McKinsey&Company

PETROTECH-2016

12th INTERNATIONAL OIL & GAS CONFERENCE AND EXHIBITION

05-07 December 2016, New Delhi, India

Theme: Hydrocarbons to fuel the future: Choices & Challenges

Fuel Retailing : Preparing For The Next Technology Wave

PREPARED FOR PETROTECH 2016 – SPECIAL TRACK ON FUEL RETAILING

6&7, December 2016





Contents



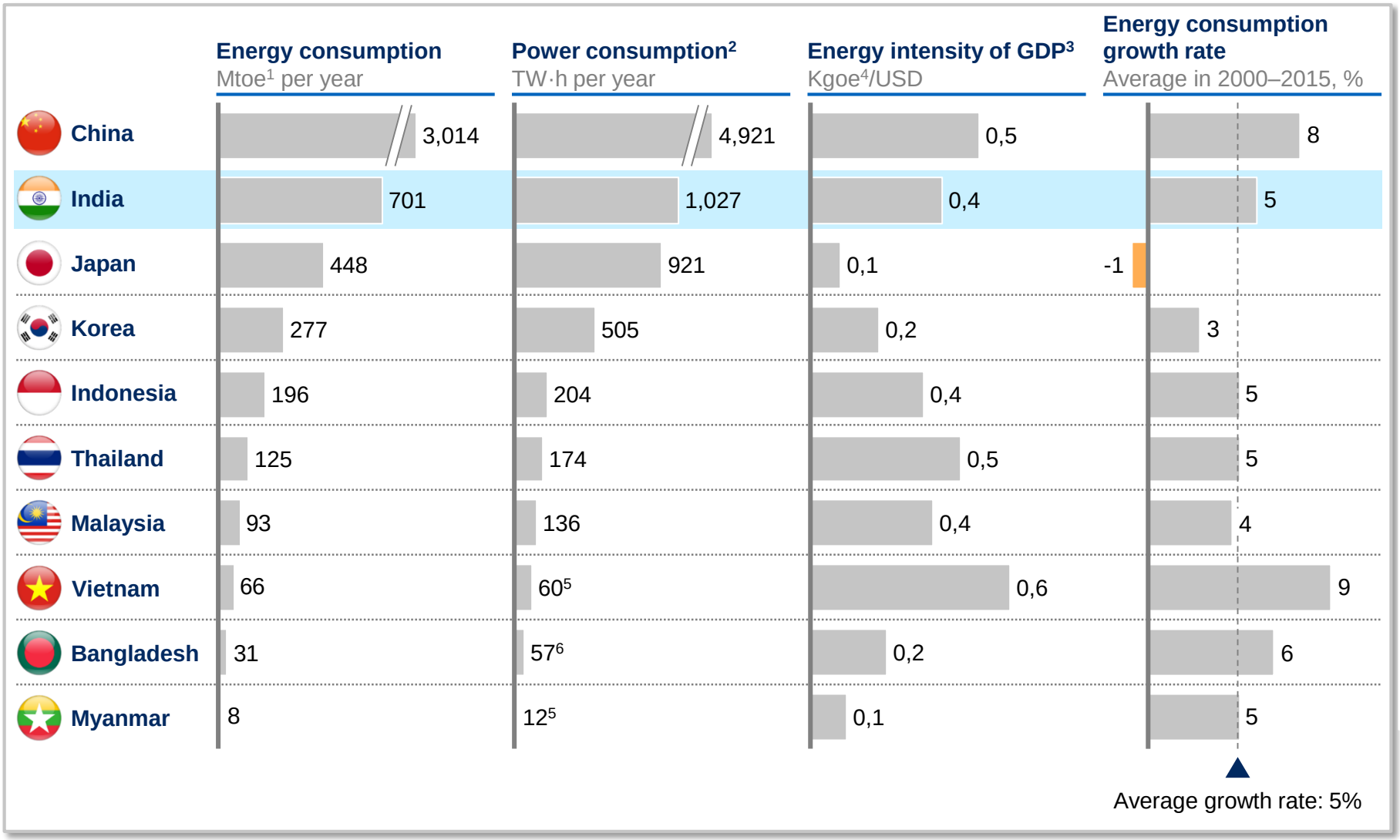
Context of fuel retailing in India

Rethinking fuel retailing - the ongoing technology revolution

Implications for Indian fuel retailing sector

India is second largest energy consuming country in Asia Pacific; Over past 15 years India has shown sustained growth in energy consumption

2015

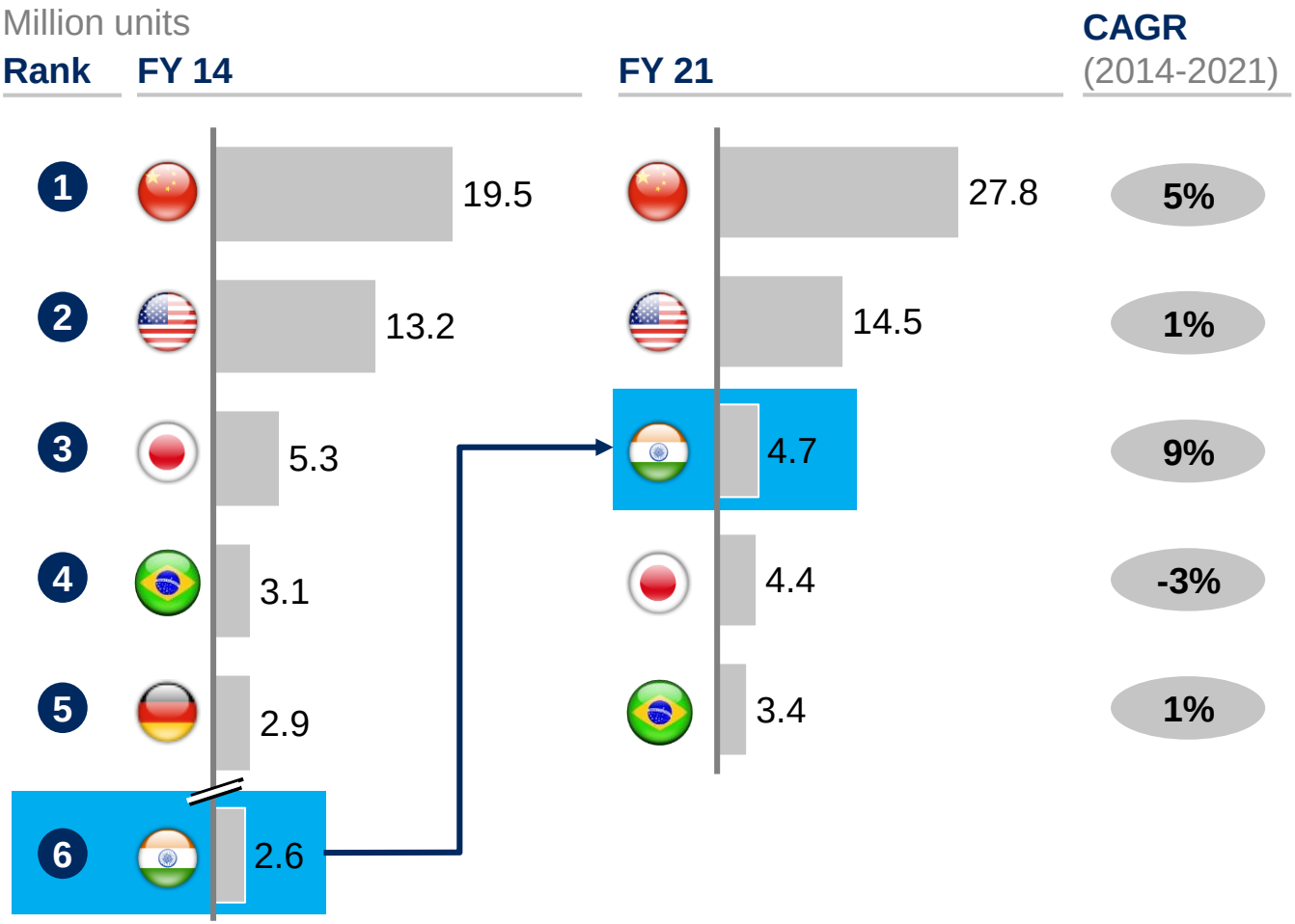


1 Tonnes of oil equivalent; 2 Consumption by end consumers; 3 Energy consumption/real GDP; 4 Kilograms of oil equivalent; 5 Estimated as equal to generation volume; 6 Data for 2014

SOURCE: BP Statistical Review 2016, Enerdata

India is expected to be the 3rd largest passenger vehicle market after China and USA by 2021; this will impact demand of HSD and MS

