

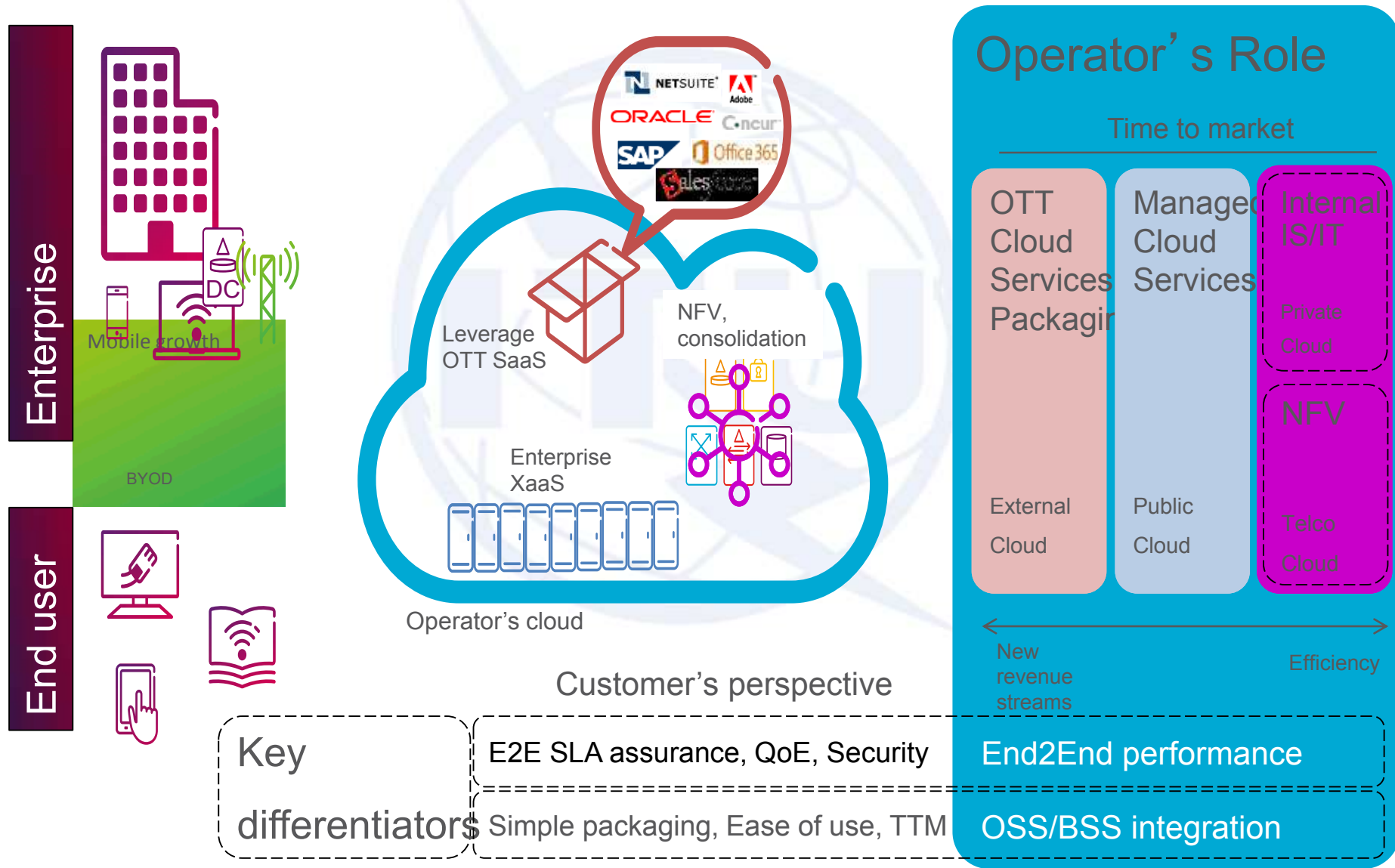




Telco Cloud and Using Big Data to Improve Customer Experience and to Drive new Revenue Streams

