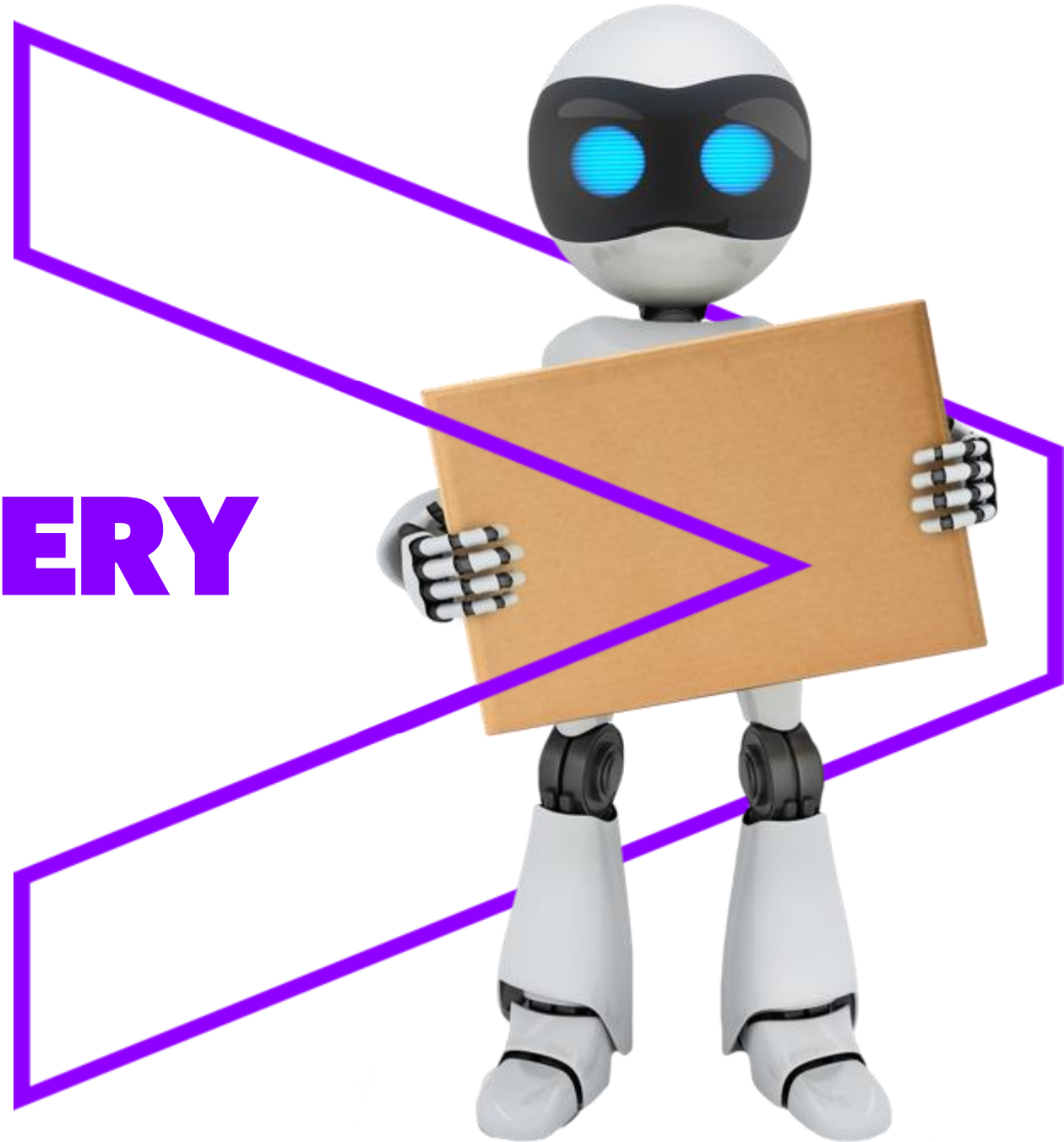accenture consulting

DIGITAL
THE NEW DELIVERY
PARADIGM

Accenture Post and Parcel
Industry Research 2017
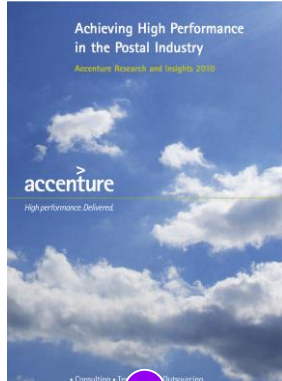
A DECADE OF RESEARCH

