

ANALYST PRESENTATION

FY2017

VINOD KUMAR - MAY 2017



WHAT NEEDS TO GET DONE IN FY17-18

OUR PRODUCT FOCUS



TRADITIONAL SERVICES

Productivity and Operating Leverage

\$7\$

NEW SERVICES GROWTH

>25% Growth Move towards positive EBITDA Internet WAN, UCC, Hosting



DIGITAL TRANSFORMATION

Internal Digital Transformation of IT, Finance and SCM

INNOVATION

Focus on Customer POCs and Formal Launch

Mobility, IoT, Security, SDWAN





WHAT NEEDS TO GET DONE IN FY17-18

DIFFERENTIATING ACTIVITIES



Get the new Go-2-Market working Revamped Customer Experience



Improve internal business velocity through process simplification and automation















HOW WILL WE MEASURE OURSELVES?

GROW REVENUE PROFITABLY



Achieve Sales Order Booking Target Achieve Net Revenue Target Achieve Free Cash Flow Target

SHAPE THE FUTURE



Achieve Revenue Target for New Products Advance the Partnership Program

BECOME THE SQ OF TELECOM



Improve Satisfaction in Quote 2 Order Process Improve Satisfaction in Order 2 Cash Process Improve Overall Customer Satisfaction

BE A GREAT PLACE TO WORK



Improve and Transform our Collective Skillsets Improve Overall Diversity Level

NEW SERVICES ROADMAP

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TATA COMMUNICATIONS UCC, MOBILITY & IoT

| | Available Q1 | 6-12 months |
|-----------------------------------|--|--|
| Global SIP Connect | Full PSTN Replacement in 24 Countries | API Interface Full PSTN Replacement in 29 Countries |
| UCaaS CISCO | WebEx CCA and CMR, Cloud plus dedicated and hybrid collaboration solutions | Launch of SPARK Cloud and Hybrid Services |
| UCaaS Microsoft | Cloud, dedicated and hybrid collaboration solutions | Seamless integration with Contact Center solution |
| MOVE Mobile Virtual Enablement | IoT Connect (SIM and eSIM), SIM Connect (Data only) and Mobile Network Enablement | Integration of voice and SMS to SIM Connect Hosted VoLTE / VoWIFI |
| IOT India | Human Safety Apps on HPE platform by May 2017 | Smart lighting, Smart Asset tracking and Management, Smart Water 60 cities rolled out |



TATA COMMUNICATIONS **GLOBAL NETWORK SERVICES**

| | Available Q1 | 6-12 months |
|---|--|---|
| IZO [™] Hybrid WAN and Internet WAN | Reach 100 countries for IZO IW | Reach 130 countries for IZO IW |
| IZO™ Private / Public Connect | Alibaba Zero Commit usage based | Orchestration for network on demand with cloud connection on demand |
| IZO [™] SDWAN PRIME and SELECT | Cloud Gateway reach to 20 | |
| Internet (IPT / ILL) | | Roll out 10-15 New PoPs |
| Ethernet GDE / NDE | GDE Burstability | 10 New PoPs |
| Transmission Products | New Transmission PoP - Maruyama Mumbai - Chennai NPL on SMW4 | Bandwidth on Demand Solutions at Layer-1 Go live with Seabras into Brazil |



TATA COMMUNICATIONS CLOUD AND DATA CENTER SERVICES

| | Next 6 months | 6-12 months |
|--|--|---|
| Managed Hosting Services IZO™ Private Cloud IZO™ Cloud Storage | Geo expansion: Dubai, Germany (IPC and ICS) Hadoop as a service Managed MS Azure | Managed services for Amazon Web Services |
| Managed Security Services | New SOC at Pune and Singapore Launch of services under Risk and Compliance (Security assessment framework) Cloud Based Web Application Firewall | New SOC Europe Launch of advanced threat management service |