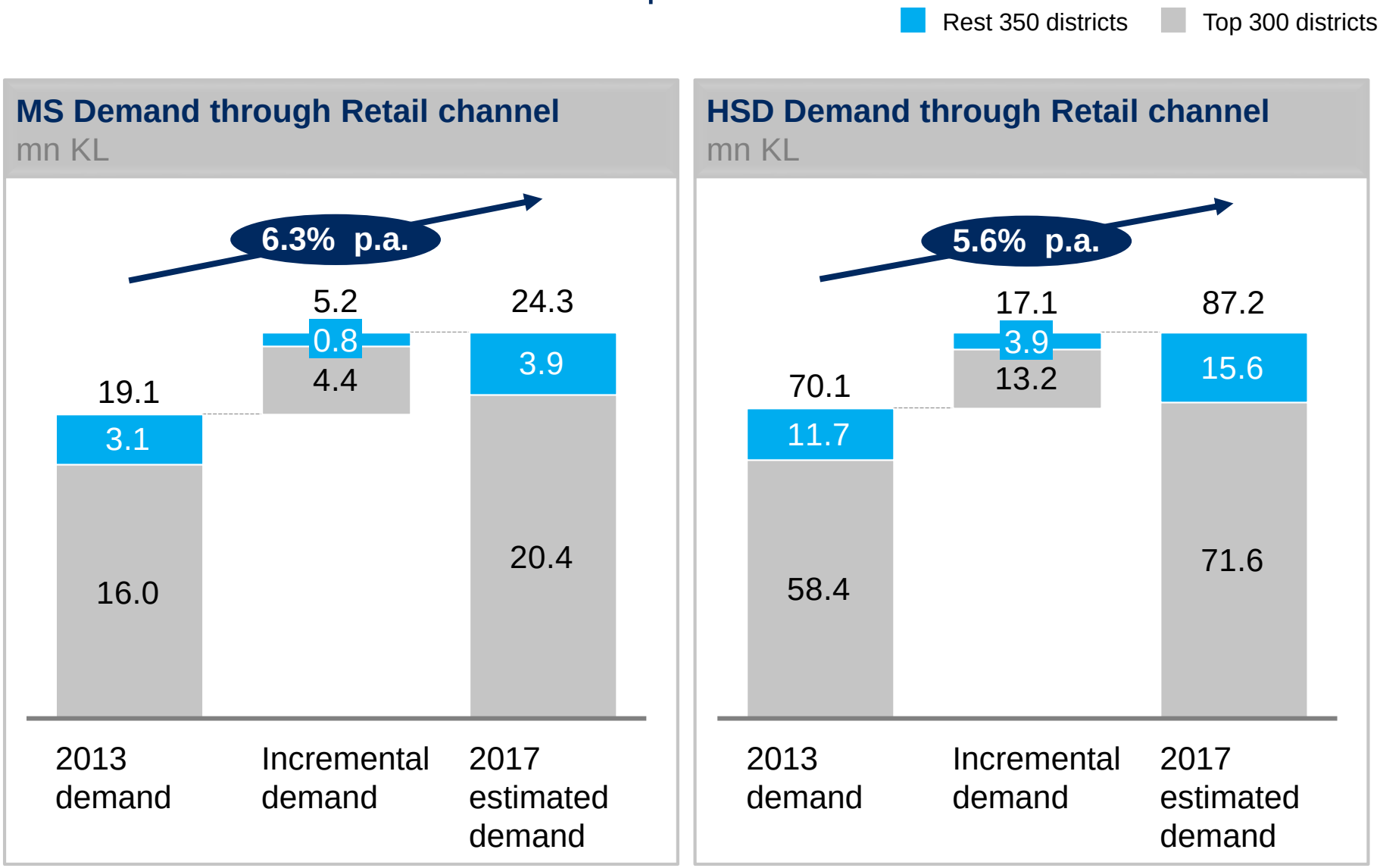
Global passenger vehicle market



- India expected to be the fastest growing market
- India will emerge as third largest market by 2021 after US and China
- 3 of the top 5 countries are emerging economies

SOURCE: IHS Global Insight; Team analysis

All India Retail MS and HSD demand expected to be 111Mn KL in 2017, ~72% of which is concentrated in Top 300 districts



SOURCE: IPR data, McKinsey Insights

Indian Government has taken several steps to push penetration of fuel into remote parts of the country (1/2)

PAHAL

- Govt. modified the prior scheme and re-launched it in 54 districts on November 15, 2014 to cover 2.5 crore households
- All consumers using LPG cylinders will get cash subsidy to buy 12 14.2-kg cylinders or 34 5-kg refills
- The amount of money which is equal to the difference between the present subsidised rate and the market price is automatically transferred to the bank account of the consumer, when he or she makes the first booking for a cylinder.



UJJWALA

- Ujjwala Yojana is aimed at providing 5 Crore LPG connections in the name of women in BPL (Below Poverty Line) households across the country
- 1 Crore Connections have been given to beneficiaries as of 7th November, 2016



Indian Government has taken several steps to push penetration of fuel into remote parts of the country (2/2)

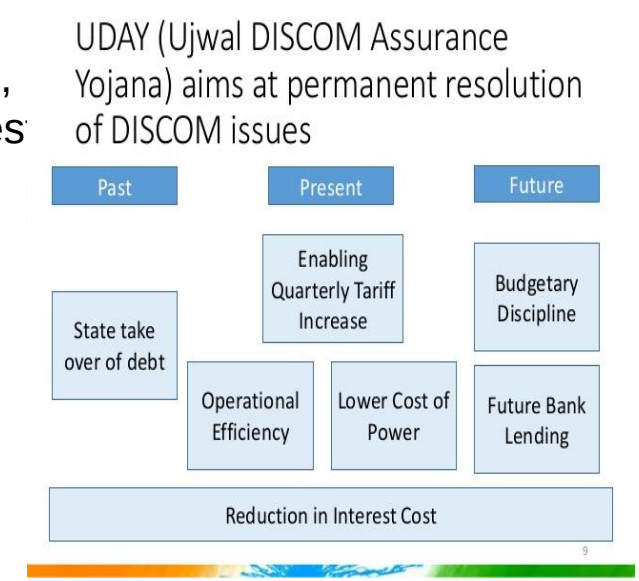
Deen dayal Upadhyay Gram Jyoti Yojana

- The **government plans** to invest ₹756 billion (US$11 billion) for **rural electrification** under this scheme
- It focuses on feeder separation (rural households & agricultural) and strengthening of sub-transmission & distribution infrastructure including metering at all levels in rural areas



UDAY

- The scheme comprises four initiatives - improving operational efficiencies of discoms, reduction of cost of power, reduction in interest cost of discoms and enforcing financial discipline on discoms through alignment with state finances
- It allows state governments, which own the discoms, to take over 75 percent of their debt as of September 30, 2015, and pay back lenders by selling bonds
- Discoms are expected to issue bonds for the remaining 25 percent of their debt



Several innovative interventions have been brought about in the Indian fuel retailing sector also over the past few years

Innovations by fuel retailing companies in India

Sell financial products: BPCL	▪ **Aug 4, 2016:** BPCL tied up with Fino Paytech to sell financial products, insurance and remittances from its fuel retail outlets. BPCL brought 21% stake in Fino Paytech, a payments bank, for INR 251 crore in late July, 2016. Fino Paytech Ltd. has already set up a kiosk at one of BPCL's outlets in Nashik, Maharashtra – The tie-up is expected to help spread financial inclusion, strengthen customer loyalty, increase customers at its fuel retail outlets, and increase revenue from its non-fuel segment. – The tie-up would also help BPCL beef up its revenue from the non-fuel segment (allied services including cafes, shopping areas, ATMs etc; available at the fuel retail outlets)
Payment Automation: BPCL	▪ **Feb 19, 2016:** Innoviti Payment Solutions and Orpak formed a partnership to drive India's largest payment automation project at BPCL. Under this project 6,500 outlets of BPCL (almost 50% of BPCL's retail base) will be automated using Innoviti's payments platform uniPAY, closely integrated with Orpak's fuel automation system – The partnership will provide an innovative solution to BPCL using Innoviti's uniPAY payments platform. This helps provide an end-to-end integration for BPCL, from fueling to payment cycle. – The improvement in attendant productivity and an end-to-end integration provides BPCL with a full control on the outlet level operations for better control – In addition, the platform also allows BPCL to seamlessly add new payment options and provides them with customer insights, thereby increasing the overall sales
Paytm Payment: IOCL & HPCL	▪ IOCL and HPCL tied-up with mobile commerce platform, Paytm, to allow payments through the Paytm wallet at petrol pumps in February and May, 2016 respectively. Payments through wallet will not only enhance convenience to customers but will also bring in more operational efficiency, thereby reducing queues at these pumps
Essar-Rosneft deal	▪ The $12 billion deal between Essar Oil and a consortium led by Russian oil major Roseneft is likely to increase consumer - focused services and dynamic pricing in fuel retail

The evolutionary trends in fuel retailing observed in other global markets, are yet to fully develop in India

Evolutionary trends in global markets

Dynamic pricing



- Micro-market segmentation and dynamic pricing are major levers of competition

Network rationalisa-tion and unmanned fuel stations



- Rise in competition, entry of new players, and the decline in fuel margins is driving many players out of business and leading to market consolidation (e.g., Germany, Canada & UK)
- Increased focus on cost reduction is leading to the shift to unmanned outlets (e.g., Netherlands)

Reliance on non-fuel revenues



- Petrol stations are increasingly relying on non-fuel revenues to drive up margins
- E.g., in US, non-fuel revenues account for 32% of outlet revenues & ~63% of gross margins

Entry of hyper-markets



- Hypermarkets have entered fuel retailing and are playing a significant role in shaping the industry dynamics by increasing price pressure and relying on high volumes
- For, e.g., in France and UK, hypermarkets capture ~50% and ~40% of fuel volume respectively

However, fuel retailing in India lags global best practices

Focus areas

Gap between India and global best practise

High gap | Moderate gap | Low gap

9 **Performance management**

3 **Market intelligence**

1 **Focus on customer experience**

6 **Automation & unmanned**

2 **Site build**

5 **Nonfuel retail (category management)**

4 **Fuel pricing – micromarket**

7 **Network planning**

8 **Frontline execution and dealer mgmt.**

SOURCE: McKinsey analysis

In previous versions of the Special Track we have discussed multiple trends, many of which have shown progress

High Progress
Medium Progress
Low Progress

Previous topics	Progress
1 Price deregulation	
2 Stricter emission norms	
3 Biofuel/gaseous fuels	
4 Entry of private players	
5 Retail automation	
6 Loyalty schemes	
7 Premium fuels	

SOURCE : Source

In this document we examine technology and business model innovations which can reshape the fuel retailing landscape in India

Global case studies show fuel retail disruption already happening

1	**Hypermarkets in France achieve 60% market share**	▪ Used fuel as a category to attract footfalls by selling at a loss ▪ Lower operating costs through leaner manpower and lower maintenance
2	**Murphy oil and Wal-Mart partnership in the US**	▪ Murphy runs complete operations on land leased from Walmart ▪ **~2.5X site gas volume** vs. average industry; expanded to 680+ sites
3	**QuickTrip sells 68% higher gasoline per site than average**	▪ QuickTrip uses retail stores to sell gasoline to customers ▪ Better understanding of consumer needs

What could happen in India?

a. Micro-market wars with private players

b. Strategic partnerships with non O&G players?

c. Could further regulatory changes open doors for
   - White pumpers which will have lower capex?
   - Hypermarket FO's?

d. Can smartphone and location based services be used to fundamentally redefine the customer relationship ?