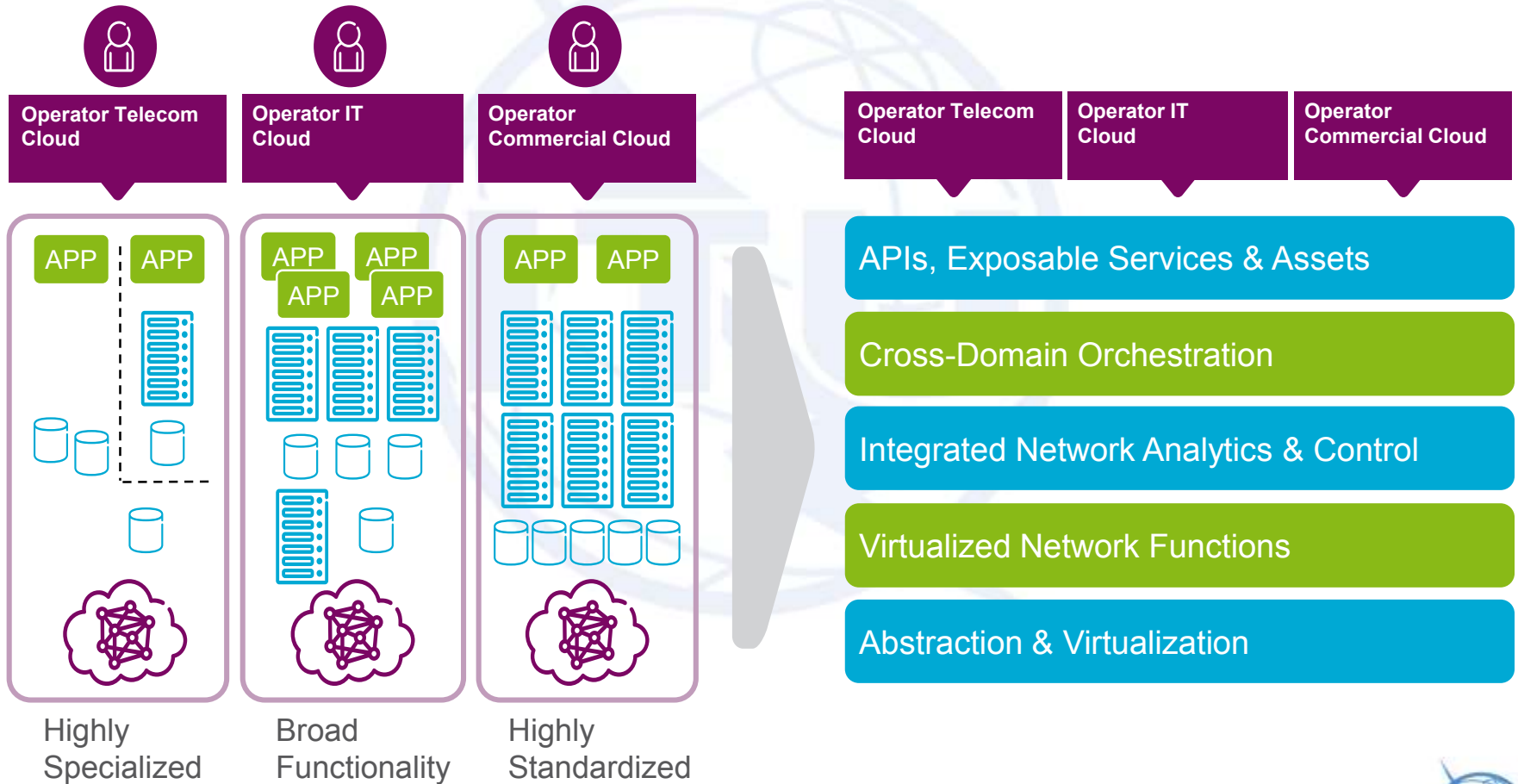
Mohamed Aly Eladel – Senior Consultant Ericsson