THEMES, VALUE PROPOSITIONS AND SOLUTION MAPPING

| THEMES | | VALUE PROPOSITIONS | LEAD SOLUTION AREAS | SOLUTION AREAS APPLICABLE FOR THEME |
|--------|--|---|--|---|
| | Borderless growth | Become truly global across new markets and segments with best-in-class infrastructure Rapidly develop new revenue streams in an agile manner | IZO WAN, MHS, MSS IZO WAN, MHS, MSS, IZO Pvt Connect | IZO WAN IZO Private Connect MOVE (IoT Connect, SIM Connect) MMX MSS |
| | Productivity and efficiency | Enable seamless multi-platform collaboration Ubiquitous access to your data and applications | UCaaS, SIP MHS, MSS, MOVE (IoT connect) | UCaaS (Cisco MOVE (IoT) and Microsoft) Global SIP Connect MSS APIs (UCC) |
| | Customer experience and engagement | 5. Enable seamless omni-channel experiences to increase customer awareness and loyalty | InstaCC, MMX | CDN Web RTC API suite (incl. WSS Wifi+) InstaCC MMX |
| | Managing business risk | 6. Secure your data and applications against external threats7. Ensure reliability and near-zero business disruption | MSS (DDoS, SIEM, Secure Web Gateway) IZO WAN, MHS, MSS | IZO WAN Cloud and hosting MSS IZO Private DDoS SIEM MHS |

BUSINESS TRANSFORMATION



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BUSINESS TRANSFORMATION

PROJECT TRACKS & TIMELINES

| Focus Project Tracks | Time to Full Functionality | Time to First Benefit |
|------------------------------------|-------------------------------|--------------------------|
| Sales Automation | 2-3 Years | 1 Year |
| Partner Management | 1 Year | 1 Year |
| Billing and Collection Improvement | 2 Years | 6 Months |
| New Product Introduction | 1 Year | 1 Year |
| Provisioning | 2 Years | 9 Months |
| Service Assurance Automation | 2 Years | 1 Year |
| Service Management | 1 Year | 9 Months |
| Data Cleanup | 1.5 Years | 9 Months |



SUSTAINABILITY



SUSTAINABILITY

WINNING MIX

Overall female headcount up from:

- 17% in 2014 to
- 20% in 2017

Company goal to reach 30%

CSR

\$2.2m USD Spent

11 Major Projects

Outreach Touched ~45,000 People

ENVIRONMENT

Plans set for 73.6 Megawatts of Renewable Energy

FY17 saw a reduction of 770 metric tons of CO2 eq.



Image of 70 Megawatt solar facility in Japan for illustration purposes. - KYOCERA



FINAL THOUGHTS

"We are more like an OTT than a telco."

- Growing Portfolio of Value Added Services.
- Cloud, API and Hybrid becoming a way of life.
- Creating and enabling more platforms.

"We are a safe haven in the tech and telecom space?"

- Globally diversified.
- Broad but Cohesive portfolio.
- Pipeline of incubation projects.





THANK YOU

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MOBILE CONNECTIVITY AND THE INTERNET OF THINGS...