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Most likely a fuel station in 10 years from now will look very different from today

Fuel - station today



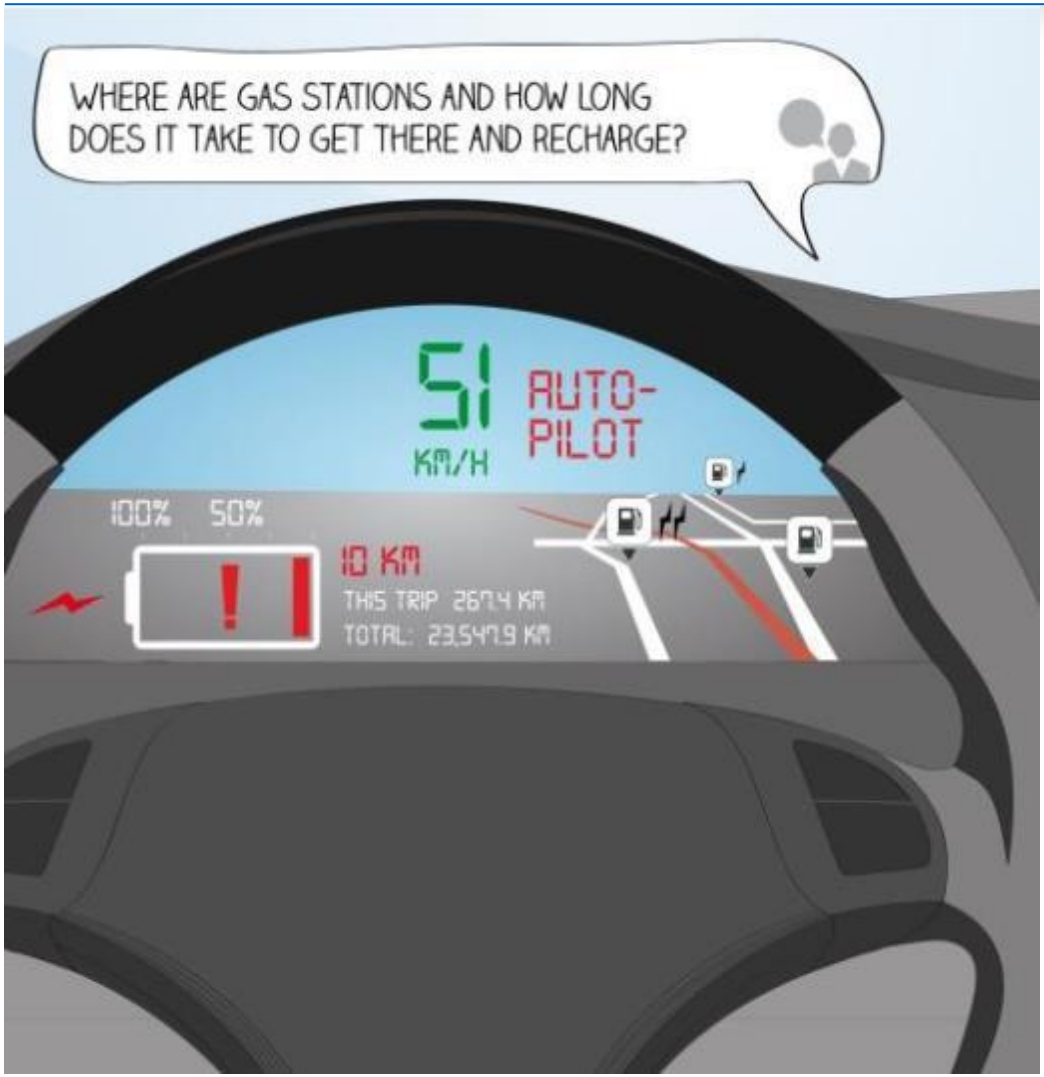
VS

Fuel station 10 years from now



Imagine at some point in time …

What if: Time matters?



Imagine an era of fully electric cars, where it might well be that time to re-charge the car and the convenience aspect of it will dominate the decision where to go to refuel



SOURCE: McKinsey

Imagine at some point in time …

What if: The car decides?



Imagine an era in which cars drive autonomously, are fully connected with the outside world and decide by themselves where to refuel and when



SOURCE: McKinsey

Imagine at some point in time …

What if: Opinions of others matter?



Imagine an era in which the decision factor on which gas station to select is no more the fuel offer itself or convenience but the adjacent services and how other customers rate them



SOURCE: McKinsey

Imagine at some point in time …

What if: role of fuel stations is different?





Imagine an era in which the role of fuel stations has expanded to a number of other non-fuel related services and the value creation logic has changed dramatically



SOURCE: McKinsey

Going forward, we see 3 technology driven trends which can reshape the fuel retailing space

1. **Reinventing customer experience through digital and analytics**
2. Preparing for the future of mobility
3. Optimising network operations using technology and analytics



To improve customer experience, there are 4 major forces paving the way for innovative solutions

Mobile	▪ **Smartphone Revolution:** availability, low-cost, high user penetration ▪ **App Economy:** Proliferation of fuel apps, in-app payment convenience
IoT	▪ **Connected Devices:** Ability to book fuel lanes before reaching the pump ▪ **User Alerts:** Provide alerts on fuel levels, nearest pumps, next station, etc.
Loyalty	▪ **Convenience:** Merging of loyalty and payment cards into one card ▪ **Enhanced Rewards:** Mobile & 10T to provide targeted reward programs
Security	▪ **Fraud:** $500M— estimated card fraud at pump (skimming is a major method) ▪ **Technologies:** Tokenization, GPS/ geolocation solutions, multifactor authentication, advanced analytics ▪ **EMV:** The proposed liability shift to reduce card fraud at gas stations

Reinvented customer experience

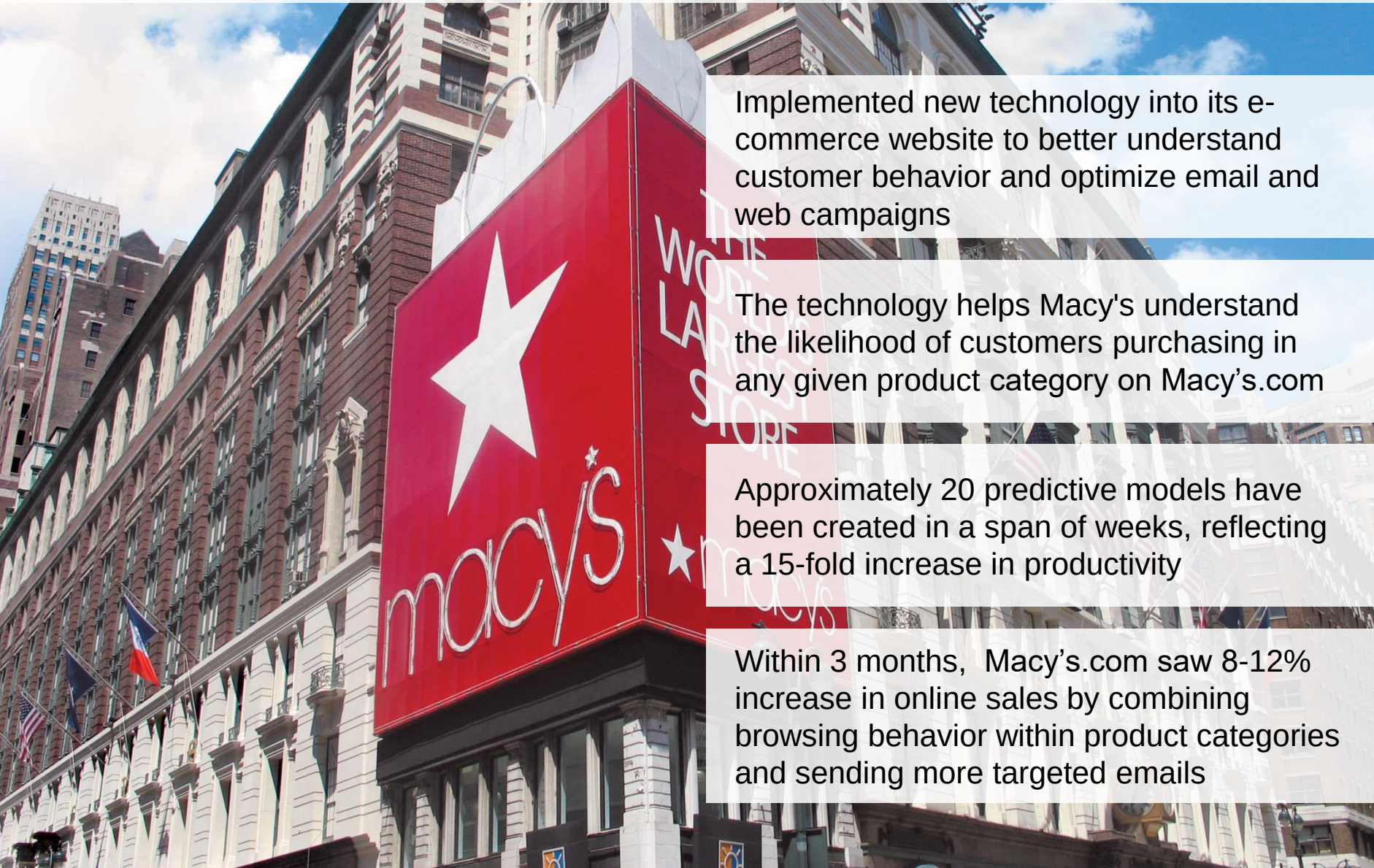
- Targeted, personalized offers
- Seamless, experience inside and out of RO compelling loyalty propositions, preferential service to loyal customers
- Richer information services on driving, vehicle performances fuel efficiency etc.