Operator Cloud Opportunities

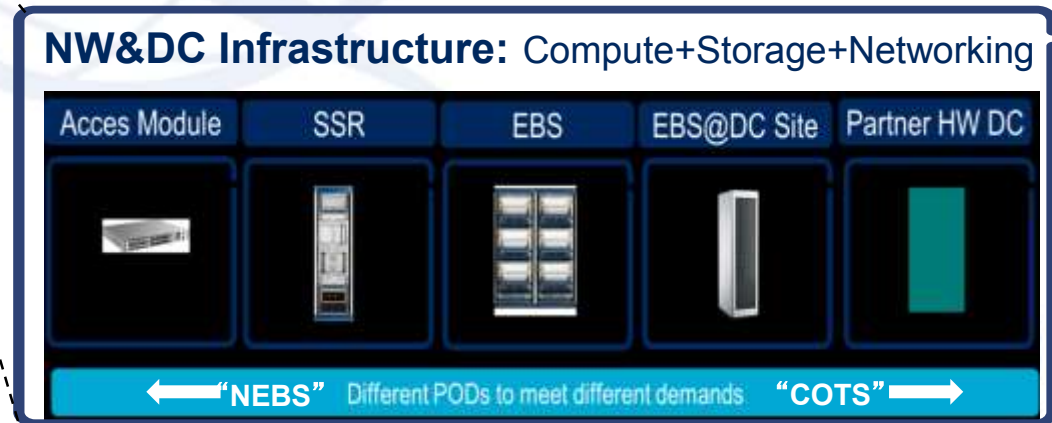
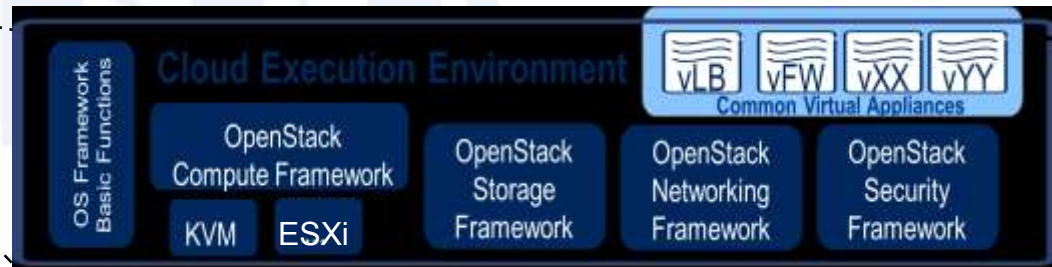
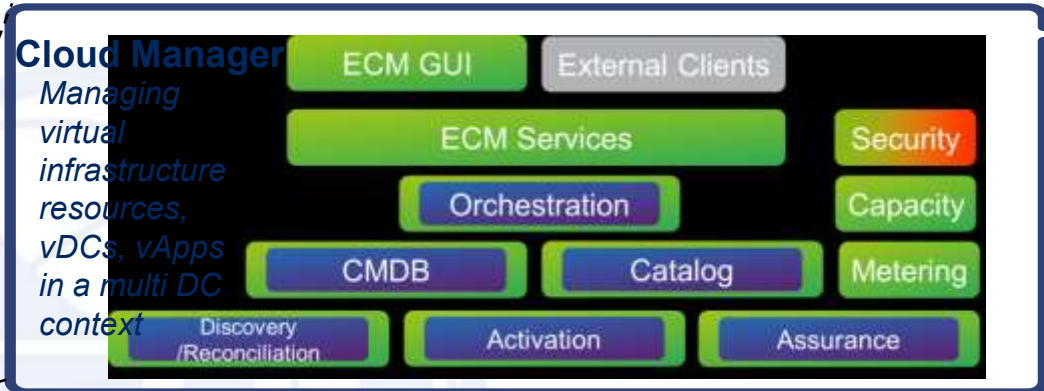
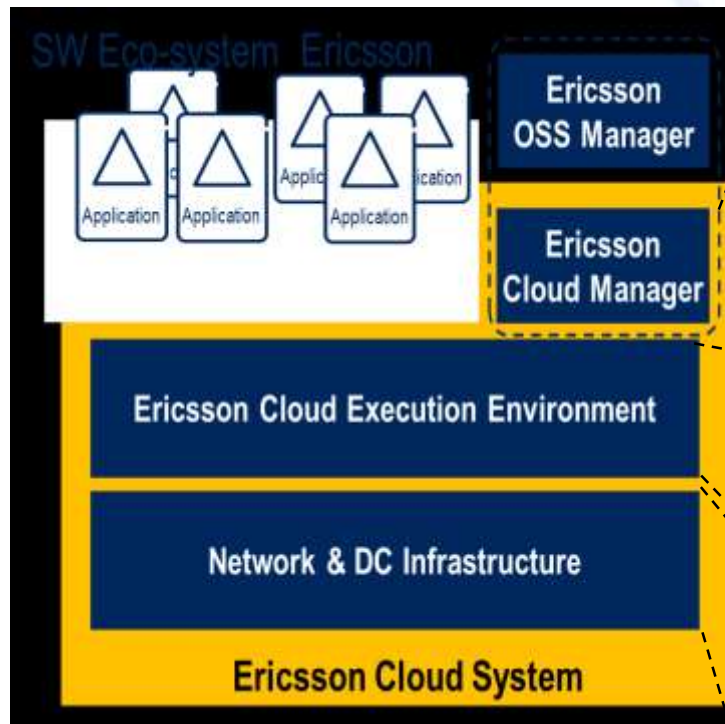


