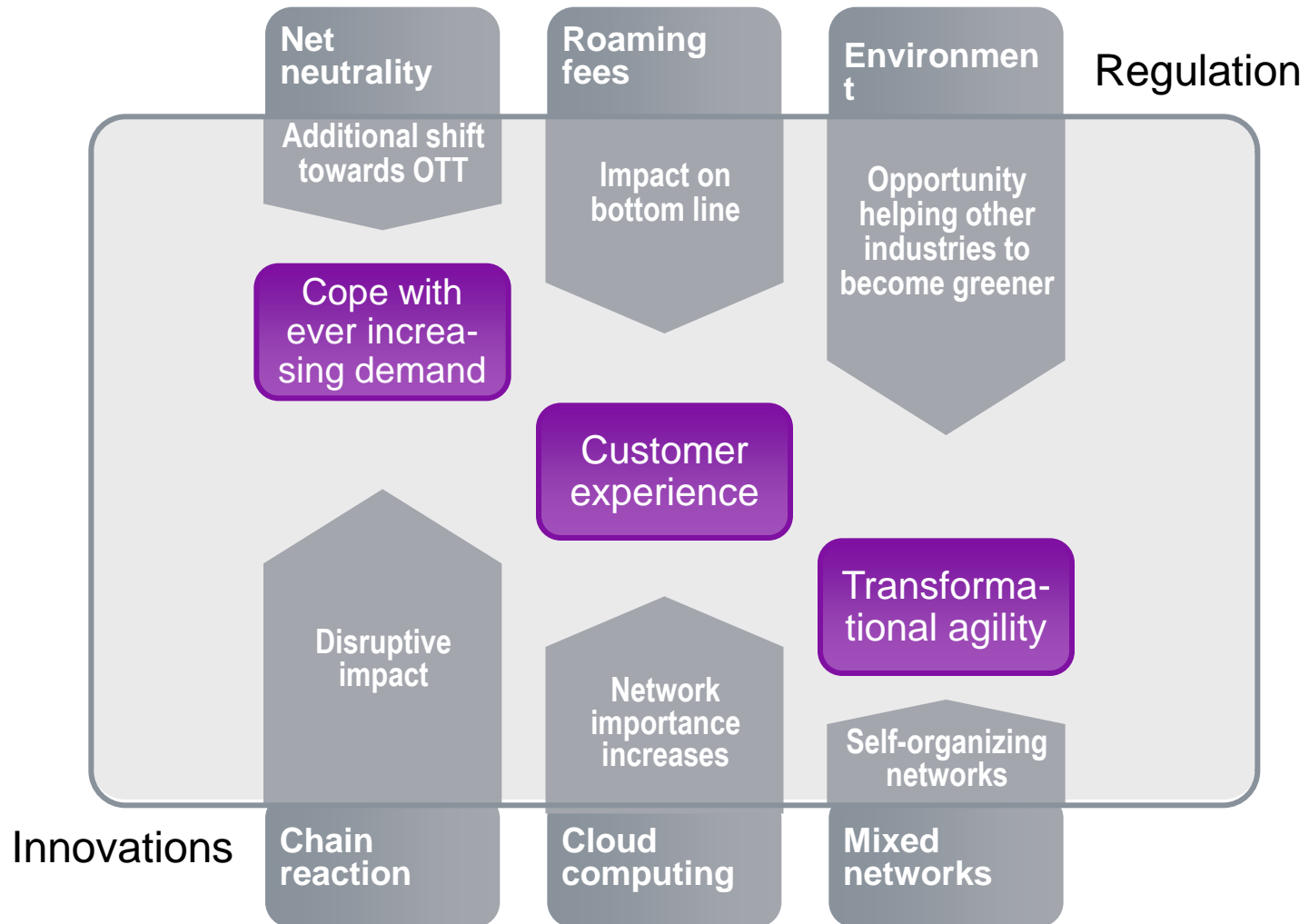


# We believe there are three key areas that are critical for CSP success in the changing industry

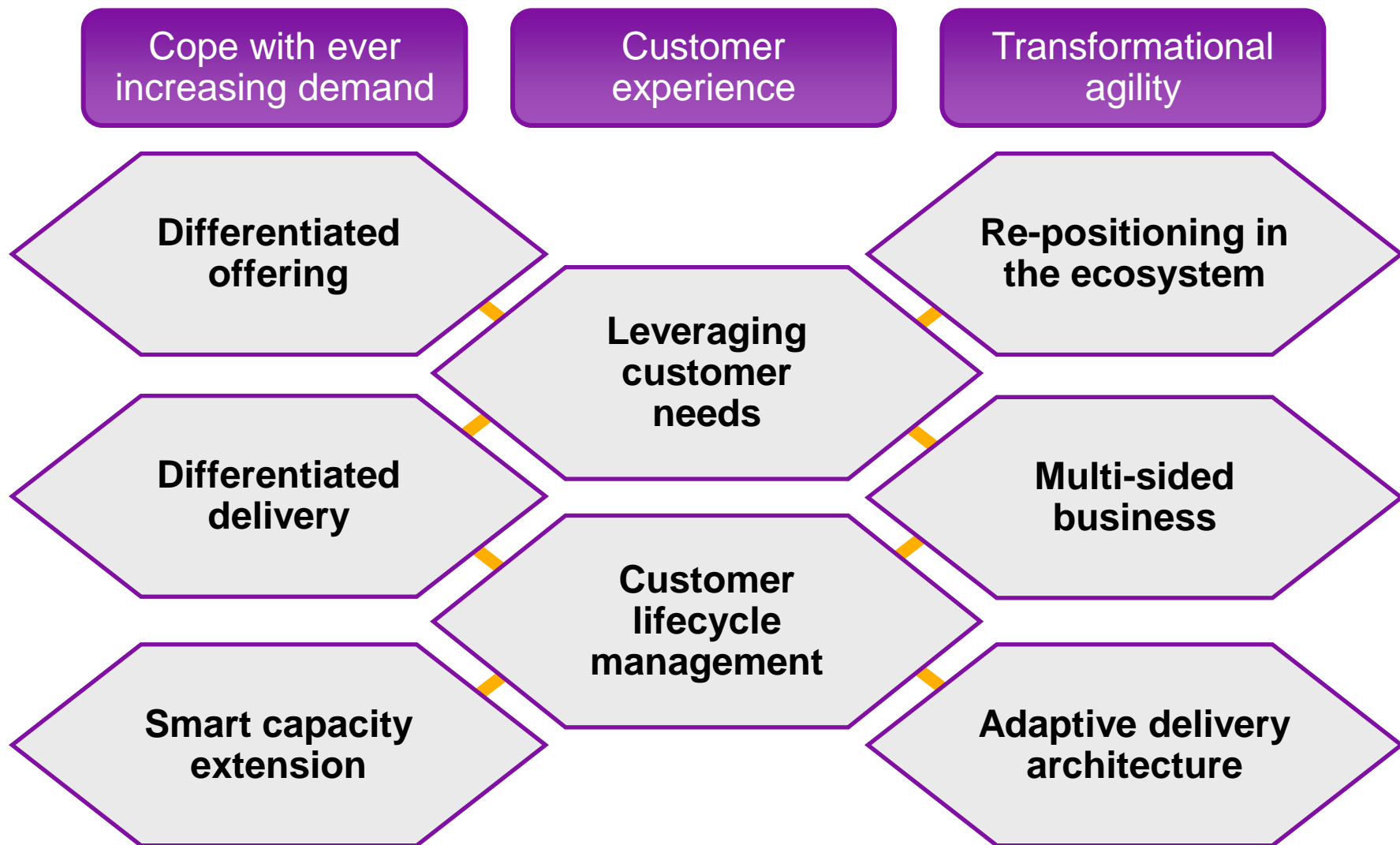




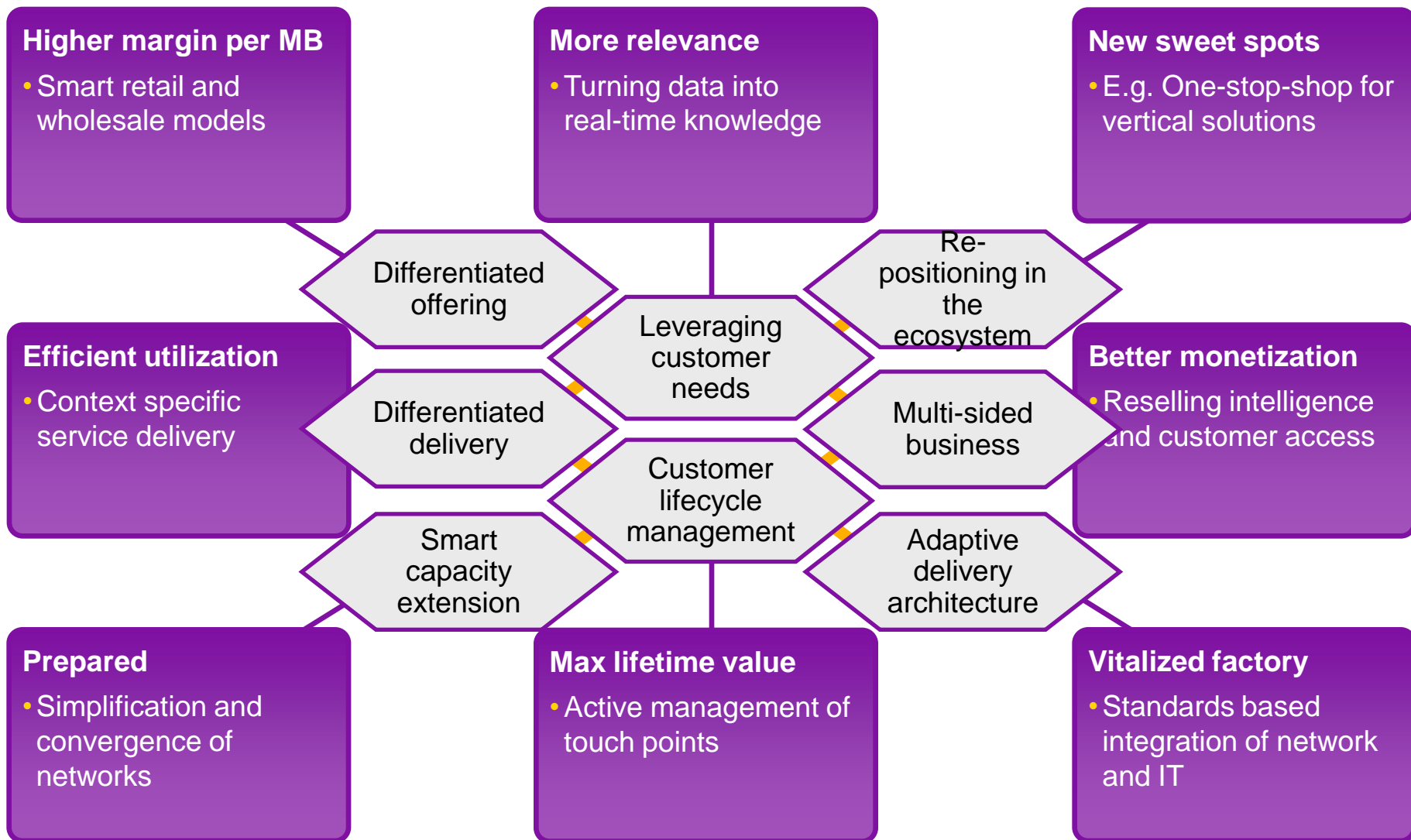
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# Industry trends call for eight initiatives to ensure sustainable business success



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# Summary

## - When everything changes



### Landscape movers

### What CSPs have in their mind

### Urgency to act

**Cope with ever increasing demand**

**Traffic monetization**

Margin per bit to be lifted due to profit destruction

**Customer experience**

**Customer relationship monetization**

Over-the-top players occupying the customer

**Transformational agility**

**Sweet spot exploration**

Disruptions endanger current positions