SOURCE: Press search

Winners are successfully adapting to these technologies to achieve superior digital performance

		From…	To
Real-time relevance		Broad-scale, one size fits all messaging and interactions	Hyper-targeted consumer journeys grounded in rich data & insights
Next-gen digital experiences		Ongoing step-change improvements to the consumer experience	Rapid testing of radical, next-generation experiences leveraging the latest technologies
Mobile-first		Basic mobile functionality (i.e., mobile-optimized site, smartphone/tablet apps)	Value-add mobile functionality designed with the “mobile-first” consumer in mind
Omni-channel adaptation		Basic level of cross-channel messaging and coordination	Truly seamless journeys that encourage “simultaneous” (vs. sequential) omnichannel behaviors
You-inspired		Basic presence on all major social platforms	Effectively leveraging social platforms and data to drive desired business outcomes

US department store Macy's achieved an 8-12% increase in online sales from launching predictive analytics



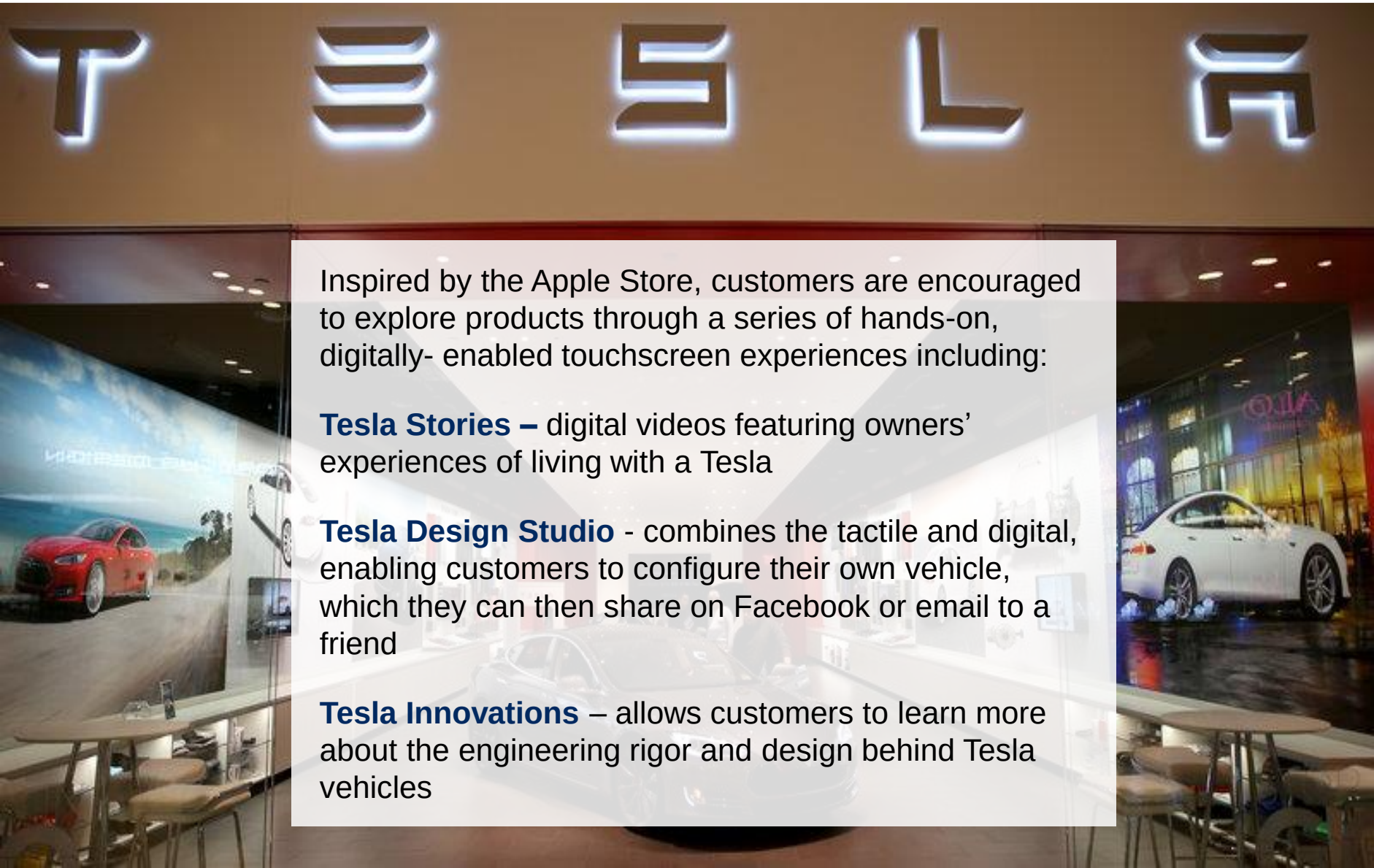
Implemented new technology into its e-commerce website to better understand customer behavior and optimize email and web campaigns

The technology helps Macy's understand the likelihood of customers purchasing in any given product category on Macy's.com

Approximately 20 predictive models have been created in a span of weeks, reflecting a 15-fold increase in productivity

Within 3 months, Macy's.com saw 8-12% increase in online sales by combining browsing behavior within product categories and sending more targeted emails

Electric car manufacturer Tesla's concept stores strives to make the purchasing process a "delightful" and interactive customer experience



Inspired by the Apple Store, customers are encouraged to explore products through a series of hands-on, digitally- enabled touchscreen experiences including:

Tesla Stories – digital videos featuring owners' experiences of living with a Tesla

Tesla Design Studio - combines the tactile and digital, enabling customers to configure their own vehicle, which they can then share on Facebook or email to a friend

Tesla Innovations – allows customers to learn more about the engineering rigor and design behind Tesla vehicles

Today customers are being engaged successfully through several innovative and user friendly 'digital' tools

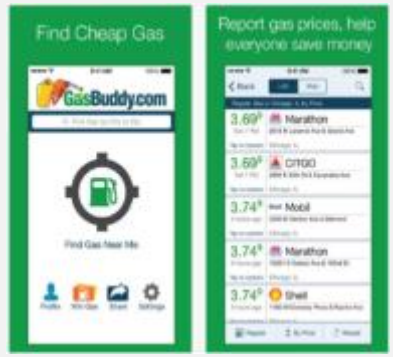
BP partnered with Nectar UK to grow by 1% in a market declining by 4%

- 40% of U.K. households participating
- Data mining leveraged to customise offers for members
- Nectar customers at partner stores spend significantly more than non-members

Gas buddy is a fuel price crowdsourcing app where consumers have formed a community

Implications for players

- Provide good services to create strong brand in the market
- Ensure competitive prices or lose market share



Mobile, big data and social media drive the engagement

Shell (U.K.) has integrated mobile payments through QR code on RO pumps



Customer uses the app to **select corresponding pump and authen-ticate the transaction**

Petrozone is a 3rd party app to search ROs close to customer and pay through the app in a seamless way



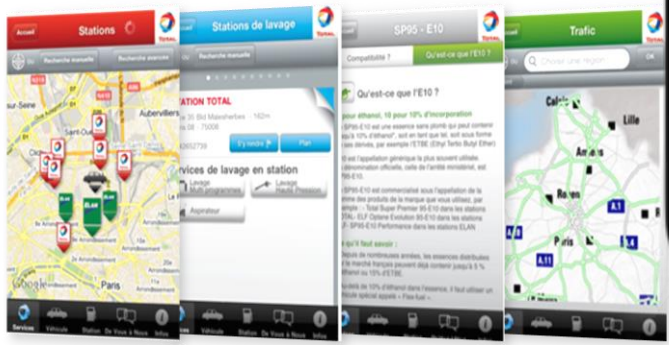
Customers can utilise different payment methods and also receive location/behaviour based offerings

TOTAL S.A. application enables customers to find stations and view real time traffic conditions

Overview

- Station finder uses iPhone GPS
- Car wash finder to look for specific wash needs (e.g. truck, high pressure) and tire inflation reminder; also finds stations with assisted tire inflation service
- Finding stations with special fuels, e.g. high ethanol gasoline, premium diesel, LPG propane, etc. with the iPhone GPS
- Real time traffic conditions and weather forecasts along the route





SOURCE: TOTAL S.A.

Digital payments: new sources of value can and is being generated along 5 themes

SELECTION - NOT EXHAUSTIVE

Basic payments value proposition for merchants

- Maximize revenue
- Reduce costs
- Improve convenience and experience
- Enhance security
- Capture information



Innovation themes

Engaging customers digitally – Digital ecosystems, customizable rewards, location based marketing and use of social media

Enhancing user experience through new modes of convenience – Mobile and contactless payments or "no-pay" connected cars

Empower users to control spend & save more – Mobile spending controls and real time spend comparisons

Insights-driven information management – Drive customer acquisition or decrease cost by information management or monetize data

Decrease costs of payments – Digitize accounts receivables/payables value chain, advanced fraud reduction, cost-efficient payment systems

Focus

End users

Fleet owners

Client

SOURCE: McKinsey Global Payments Practice

MyOrder and Petrozone use location based targeting and enables customers to order and pay online, thereby avoiding waiting times

Applications of mobile app

- Benefit to end customers
  - Order food/tickets/services via phone
  - Pay via phone, using different payment methods – PayPal, credit card, Ideal
  - Receive location/behavior based offers on their phone
- Benefit to businesses
  - Connect to customer via phone
  - Less cash required
  - Increased service offering to customers (e.g., no waiting times for food, no need to get out of car for ticket for car wash)
  - Personalized offering based on location/time
  - Data analyses of buying behavior



Deli2Go – restaurants in Shell in The Netherlands, already use MyOrder to allow customers to order/pay in advance and collect order upon arrival, avoiding queueing

SOURCE: MyOrder, Petrozone

Using digital station TV for personalized promotions inside the shop

EXAMPLE

Tailored promotions



Inspiration

- Use digital technology that would “recognize” the customer and play tailored promotion for the customer

Idea

- A LCD screen is mounted on the fuel dispenser and asks the consumer for credit/ loyalty card
- When the pumping begins, the TV turns on and plays a tailored promotion program based on previous customer purchases
- Nielsen Research showed 90% of US consumers watch program when fuelling (non-tailored offer)
- Improved in-store sales: +42% windshield wash fluids, +69% candy sales reported by some stations in the US (for non-tailored offering)