Telco Cloud

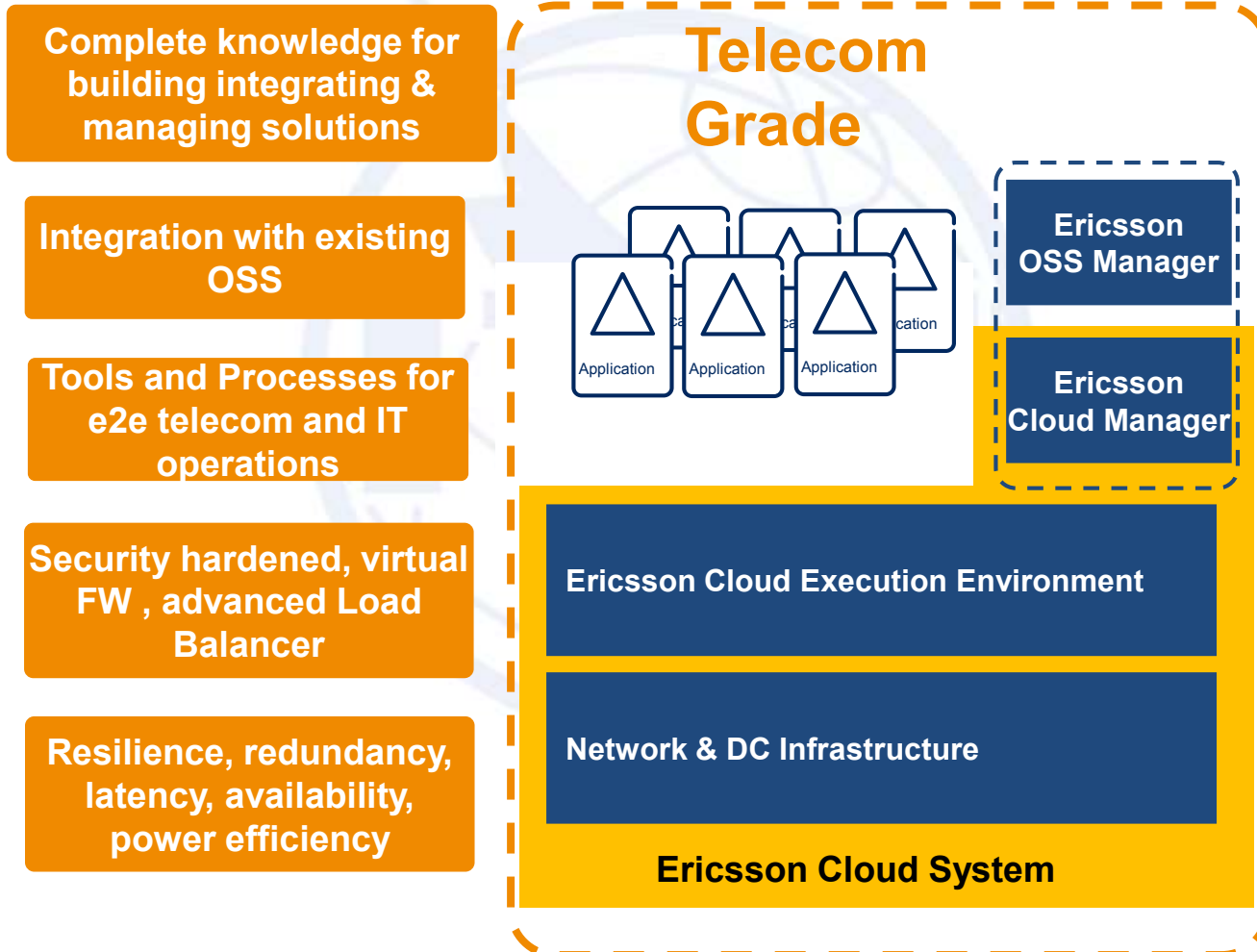
Enterprise wide Transformation



The network enabled Cloud Ericsson Cloud System (ECS)



BUILDING TELECOM GRADE PERFORMANCE



Big Data Analytics

Understanding data

What is data? A Customer's record, Subscriber's telephone # and address, a retail ticket, an insurance claim, an inventory list, a sales order, a flight ticket...etc.

Customer Record Software Interface

Fields include: First Name, Last Name, Birth Date, Marital Status, Phone, Mobile, Address, State, Country, Zip/Postal Code, Email, and a list of previous orders with columns for Order No., Customer Name, Mobile, Date of Bill, Cn, and Order Provider.

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INVENTORY

From our experience of handling claims, we have noted that many of our clients are under-insured, due to the rate of inflation and ever increasing costs. Therefore, in view of the condition of average, it is in your interest to check, without delay, the adequacy of your sum insured by using the following valuation schedule and advising your agent or broker of your requirements. Similar attention should also be given to your All Risk Policy.

NAME	ADDRESS				
BEDROOMS	1	2	3	4	STUDY/WORK ROOM
Bed and mattress					Desk and bookcases
Bedside table					Tables and chairs
Wardrobes					Books and manuscripts
Tables and chairs					Curains and loose carpets
Curains, loose carpets					Paintings and ornaments
Paintings and ornaments					Sewing machine
Linens, blankets, bedding					Knitting machine
Clothing, footwear					Camera and projector
Furs and jewelry					Fragrances and brooches
Reading lamps					Typewriter
Toys					Sporting equipment
TV Set					Reading lamps
Other					Other
TOTAL					TOTAL
BATHROOM/TOILET	1	2			ENTRANCE HALL/PASSAGE
Curains, loose carpets					Tables and chairs
Toilets, toilets					Curains, carpets
Shaving equipment					Paintings, ornaments
Handbar					All household fixtures
Other					Linens stored
TOTAL					Other
					TOTAL
LOUNGE					FAMILY ROOM
Lounge suite					TV, video, video games
TV and video games					HIFI and tape deck
HIFI and tape deck					Records, tapes, CD's, DVD
DVD player and DVD's					Tables and chairs
Records, tapes, CD's					Curains, loose carpets
Display cabinet					Paintings, ornaments
Display articles					Piano, other instruments
Tables, chairs					Reading lamps
Curains, loose carpets					Hour and glass sets
Paintings and ornaments					Other
Reading lamps					TOTAL
Other					
TOTAL					
					DINING ROOM
					Dresser and sideboard
					Tables and chairs
					Dinner service
					Cutlery and silverware
					Reading lamps
					Display articles
					Glassware
					Hip ring
					Curains and loose carpets
					Paintings and ornaments
					Sea trolley
					Other
					TOTAL
KITCHEN					SERVANTS QUARTERS
Fridge and contents					Bed and mattress
Freezer and contents					Wardrobe
Dishwasher					Tables and chairs
Washer and blender					Curains, loose carpets
Wastbin and rubbish					Paintings and ornaments
Electrical appliances					Linens, blankets, bedding
Cutlery and crockery					Clothing, footwear
Furniture and curtains					Radio and TV
Decorates					Other
Librally					TOTAL
Non-praise items					
Other					
TOTAL					TOTAL
					GRAND TOTAL