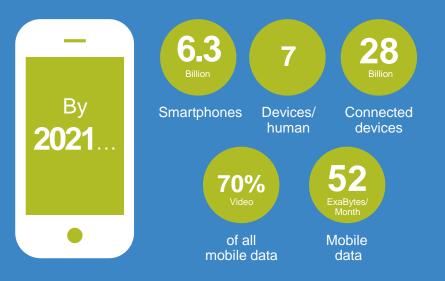
BORN CONNECTED

ANTHONY BARTOLO May 2017

OPPORTUNITY ... BY THE NUMBERS





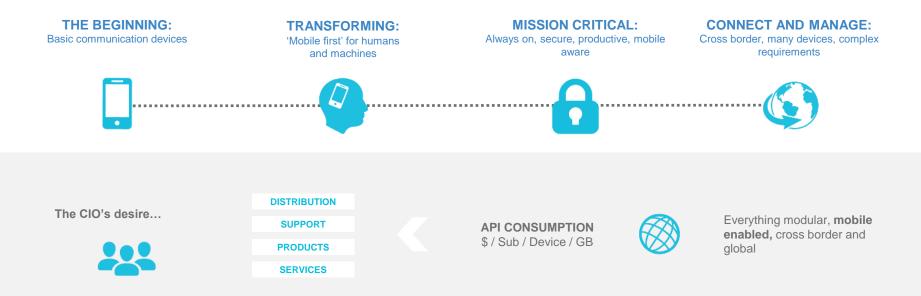




NEW ERA OF PEOPLE AND THINGS BORN CONNECTED



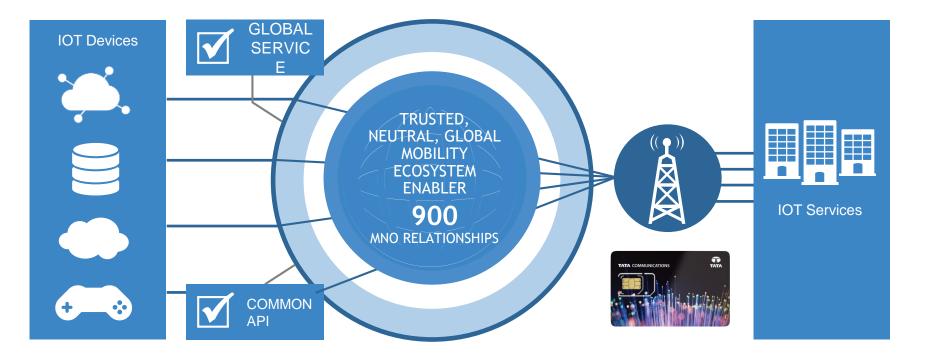






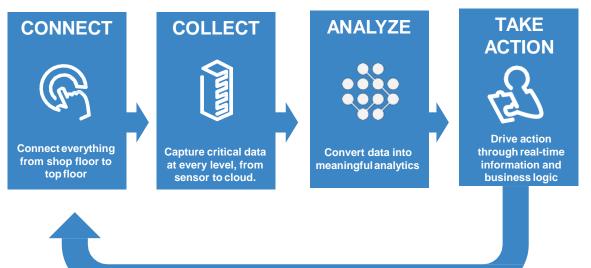
TURNING NETWORKS INTO AN API <u>GLOBALLY</u>

ACROSS 900+ NETWORKS...



ECOSYSTEM PLATFORM DRIVES BUSINESS DECISIONS

MAXIMIZES VALUE OF DATA BY TRANSLATING INTO ACTIONABLE INTELLIGENCE



CLOSE THE LOOP

END CUSTOMER VERTICALS

MOST INDUSTRIES SEE BENEFITS OF LEVERAGING MOBILITY / IOT

| Automotive | Cars and electric car manufacturers |
|--------------------------------------|---|
| Moving Assets | •Solution providers managing moving assets in telematics, logistics, and navigation |
| Consumer Electronics & Device OEM | Consumer devices manufacturers |
| Construction & heavy equipment | Manufacturer or leasing company of equipment in construction, machinery or agriculture |
| Aerospace | Airlines companies and their tier one communication suppliers |
| Fixed Assets | • Solution provider or enterprise managing fixed assets across sub-segment such as security, energy, manufacturing, Oil & Gas, Point of Sales, parking, elevators or building assets. |
| Healthcare & Insurance | Medical devices providers and insurance companies |

OUR PROGRESS TO DATE

Tata Communications MOVE - Global

Pre-



- Market
 assessment
- Investment in Teleena
- Recruitment
- Product availability
- Internal readiness
 and training

- Launch at Mobile World Congress
- Product Availability March 2017
- Defined target
 customer focus



India IoT Platform

Trials

- Trials in Delhi, Mumbai, Bangalore, Jamshedpur
- •53+ POCs running



Rollout

- Developing a
 Partner & Developer
 Eco-System
- •60 Cities by FY2017
- Rest of India FY2018
- Target 1900 cities and towns in India

IDENTIFIED IOT LARGE SCALE OPPORTUNITIES

ENERGY MANAGEMENT SERVICES MANAGEMENT SAFETY MANAGEMENT ATA COMMUNICATIONS WORKER SAFETY **3 BUTTON DEVICES A/C TEMP MONITORS IOTREK** STREET LIGHTS **REMOTE ELECTRIC SWITCH** WOMAN's SAFETY BUTTON