SOURCE: National Petroleum News, team analysis; McKinsey

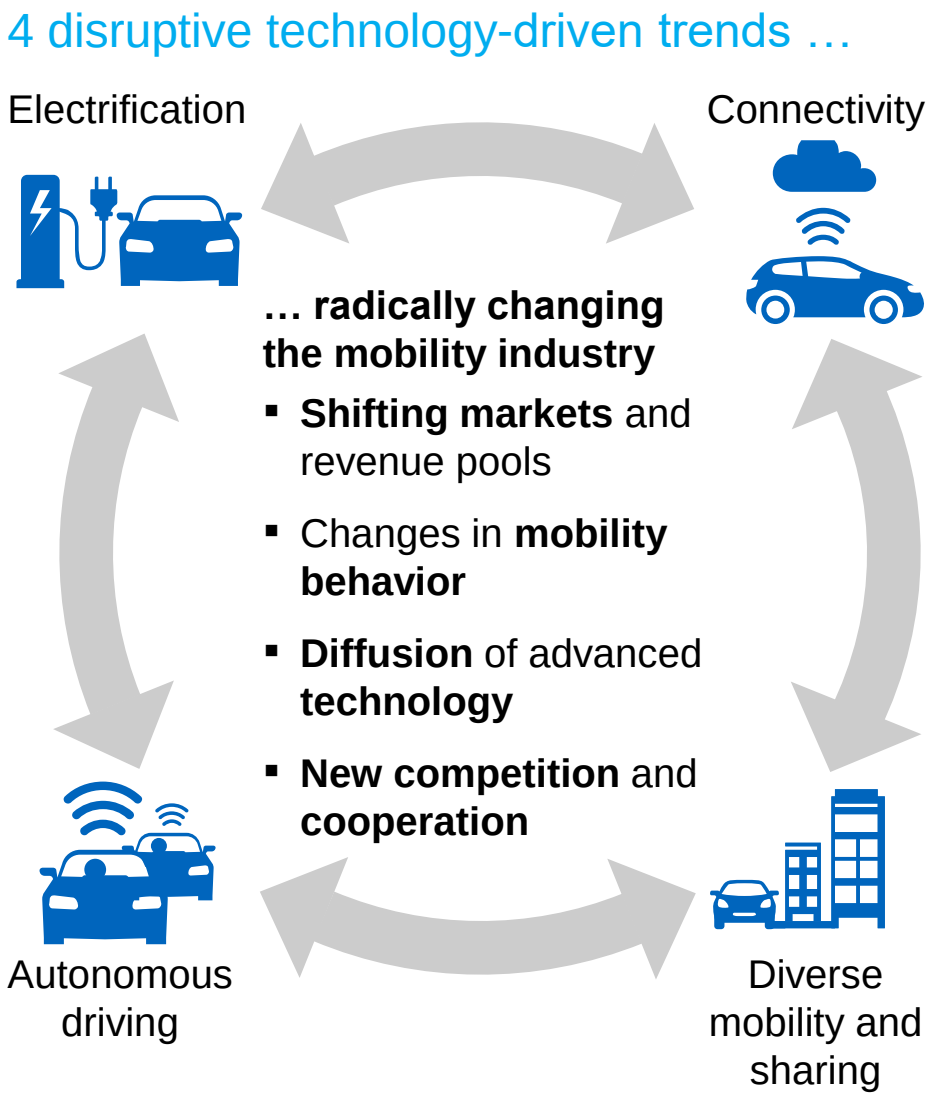
1 Reinventing customer experience through digital and analytics

2 Preparing for the future of mobility

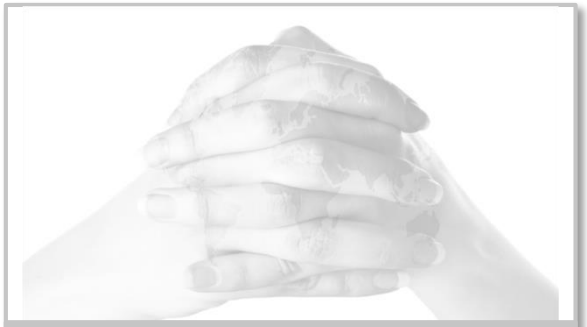
3 Optimising network operations using technology and analytics



Global megatrends trigger trends in the automotive industry that have the potential to radically change the mobility industry



The success of the sharing trend is enabled by three main factors, both globally and in India



Societal

- **Sustainability**: Desire to reduce footprint which sharing economy allows for
- **Community and Authenticity:** A growing desire to connect with others through sharing as it involves connecting with buyers and sellers more personally and a distrust for big brands
- **Altruistic Mindset:** Gifting or paying it forward are common themes to many sharing startups



Economic

- **Stagnant Economy**: A tougher economic climate encourages companies and individuals to consider new revenue streams and cost savings
- **Resource Utilization:** There is a growing focus on efficiency and utilization and monetizing idle or excess capacity
- **VC Funding:** VC funding has taken an interest in sharing startups and this has allowed for rapid growth in the number of entrants



Technological

- **Social Networking**: Most sharing models involve a network for interaction, reputation and communication
- **Mobile Technology:** Mobile devices provide the mobile access needed for the sharing economy
- **Payment Systems:** Sharing involves many individual transactions that need to be executed electronically, payment systems have made this possible

SOURCE: Web Strategist, The Economist

Multiple models are emerging in the car sharing industry (1/2)

zipcar

- **Size and Profitability**
  - 850,000+ members in USA, Canada, UK, Spain and Austria
  - 10,000+ vehicles in 30 metro markets, 350+ college campuses and 30 airports
  - 2013 Revenue 236 million USD, 23% CAGR 2009 – 2013
  - Market share by city: Boston (90%), NYC (85%), DC (80%), San Francisco (75%), Chicago (65%)
- **Offering**
  - 30 different makes and models of vehicles ranging from hybrids to cargo vans
  - Service includes sign-up fee, monthly membership fees and usage fees
  - Memberships for individuals, businesses and universities
- **Acquired by Avis Budget Group**
  - Acquired in 2013 for $500 million USD
  - Expected synergies between $50 to $70 million through lower fleet costs, fleet sharing and expansion in new and existing markets

CAR 2GO

- **Size and Profitability**
  - 325,000 members and 4,800 vehicles in North America as of 2013
  - 15 cities in US as of 2014
  - Already profitable in several cities outside the US while other locations expected to become profitable within 3 to 4 years of launch
- **Offering**
  - Fleet of gasoline and electric Smart vehicles
  - One time sign-up fee, and per minute usage fee
  - Trips can be one way, Car2go has negotiated citywide parking deals in most cities it operates in
- **Rapid Growth**
  - Doubled registered users from 2012 to 2013
  - Expects to expand into 40 to 50 additional locations worldwide by 2020

DriveNow

- **Size and Profitability**
  - 230,000 members worldwide and 150 vehicles in the US
  - San Francisco is the only US location
- **Offering**
  - Fleet includes only electric vehicles
  - One time sign-up fee, flat rate for first 30 minutes and per usage fee for each additional minute
  - One way trips allowed, cars can be return to specific parking locations or specific street parking locations
- **Related Services**
  - BMW has also funded additional services such as Parknow, a parking reservation system and CharePoint, a charging network

SOURCE: Press Search, Company Filings

Multiple models are emerging in the car sharing industry (2/2)

- **All of these are local players purchased by Enterprise Holdings**
  - Localized car sharing programs acquired and integrated into Enterprise CarShare
  - Fees include a sign-up fee, membership fee and usage charges
  - Pricing and program details vary by location
  - Model is closer to traditional car rental, reservations are made through the company website and cars must be returned to pick up location
- **Offering**
  - Offering varies significantly by region with some electric vehicles available

- **Background**
  - Launched by Bollore Group and modeled after the Autolib program in Paris
  - Plans to have 500 vehicles and 200 stations in Indianapolis by 2015
  - Bollore invested around $35 million in the program while Indianapolis Power and Light to invest $16 million in charging stations and infrastructure
- **Offering**
  - Fleet of all electric Bollore Bluecars, 125 cars and 25 locations at launch
  - Pricing unavailable but will offer daily, monthly and annual memberships with hourly usage fees
  - Fees include insurance and parking
  - One trips will be available, users can return vehicles to different stations

- **Size and Profitability**
  - 300,000 members and 2,000 vehicles worldwide
  - 34 locations in the US
- **Offering**
  - Wide range of makes and models, includes some electric vehicles
  - Free to join, hourly and daily usage fees
  - Fuel and insurance included
  - Offer one way trips with reservation 48 hours in advance

Local Car Sharing Companies

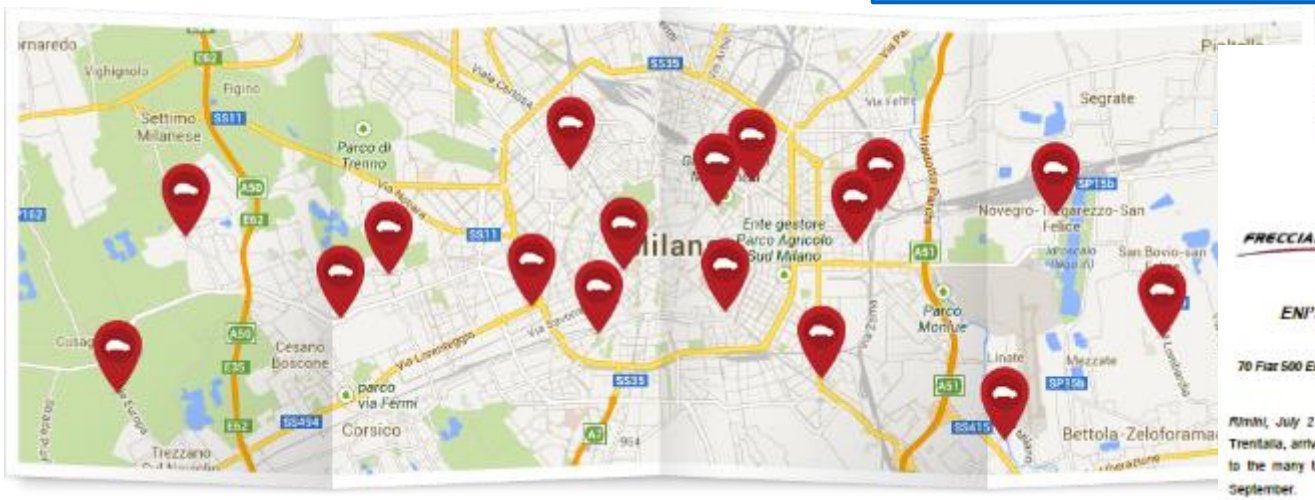
- **Size and Locations**
  - Wide range of local companies offering car sharing in cities and even small communities
  - Some of these are for profit while others are non for profit
  - Present throughout the United States with several in California
- **Examples**
  - City Car Share – San Francisco, 413 vehicles
  - Buffalo CarShare – Buffalo, 17 vehicles and 600 members

SOURCE: Press Search, Company Filings

New mobility concept: Eni has partnered with Fiat and Trenitalia



- Eni acquired a provider of car-pooling service – Enjoy
- They partnered with Fiat and with Trenitalia (trains) for a comprehensive car+train service
- Through Enjoy, they deliver a mobility product for customers in metropolitan areas. First they started in Milan and now launched in Rimini
- Price is EUR 25 cents per minute
- Customer can pick up the car in any available location and drop it in any authorized location across the city




Comune di Rimini

eni

FRECCIAROSSA

FIAT

ENI'S "ENJOY" CAR SHARING SERVICE COMES TO RIMINI

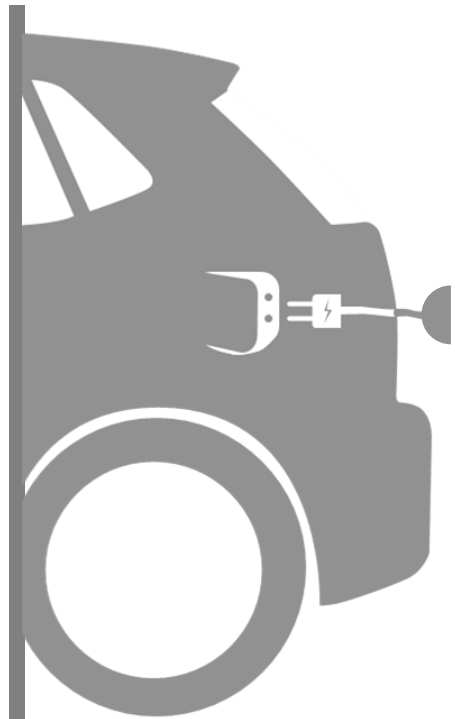
70 Fiat 500 Enjoy cars will be available to citizens and tourists from July 2 through September

Rimini, July 2 2014 – Enjoy, Eni's car sharing service operated in partnership with Fiat and Trenitalia, arrives today in Rimini with a fleet of 70 Fiat 500's available to the people of Rimini and to the many tourists who flock to the city in the summer. The service will be available until September.