NB: Please complete and send back within 14 days



Checkout

INSURANCE CLAIM FORM

Personal Information

Name (Last) _____

Address (Mailing Address) _____



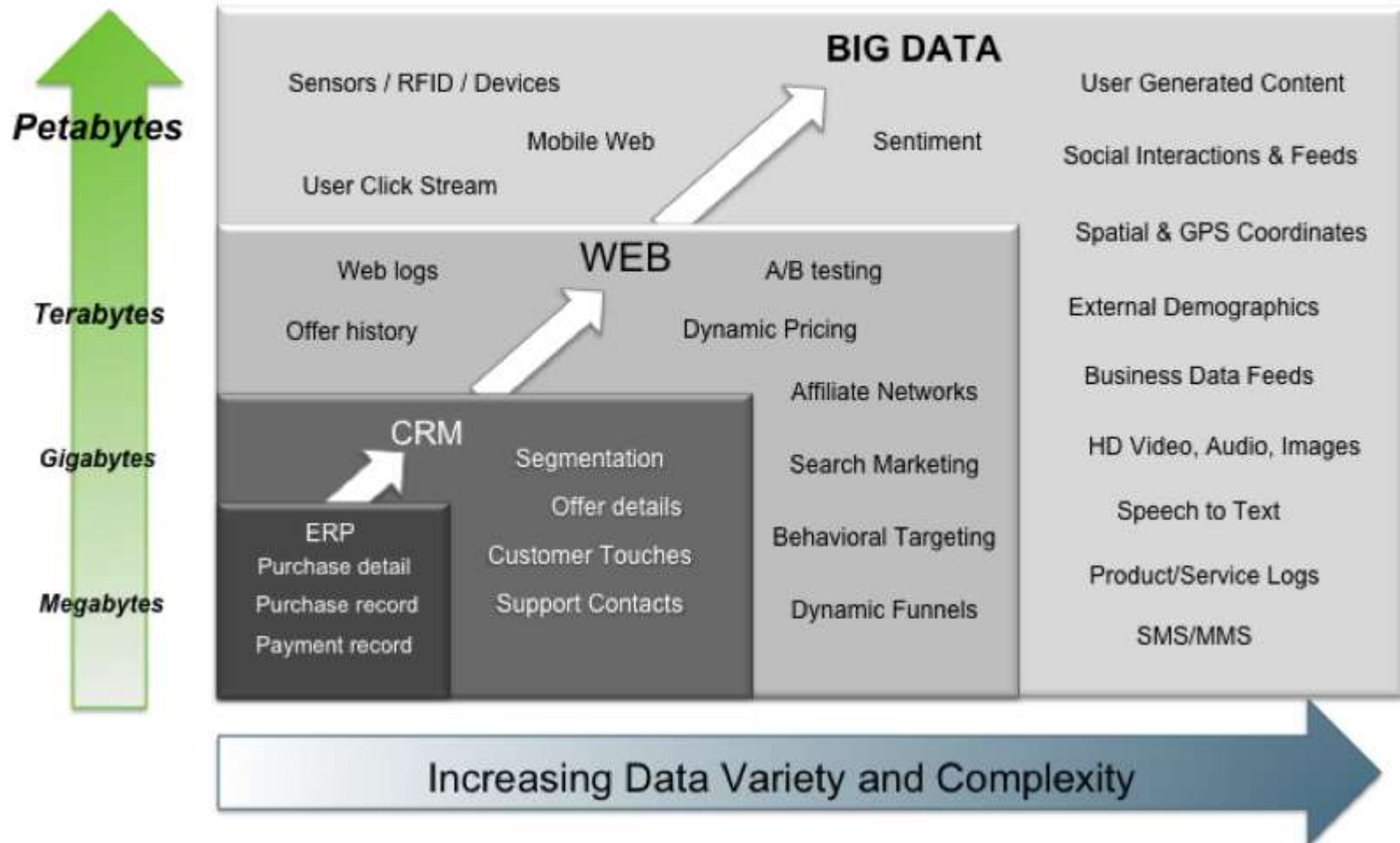
CHANGING NATURE OF data

- The manifestation of data has changed dramatically over the last few years. Data today is quite different from what data used to be a few years ago!