IOT INDIA USE CASE SAFETY & ASSET TRACKING

SCENARIO

• Mining companies tend to rely on mechanical and manual approaches to monitor assets, as well as monitor conditions and safety

HOW TATA COMMUNICATIONS LP-WAN HELPS

- Track asset location Drilling equipment, safety equipment
- LP-WAN operates better than cellular in underground conditions
- Monitor mine conditions
 - Air quality
 - Temperature
 - Humidity
 - Water levels



We need to be able to monitor conditions in the Mine to ensure employee safety at all times



TATA COMMUNICATIONS MOVE - IOT CONNECT

SMART PALLETS

SCENARIO

- · Cargo Pallets can be shipped anywhere in the world
- Connectivity is required to ensure cargo is delivered on time and in the best possible condition
- · Lost pallets are an everyday problem for transport companies

HOW TATA COMMUNICATIONS MOVE - IOT CONNECT HELPS

- Track the location and monitor the cargo's condition throughout its journey, predict delays and the spoilage risk for perishables
- · Smart Pallets have embedded sensors to monitor
 - Location how long has the cargo been in transit?
 - Temperature / Humidity has the right environment been maintained?
 - Shocks has the cargo been dropped or damaged on route?

Lorries carrying pallets can be tracked with GPS, but what's the condition of their cargo ?



TATA COMMUNICATIONS MOVE – IOT CONNECT

AIRCRAFT MAINTENANCE

SCENARIO

- Aircraft require maintenance, refuelling and stock replenishment at different legs of their daily flight schedule
- Sometimes its difficult to predict what ground services or maintenance tasks are required until after an aircraft has landed. Airside triage consumes time and costs airlines money

HOW TATA COMMUNICATIONS MOVE - IOT CONNECT HELPS

- Monitor the fuel consumption, engine performance, holding tank levels, and catering stock in real time.
- Request essential maintenance activity before aircraft land. Have the right staff, equipment and services already on the tarmac waiting.
 - Quicker turnarounds save time on the ground and depart quicker
 - Customer Satisfaction punctual airlines are often the most popular
 - Improved efficiency right assets are in the right place at right time

Aircraft turnaround time is everything on short haul routes, getting back in the air quickly can save airlines millions





TATA COMMUNICATIONS MOVE – IOT CONNECT

FLEET MANAGEMENT

SCENARIO

- Haulage firms and delivery companies are under pressure to deliver cargo and goods on time and to budget
- GPS-based tracking on its own isn't enough, firms also need to monitor, log and control a variety of different factors to reduce costs

HOW TATA COMMUNICATIONS MOVE - IOT CONNECT HELPS

- Optimise the road worthiness and asset life of vehicles by proactively monitoring and maintaining vehicles. In turn reducing the average cost per mile.
- Sensors can be used to monitor fuel consumption, engine alarms, brake wear, tyre wear, load weight, speed, tyre pressure, cargo temperature & humidity.
- Deceleration, braking, and airbag sensors can be combined to detect accidents and automatically alert the emergency services and fleet managers.

There's more to Fleet Management than just knowing where your vehicles are and any delays on route



TATA COMMUNICATIONS MOVE – SIM CONNECT

SMART RECOVERY TAGS

SCENARIO

31

- People lose precious items and possessions all the time. It's distressing and often expensive to replace them
- Using technology to locate and recover lost items is the smart way forward

HOW TATA COMMUNICATIONS MOVE - IOT CONNECT HELPS

- Trackable Smart Tags are a great low cost recovery solution and can be used to locate anything from a lost dogs to holiday luggage.
- Endless applications but particularly well suited to:
 - Airlines (smart luggage check-in)
 - Luggage manufacturers
 - Motor insurance companies
 - Plant hire
 - · Farmers and vets

Lost holiday luggage could be a thing of pass with Smart Recovery Tagging



TATA COMMUNICATIONS MOVE – SIM CONNECT

CONNECTED CONSUMER DEVICES

SCENARIO

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- Holidaymakers or mobile workers who use their domestic call plan abroad can sometime end up with huge roaming bills or suffer from restrictive fair usage policies
- Increasingly manufacturers are selling devices with the option of a pre-installed OEM SIM. These can sometimes offer good value and solve global roaming headaches for consumers