SOURCE: https://enjoy.eni.com/it/milano

There are 4 key growth drivers for electric vehicle adoption

1 **Regulation**	CO_2 regulation
2 **Technology**	Battery improvements
3 **Customer preferences**	Fun to drive and high-tech
4 **Infrastructure readiness**	Fast infrastructure roll-out



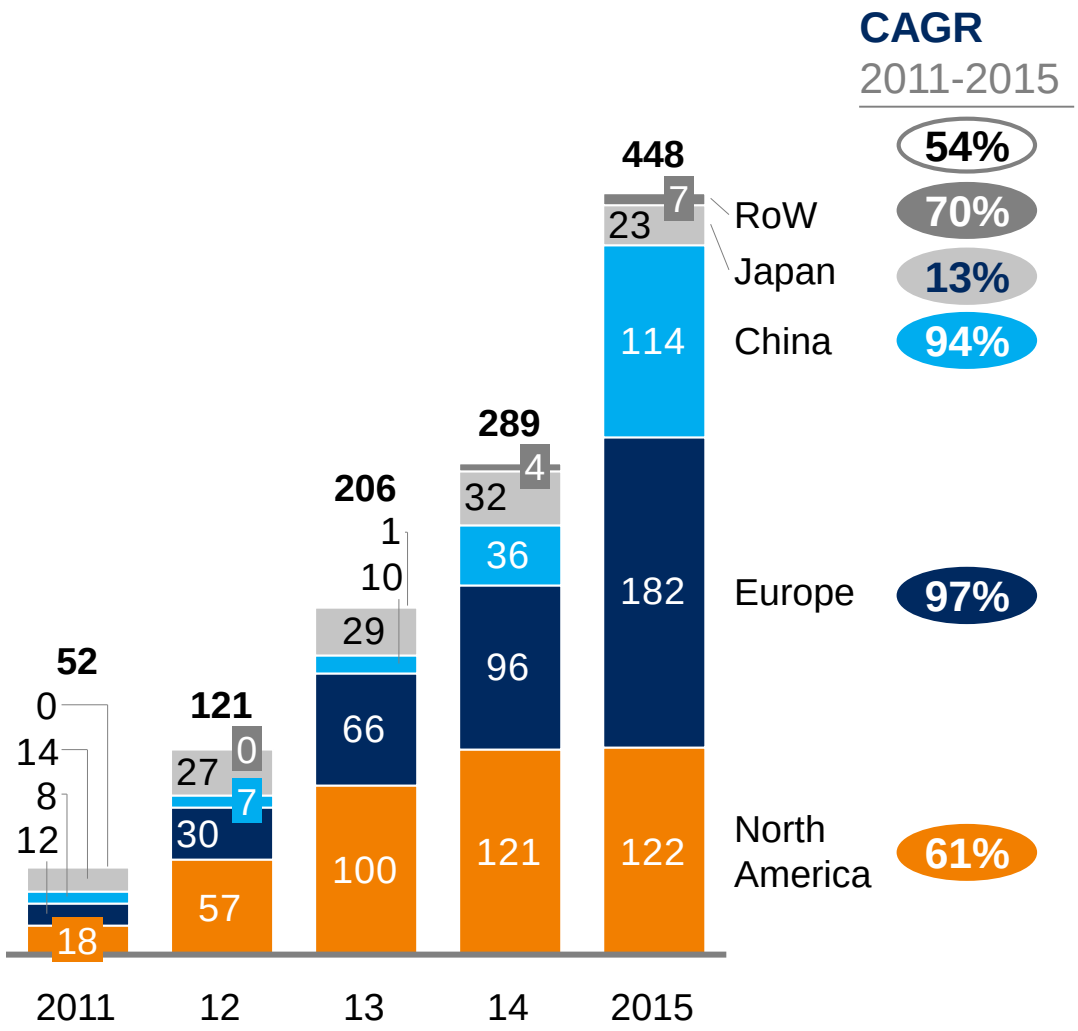
Different scenarios will have different implications

SOURCE: McKinsey Sustainable Mobility Initiative

Electric vehicle sales have risen and battery costs have fallen rapidly

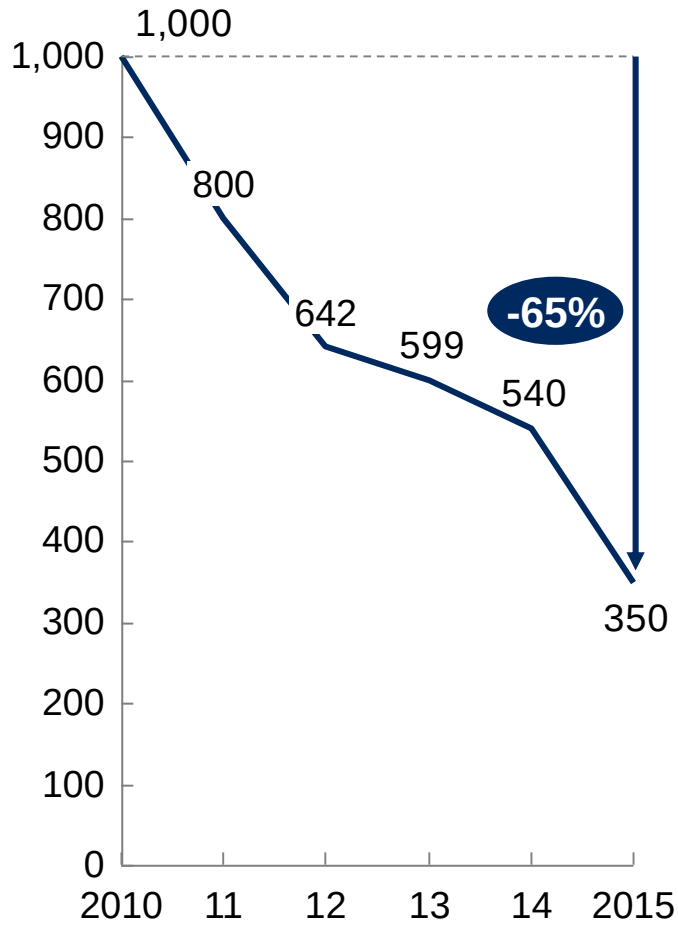
Electric vehicle sales

Sales, thousands



Average battery pack price

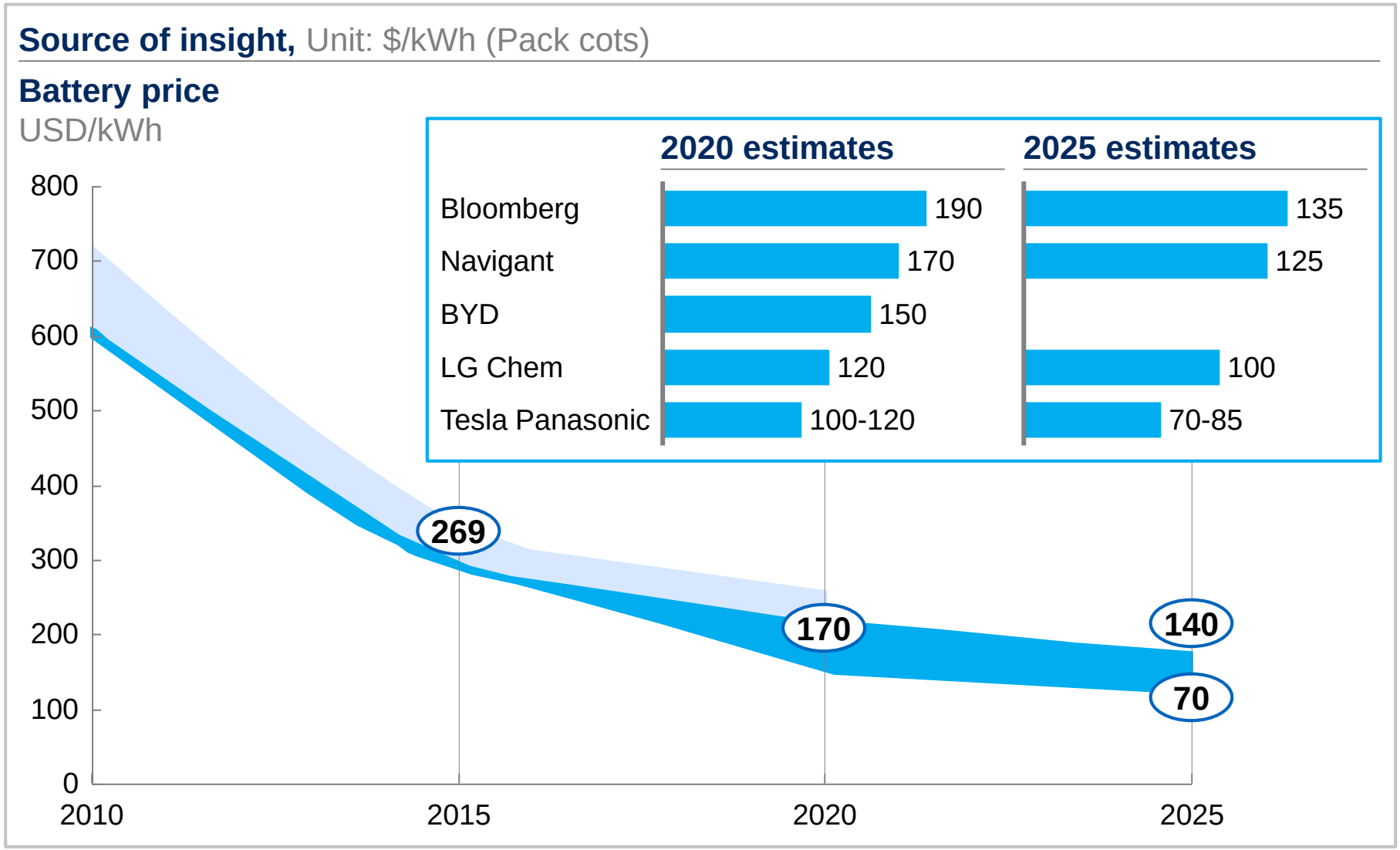
US$ per kWh



1 Plug-in hybrid electric vehicles and battery-electric vehicles. Excluding low-speed vehicles and hybrid electric vehicles without a plug