Evolution of big data

Big Data = Transactions + Interactions + Observations

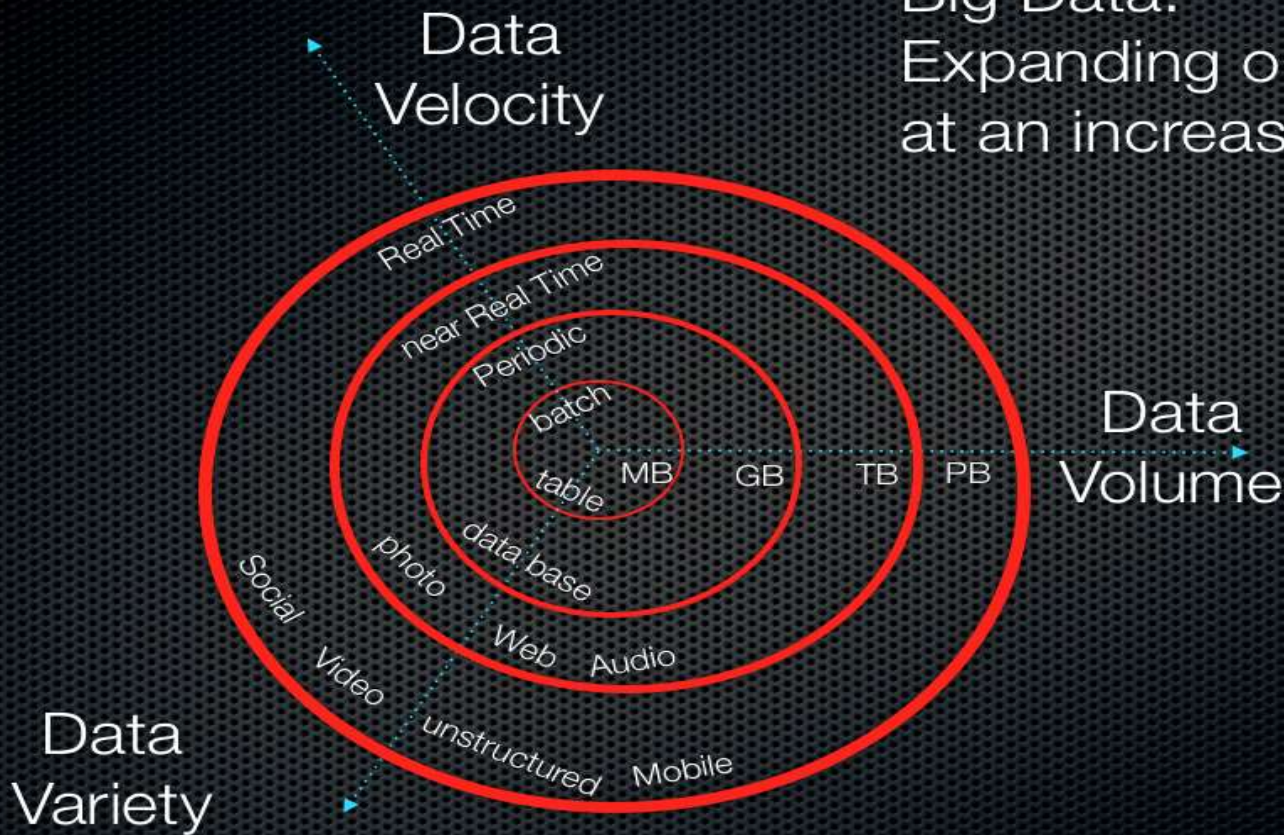


Source: Contents of above graphic created in partnership with Teradata, Inc.



The pillars of bigdata

Big Data:
Expanding on 3 fronts
at an increasing rate.



Traditional BI limitations

- Prohibitively expensive solutions to handle Volume
- Expensive, Complex and Unfeasible in handling of Variety
- Design and Architecture not able to handle high Velocity
- Inefficient and Expensive in handling Complexity

Solution



Non SQL DB such as Cassandra or MongoDB or New MPP DB such as GreenPlum

- A reliable and shared storage system.
- Storage provided by HDFS
- Processing provided MapReduce

Ericsson Expert Analytics

E2E ACTIONABLE INSIGHTS



PRODUCTIZED APPLICATIONS



DATA MODELS, CORRELATION & ALGORITHMS



ADVANCED BUSINESS LOGIC

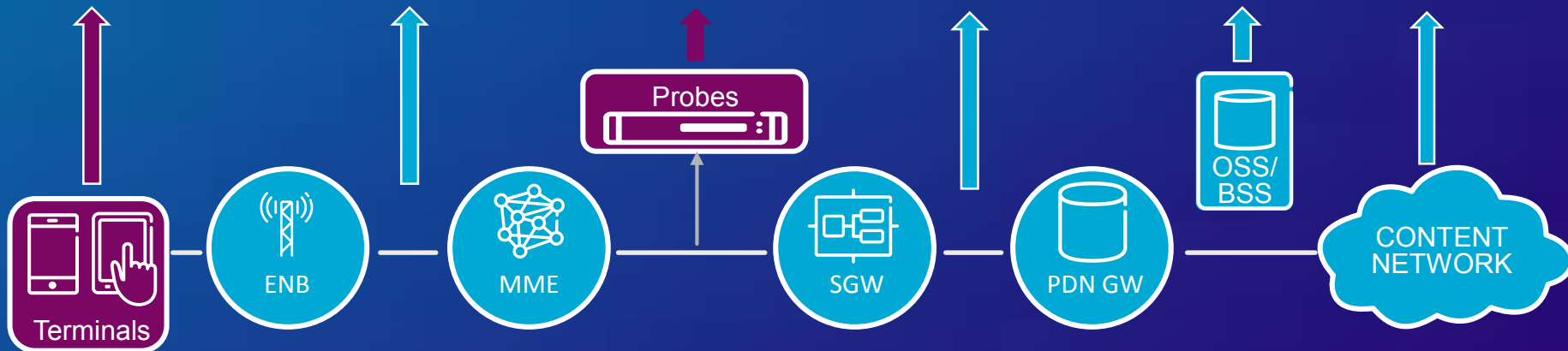
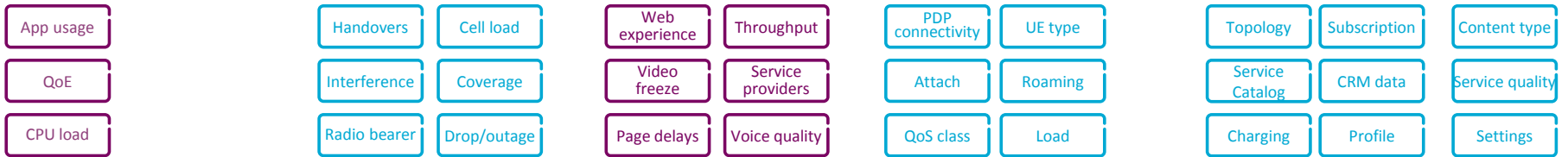