HOW TATA COMMUNICATIONS MOVE - IOT CONNECT HELPS

- Smartphone and tablet manufacturers should be targeted to become Tata MVNOs and provide connectivity out of the box. This provides the following benefits:
 - Creates new revenue streams for manufacturers
 - Gives manufacturers greater leverage against MNOs when selling devices
 - Controlling the cost of data creates an opportunity to better monetise other apps sold by the manufacturer (e.g. iTunes)
 - · Simplifies the customer journey for consumers

"My smartphone came with a SIM and cheap roaming out of the box so I didn't need to think about which mobile network to use"



TATA COMMUNICATIONS MOBILE *STRATEGY EVOLUTION "THE MOBILE ENABLEMENT SPECIALIST"*

900 MNO RELATIONS





TRUSTED, NEUTRAL, GLOBAL MOBILITY ECOSYSTEM ENABLER MOBILE CUSTOMER ENGAGEMENT



MOBILE CUSTOMER ENGAGEMENT ENTERPRISE MESSAGING API SUITE

MOBILE VIRTUAL NETWORK ENABLER

IOT & M2M



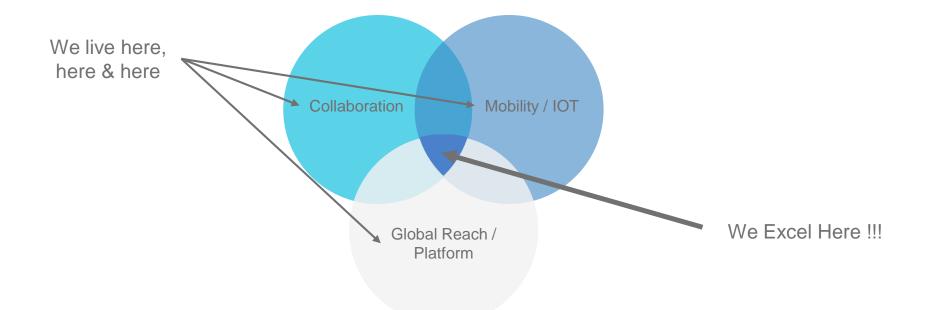
NETWORK FUNCTION VIRTUALISATION MVNO FOR ENTERPRISE MVNO FOR SERVICE PROVIDERS

INTERNET OF THINGS GLOBAL IOT CONNECTIVITY & VAS PROVIDER

INDIA LP-WAN LoRa NETWORK & ECO-SYSTEM ENABLER

WHY WE ARE DIFFERENTIATED

..ABOUT INTERSECTIONS



BUILDING SMART CITIES TOGETHER



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TATA COMMUNICATIONS



FINANCIAL PERFORMANCE

TCL CORE | FY17 KEY HIGHLIGHTS (INR CRS)

| Rs Crores | | FY 16 Reported | FY 17 Reported | FY 17 Normalized Operating Performance | DED | F' F |
|-------------------------------------|-------|--------------------|-----------------------------|---|-------|---------|
| Gross Revenue % Growth | 0 | 18,653 | 18,038 <i>-</i> 3.3% | 18,165 <i>-</i> 2.6% | CLUD | |
| Net Revenue % Growth | RTED | 8,601 | 8,774 2.0% | 8,839 2.8% | - EX(| |
| EBITDA % Growth EBITDA % | REPOR | 2,747 14.7% | 2,660 -3.2% 14,7% | 2,870 <i>4.5%</i> 15.8% | & TCX | |
| EBIT % Growth | | 758.6 | 775.6 2.2% | 984.9 29.8% | | |
| EBIT % Operating PBT % Growth | | <i>4.1%</i> 346 | <i>4.3%</i> 407 17.8% | 5.4% 616 78.4% | | |

| ED | FY 16 Excl. Reported | FY 17 Excl. Reported | FY 17 Excl. Normalized Operating Performance |
|------------|-------------------------|-------------------------|---|
| - EXCLUDED | 17,868 | 17,486 <i>-2.1%</i> | 17,613 <i>-1.4%</i> |
| - EX | 8,055 | 8,369 <i>3.9%</i> | 8,434 4.7% |
| тсх | 2,307 | 2,338 <i>1.3%</i> | 2,547 10.4% |
| гсрс & тсх | 12.9% 442.4 | 13.4% 472 | <i>14.5%</i> 681 |
| 1CI | 2.5% | 6.7% 2.7% | 54.0% 3.9% |
| | 27 | 104 4X | 313 11X |

| FY17 Actuals Nor | rmalised |
|---------------------------------------|---------------|
| <u>AFA</u> GR EBITDA | 58.7 168.5 |
| <u>Demonetisation</u> GR EBITDA | 68.6 42.0 |