SOURCE : Bloomberg New Energy Finance

We expect further declines in EV battery costs with several sources suggesting steep declines in the next 5-10 years



SOURCE : Expert interview, SNE research, Navigant, Avicenne Energy, Bernstein

Globally we see O&G retailers are lagging in offerings to EV users – innovation driven by new entrants and non traditional players

■ Company's positioning

Positioning in e-mobility value chain (EV — Charging infrastructure — Retail)	Value chain positioning	Example business models	Other similar companies
	Design, production, installation and operation of branded CPs, plus charging solution to end-consumer	▪ **EV-Box** building a diversified business model around production/sales of CPs and back-office solutions to broad customer base	
	CP installation and operation, incl. charging solution provider. Different sub-archetypes: ▪ Public and private charging ▪ Own network, O&M and lease models	▪ **Chargemaster** building a diversified business model around B2C and B2B charging solutions ▪ **FastNed** building on a loyal customer base for its exclusive fast charging network	
	Charging solutions provider – interface between charging infrastructure and consumer	▪ **Ladenetz.de** – a defensive move of local utilities to claim a position and create lock-in in B2C power customer base	
	Integrated solutions	▪ **Tesla** offering charging infrastructure as a means to accelerate EV sales	
	Semi-public charging (as add-on to existing retail business model)	▪ **IKEA** offers free fast charging to shop visitors to accelerate sales	
Other examples	OEMs extending their offering to car sharing and charging	▪ **BMW DriveNow** ▪ **Nissan LEAF**	

SOURCE: McKinsey

1 Reinventing customer experience through digital and analytics

2 Preparing for the future of mobility

3 Optimising network operations using technology and analytics



Digital fuel retail covers 4 key areas: on the ground technology, e-commerce, mobile application and digital marketing

ILLUSTRATIVE

A Implement on-the-ground technology

Data-driven automated pricing

Screen greeting customers as they enter

Mobile payments:
- Front-end (unmanned operation, mobile payment)
- Backbone (e.g., demand & inventory)

Non-fuel retail innovations, e.g.,
- Customized store format
- Value-added services offering a complete customer experience (ATM, c-store etc.)

Enhanced supervision with remote security monitoring

Interactive customer experience
- Digital advertising screens
- Digital feedback screens

Various type of fuels:
- Gasoline
- Battery charging
- New Liquified gas (LNG, CNG, LPG)



B Use e-commerce for B2C products



- Online selling of B2C products such as LPG and lubricants;
- Partner with other e-commerce merchants

C Develop mobile app



Mobile applications that covers :
- Fuel station info
- Product info
- Loyalty program, etc.

D Introduce digital marketing



Use of digital channels such as social media, online video, website and blogs etc. for marketing activities

ExxonMobil

UBER

ExxonMobil introduced the Exxon Mobil Fuel Finder, where customers can easily locate the nearest station from the phone apps. They also partnered with Uber to launch the new Fuel Card program where Uber drivers can receive discounts from Exxon fuel stations.

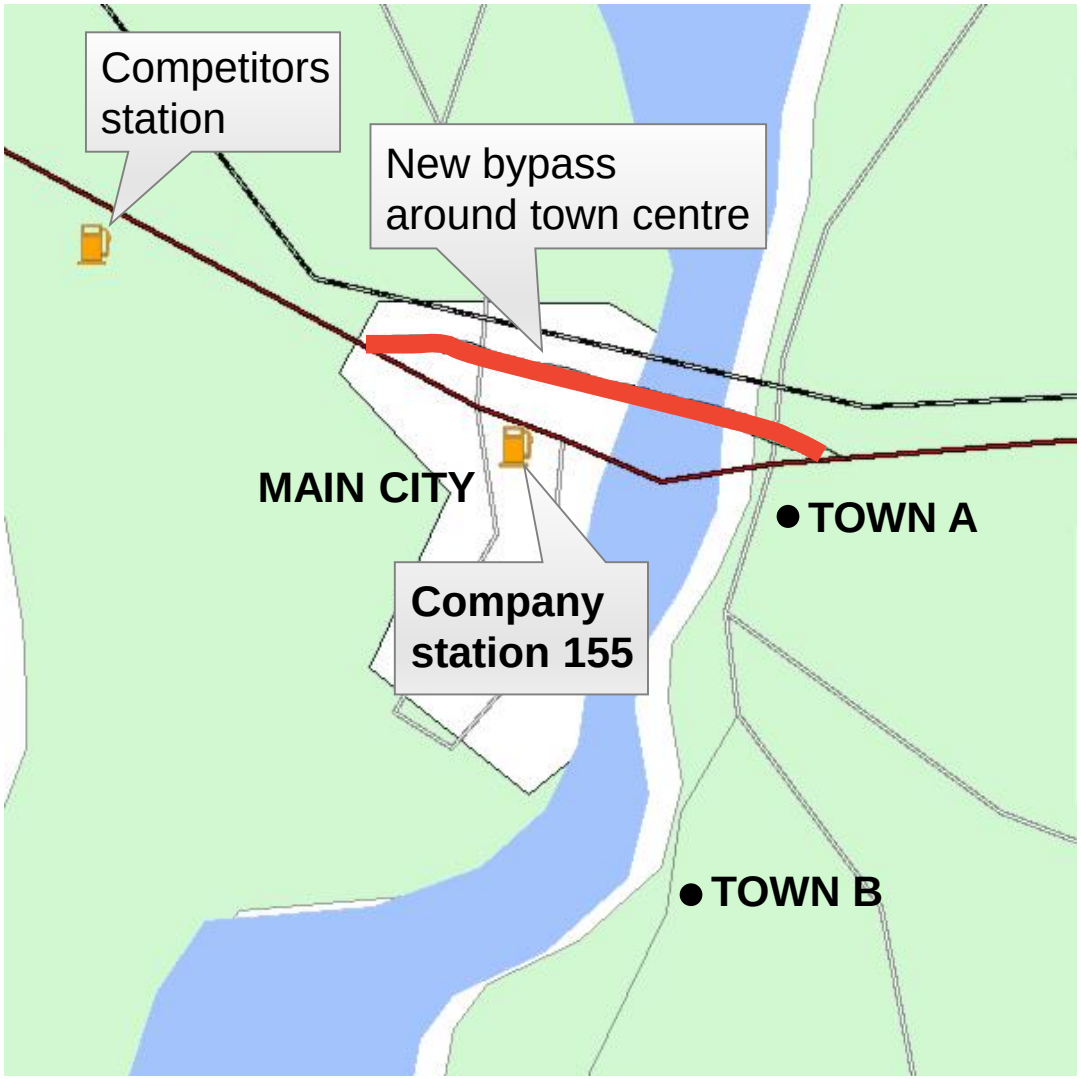
SOURCE: McKinsey & Company

Technology support: 5 areas for improving operations

Area	Strategic consideration	Potential solution space (learning from around the globe)	Example
1 Depot management technology support	▪ Designing the end to end system to manage supply chain and losses	▪ Enabling big data driven models linked to SAP, right automation equipment (ATGs, Flowmeters, Historian, DC)	Vopak
2 Improving effectiveness of the sales force	▪ Digital technology allowing rapid visualization of sales territories, and is a vehicle for ongoing territory management	▪ Account profile with product consumption behavior account-by-account ▪ Sales performance management ▪ Action plan tracking	*iPad app* 
3 Better control of stock in C stores	▪ Understand the high value fast moving SKU ▪ Put in systems to ensure stock-outs are minimized	▪ Inventory solutions and tracking systems	
4 Innovative methods to create strong value proposition	▪ Move from fuel to mobility service ▪ Innovate in retail experience ▪ Leverage the high-traffic footprint ▪ Capture big data opportunities	▪ Lead the wave into non-traditional fuel offering (e.g., EV) ▪ Take a leading role to innovate on trends related to health, social (media), payment e.g. petrozone	
5 Optimize supply and distribution using big data solution	▪ Rethinking pricing, network optimization, marketing and loyalty programs using big data solutions	▪ Pricing e.g. driving decision on – Rush hour pricing – Competitive pricing – Non-fuel pricing & assortment	Radical new ideas

SOURCE: McKinsey

Network planning is an ongoing process requiring forecast of changes in traffic patterns – analytics can and has been useful here



- New by pass will cut off company station from through-traffic
- Competitors station is likely to gain big part of current station sales
- Given fast changes in country infrastructure, traffic patterns change significantly, requiring permanent analysis

SOURCE: McKinsey analysis

Digital technology also allows rapid visualization and of sales territories, and is a vehicle for ongoing territory management

Visualization



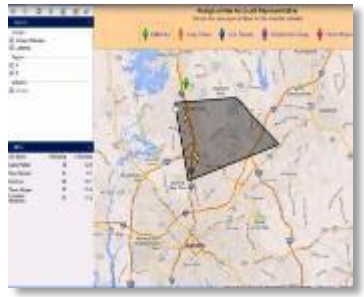
- Accounts and sales reps are visually displayed on territory map with key customer attributes (e.g., account size, estimated upside, cross-sell potential, historical sales, existing/new account)

Assessment



- Account loading and rep balancing metrics analyzed in real-time (e.g., total opportunity per rep, mix of existing/new accounts, avg. drive time)
- Problem areas highlighted where design rules are exceeded/broken

Re-assignment



- Accounts can be re-assigned and territories re-drawn directly in the visual interface
- New allocation immediately re-analyzed

Continued use in future act. allocation/planning



- RepNet transferred to your sales ops team and new users trained in the tool
- RepNet and associated data becomes part of the annual sales force assessment and tuning