SERVICE LEVEL INDEX

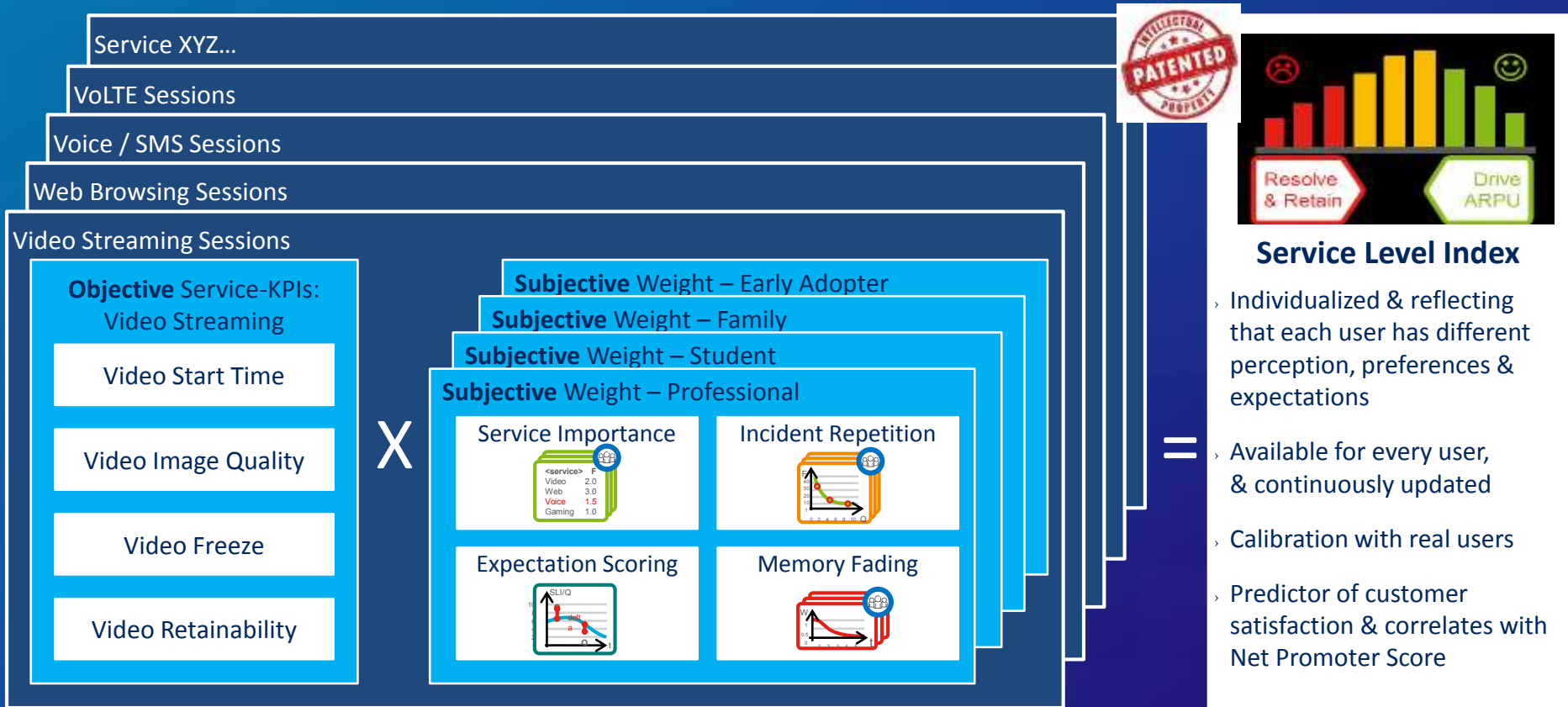
Correlated, End-to-End, Multi-source View of every customer session

End-to-End Session Record (ESR)

Every Customer, all the time, in real time.



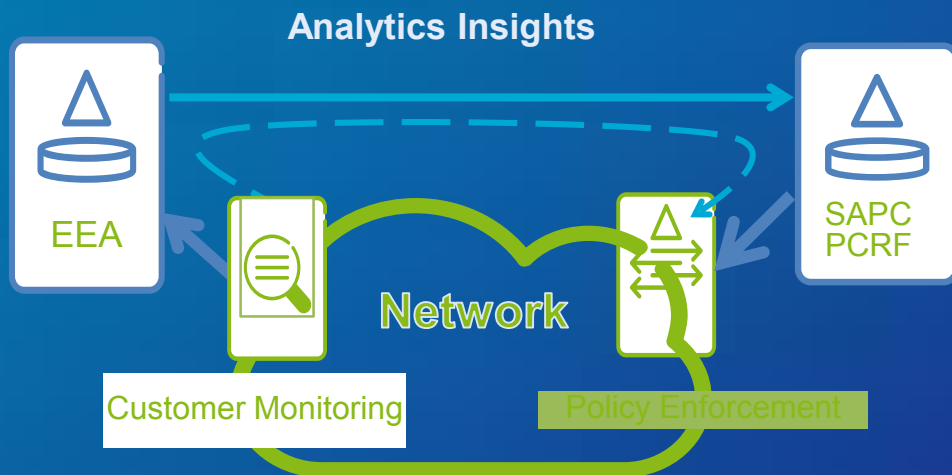
Service Level Index (SLI)