Excluded section refers to financials without TCDC & TCX for Full Year

- > Voice \$\forall 17%. Sequential decline in Voice GR over last 6 quarters
- > NR 5% favourable change in revenue mix with data at 89% Vs. 86% last year
 - Traditional services revenue grew by 4%
 - Growth services revenue 13 %
- RoCE improved to 8.6% from 8.1% last year

Basis Management estimates for cost allocation Prior period figures have been regrouped / recasted where necessary

DATA FY 17 FY17 KEY HIGHLIGHTS (INR CRS)

| Rs Crores | D | FY 16 Reported | FY 17 Reported | FY 17 Normalized Operating Performance |
|---------------------------|-------|-------------------|-----------------------|---|
| Gross Revenue % Growth | ORTEI | 10,597 | 11,320 6.8% | 11,448 <i>8.0%</i> |
| Net Revenue % Growth | REPO | 7,512 | 7,868 <i>4.</i> 7% | 7,933 5.6% |
| EBITDA | | 2,243 | 2,231 | 2,440 |
| % Growth | | | -0.5% | 8.8% |
| EBITDA % | | 21.2% | 19.7% | 21.3% |

Excluded section refers to financials without TCDC & TCX for Full Year

- Data GR 11%
 - Growth services **↑** 18%
 - Traditional services **↑** 5%
 - Transformation services **↑** 33%
- Significant improvement in EBIDTA margin (120 bps) driven by strong net revenue growth and favourable mix change

| * <u>FY17 Actuals Nor</u> | malised |
|--|--------------------------------|
| <u>AFA</u> GR EBITDA | 58.7 168.5 |
| <u>Demonetisation</u> GR EBITDA | 68.6 42.0 |
| <u>Traditional</u> ILL Ethernet VPN | <u>YoY</u> 15% 12% 5% |
| <u>Growth</u> SIP T | 20% |

FY 17 Excl.

Normalized

Operating

Performance

10,895

11.0%

7,529

8.1%

2,132

18.3%

19.6%

MSS

Mobile New

FY 17 Excl.

Reported

10.768

9.7%

7,464

7.1%

1,924

6.7%

17.9%

FY 16 Excl.

Reported

9.813

6.967

1,803

18.4%

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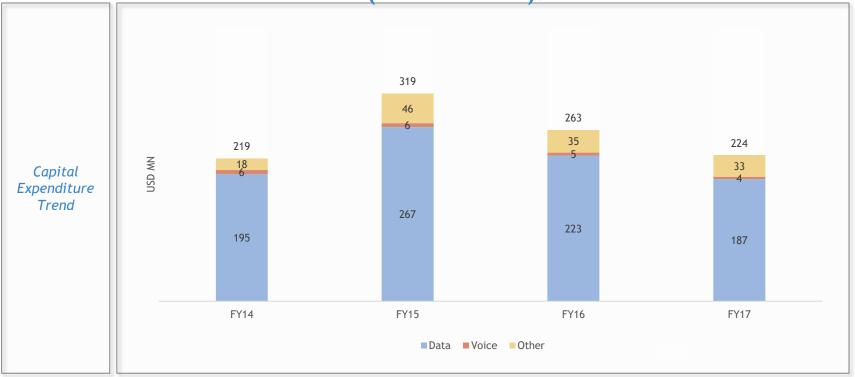
55%

159%





CAPITAL EXPENDITURE TREND(CAPITALISED): FY14 - FY17



Note: USD-INR: FY14 60.48, FY15: 61.13, FY16: 65.44, FY17: 67.08

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NET DEBT: FY14 - FY17



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