SOURCE: McKinsey

Contents



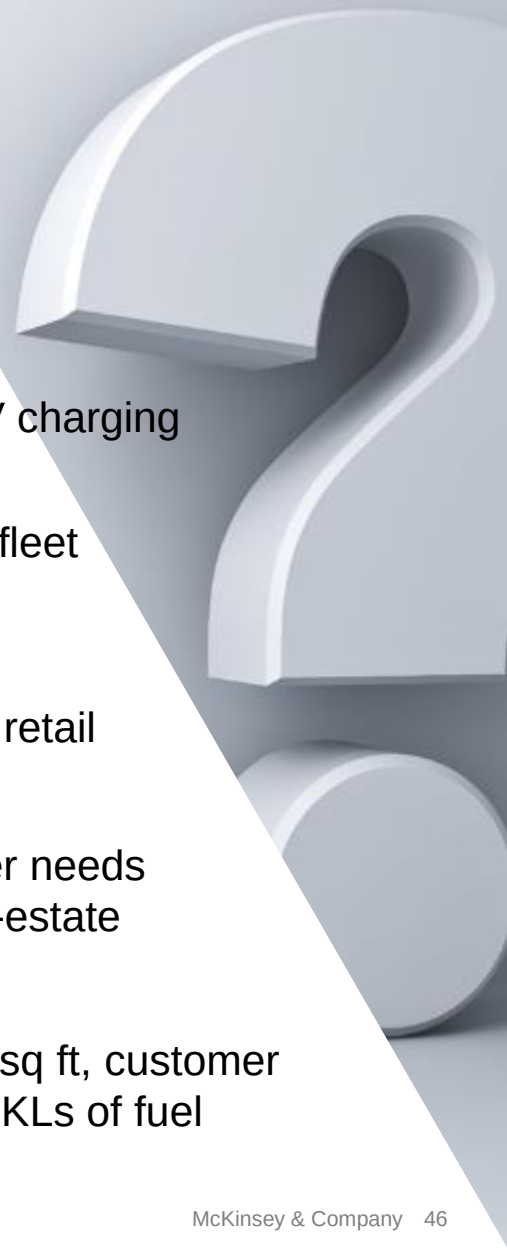
Context of Fuel retailing in India

Rethinking fuel retailing - the ongoing technology revolution

Implications for Indian fuel retailing sector

The imperative : transform from “selling fuel” to “providing mobility solutions”

1. Reinvent the customer relationship using digital and mobile technologies
2. Partner with an eco-system of players in mobility sector such as cab aggregators, ride sharing services
3. Utilize retail infrastructure for broader mobility solutions such as EV charging stations, meeting points for cab aggregators
4. Provide mobility related value-added services such as financing to fleet segment (as opposed to fuel centric or unrelated NFR)
5. Create customer segment focused outlet designs and services as opposed to generic outlets such 2 wheeler only ROs, fleet focused retail highways
6. Choose locations based on Micro market strategy (where consumer needs mobility such as near office/educational institutions) instead of real-estate availability
7. Measure and evaluate performance on retail metrics like sales per sq ft, customer satisfaction index instead of traditional volume focused targets like KLs of fuel sold



Redefine the customer relationship using mobile and digital

From forecourt to smartphone



- Exploit mobile and data analtics to deliver personalized offers to customers based on their driving habits, purchase and usage patterns
- Partner with other service providers (movie halls, restaurants, e-tailers) to enrich loyalty propositions
- For fleet customers – create ecosystem of vehicle OEM, financiers, insurers, breakdown services, fuel providers, information services
- Fleet customers : end-to-end energy efficiency solution through remote engine health analysis, customised fuels, route management and usage analytics

SOURCE: McKinsey analysis

1 How might this work in practice ? Example of an urban customer

Priya is heading for work and realises fuel is low in her scooter. She quickly checks the mobile app to locate the closest outlet



She prepays for fuel and groceries on her e-Wallet



At the RO, she goes to the special lane for 2 wheelers.



She picks her groceries from the retail store at the RO



She rates the RO with 5 stars on the app and shares her amazing experience on social media



In the evening, she receives a personalised offer which allows her to get a 20% discount on her preferred microwave if she uses her reward points



SOURCE : McKinsey

Implications for Indian Fuel Retailers : prepare for the new mobility paradigm

From kL to kWh



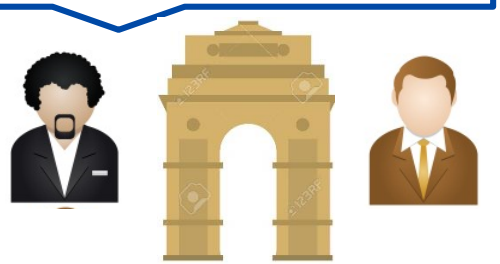
EV penetration growth can significantly impact fuel retail business - if 10% of new car sales switch to EV, liquid fuel demand can reduce by 20 MMTPA

- Explore business model innovations which will accompany growth of EV e.g. partnerships with aggregators, ride-share platforms
- Enhance site level and network level economics through partnerships with other service providers e.g. retail, hospitality, auto services
- Innovate future retail model : RO network and format not required for EV charging (can be done at home, office, malls or restaurants)
- Tieups with e-commerce and logistics companies to provide pick up, delivery and fulfilment services; Outlet for additional services – e.g. payment bank, issuance of government documents, Aadhaar registration etc

SOURCE: McKinsey analysis

3 Utilize retail infrastructure for broader mobility solutions…

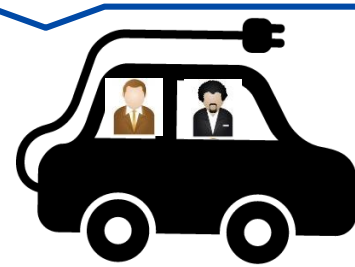
Rahul and Raj both live **in Delhi** and are planning to go to **Chandigarh** over an extended weekend



Rahul decides to use his **app to find a shared journey** instead of taking his own car and finds Raj



Rahul and Raj travel together in **Raj's electric car** to Chandigarh



The electric car **automatically calculates optimal route**; noticing an accident 20km ahead it also re-routes





After travelling half way, the **car needs charging** and Raj subscribes to a **battery swap service**



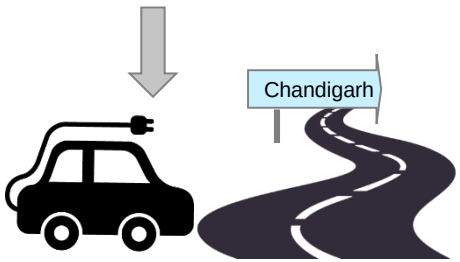


Car **automatically suggests closest RO** for battery swap



Rahul and Raj **pre-order their lunch** also at the RO and eat while battery is swapped





Rahul and Raj continue their journey and **reach Chandigarh**



Rahul/Raj use their **apps** to **give feedback** and rate their experience

4 Provide mobility related value-added services...

1. FINANCIAL SERVICES



Help connect fleet owners to creditors to enable growth

2. FLEET MANAGEMENT SOLUTIONS



Create comprehensive management platforms for tracking vehicles, recharging fleet cards, optimising routes and scheduling driver exchanges

3.VEHICLE HEALTH SOLUTIONS



Provide 24 hour breakdown services on highways and maintenance services on ROs

4. PAYMENT MANAGEMENT SERVICES



Remove hassle of giving cash to truck drivers by enabling payments for all services through fleet cards

SOURCE : McKinsey



BPCL came into existence in January, 1976 when Burmah-Shell was taken over by the Government of India. A Fortune Global 500 Company, BPCL is one of the premier integrated refining and marketing companies in India. BPCL's vision is to be the most admired global energy Company leveraging talent and technology.

The Company's Refineries at Mumbai and Kochi, subsidiary Numaligarh Refinery Ltd. at Assam and joint venture Bina Refinery at Madhya Pradesh have a combined refining capacity of over 30 MMT. BPCL's subsidiary, Bharat PetroResources Ltd. has acquired participating interests in 17 oil & gas blocks in India and abroad. BPCL markets its products through a robust marketing and distribution network comprising 13,439 Retail Outlets, 4,494 LPG distributorships, 131 storage depots/ installations, 50 LPG Bottling Plants, 40 Aviation Service Stations, Lube blending plants, cross-country pipelines etc.

In 2015-16, BPCL's market sales were 36.53 MMT and its market share amongst public sector oil companies was 22.94%. The products have a wide range of applications in industrial and transport sectors. BPCL has formed sixteen joint venture companies covering refining, city gas distribution, renewable energy, pipelines, gas, into-plane servicing etc. to cater to the diverse requirements of its customers.

During the year 2015-16, BPCL's gross revenue from operations stood at Rs. 2,18,011 Crores and the net profit was a record Rs. 7,431 Crores, representing a 46.17% leap over last year's record of Rs.5,084 Crores. BPCL's net worth stands at Rs.27,158 Crores as on 31st March 2016. BPCL has always achieved an 'Excellent' performance rating for its MOU with Ministry of Petroleum & Natural Gas since 1990-91. In addition, BPCL had the best score in the petroleum syndicate in 2013-14 and 2014-15 as well.

In the prestigious Fortune Global 500 list for 2016, BPCL's is ranked at 358 and is the one among the seven Indian companies on the list. BPCL's is ranked at 650 in the Forbes Global 2000 list for 2016, a significant leap from the 757 rank in previous year. For its outstanding global, financial and industry performance, BPCL has been ranked among the top 20 Oil and Gas Refining and Marketing companies in the Platts Top 250 Global Energy Company Rankings for 2016. BPCL ranks 3rd in Oil & Gas Refining and Marketing in the Asia/Pacific Rim, 7th in Oil & Gas Refining and Marketing globally and 11th in overall performance in the Asia/Pacific Rim. On an overall global performance, Bharat Petroleum has been ranked 35th .

To mark the Ruby Anniversary of its Foundation Day celebrations, BPCL has institutionalized the first ever national level Energising Bharat Awards, to recognize individuals working selflessly for the betterment of society. BPCL took immense pride in celebrating 40 years of fuelling dreams on 24th January, 2016. With 'Energising Lives' as its core purpose, BPCL touches the lives of a billion Indians in some way or the other.



Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies. FICCI has contributed to this historical process by encouraging debate, articulating the private sector's views and influencing policy.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry.

FICCI draws its membership from the corporate sector, both private and public, including SMEs and MNCs; FICCI enjoys an indirect membership of over 2,50,000 companies from various regional chambers of commerce.

FICCI provides a platform for sector specific consensus building and networking and as the first port of call for Indian industry and the international business community.

Our Vision

To be the thought leader for industry, its voice for policy change and its guardian for effective implementation.

Our Mission

To carry forward our initiatives in support of rapid, inclusive and sustainable growth that encompass health, education, livelihood, governance and skill development.

To enhance efficiency and global competitiveness of Indian industry and to expand business opportunities both in domestic and foreign markets through a range of specialised services and global linkages.

Notes



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