Service Level Index

- › Individualized & reflecting that each user has different perception, preferences & expectations
- › Available for every user, & continuously updated
- › Calibration with real users
- › Predictor of customer satisfaction & correlates with Net Promoter Score

VIP/Enterprise Dynamic experience Management



KEY HIGHLIGHTS:

Dynamically resolve customer problems for VIPs

- Track each VIPs Quality of Service
- If Quality is not at objective, issue Alert to Policy Control
- Policy Control takes action to improve customer's service
- When service improves, restore policy to standard

KEY BUSINESS BENEFITS:

- Ensure high quality for most valuable customers
- Respond automatically before customer calls
- Reduce churn, enhance opportunity for upsell



Experienced-Based Marketing



KEY HIGHLIGHTS:

Utilize unique Ericsson Expert Analytics insights about each subscriber to drive revenue and reduce churn

- Powerful **micro-segmentation** using real-time network insights correlated with traditional customer and BSS insights
- What is the **satisfaction** of each and every subscriber? (Service Level Index)
- What is their **profile and behavior** (e.g. Social media fanatic, Heavy Netflix Usage in evening etc.)

KEY BUSINESS BENEFITS:

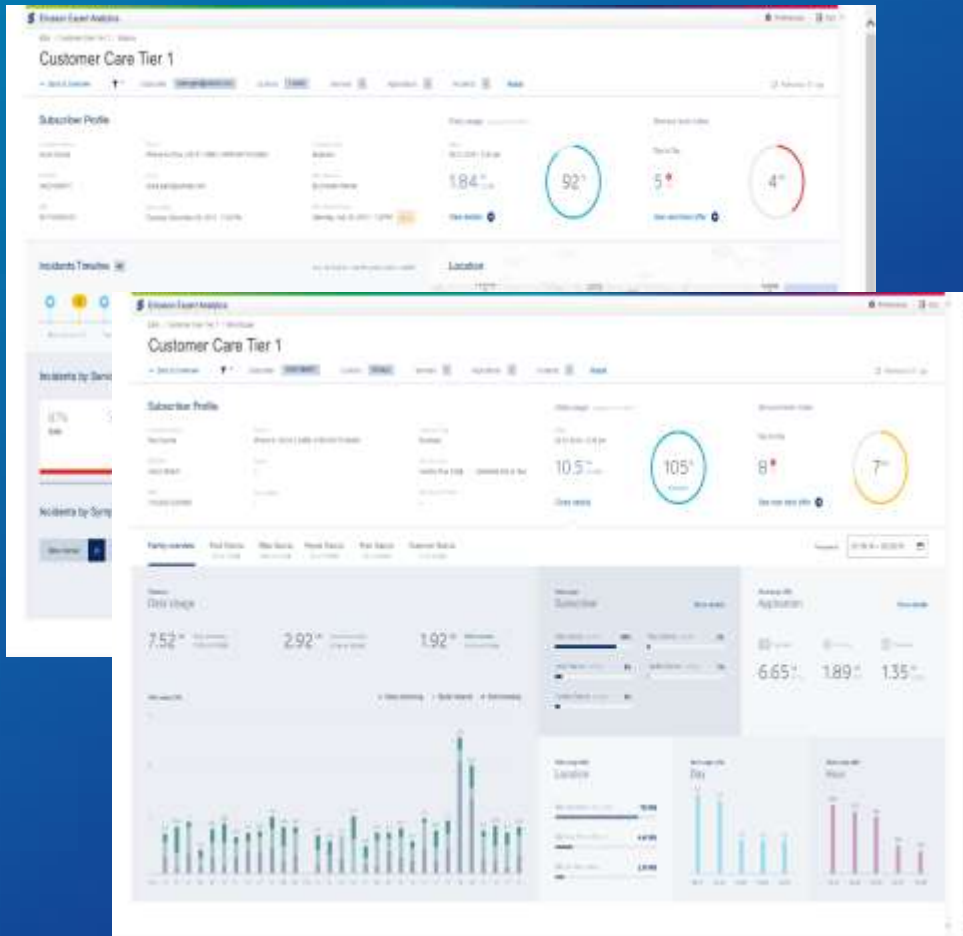
Drive ARPU

- Which customers are most satisfied and most likely to buy additional services and products?
- What Upsell/Cross-sell offers are best fit?

Reduce Churn

- Which customers are most unhappy, and what are the contributors to their dissatisfaction?
- What can be offered to make them stay?

Empowered Customer Care



KEY HIGHLIGHTS:

Proactive handling of customer experience issues in Customer Care

- **Predict Reason for Call** – Why might the customer be calling? How to resolve the call?
- **Validate the Complaint** – Did the customer really have an issue? If so, when and where did it happen?
- **Take Action** – Identify the “Most Probable Cause” and trigger the “Next Best Action”

KEY BUSINESS BENEFITS:

- 48% Reduction of Average Handling Time (AHT)*
- 35% Increase in First Call Resolution Rate*
- Reduced number of trouble tickets created
- Increase Net Promoter Score