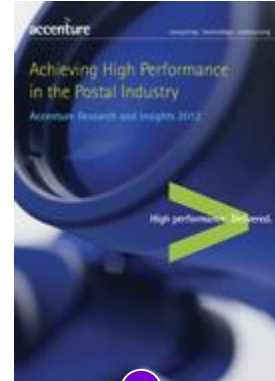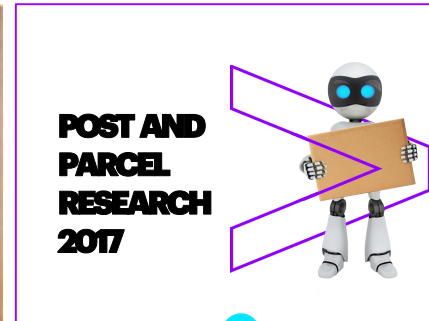ACCENTURE POST AND PARCEL RESEARCH

2006   **2009**   **2010**   **2011**   **2012**   **2013**   **2014**   **2015**

2016   **2017**

DIGITAL OPENS UP US$400M OF VALUE ANNUALLY FOR AN AVERAGE POST AND PARCEL ORGANIZATION

BE A DIGITAL ORGANIZATION

DIVERSIFY SELECTIVELY

GROW PARCELS

DEFEND THE CORE

DRIVE EFFICIENCY

Used to prove digital impact to the board and free up capital for other investments

DIGITIZE DELIVERY

Used to prove digital capability publicly to change brand perception

CREATE NEW REVENUE

Used to deliver growth but requires capital, board buy-in and a digital brand image
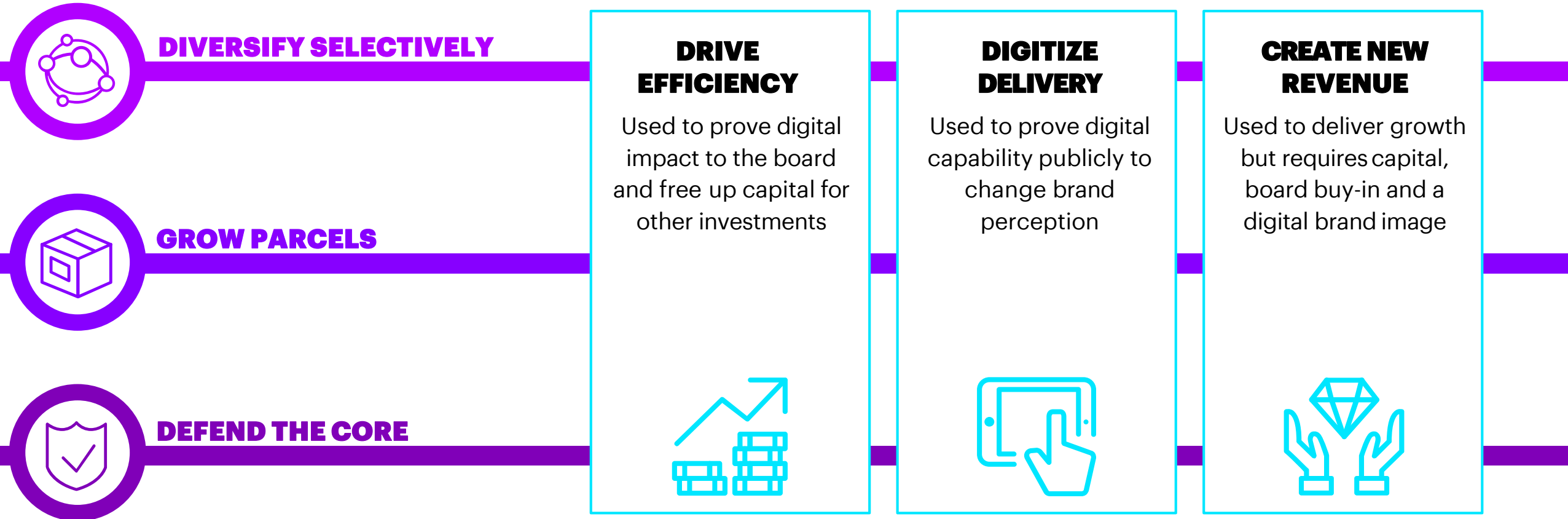
TECHNOLOGIES THAT MATTER

ARTIFICIAL INTELLIGENCE (AI)
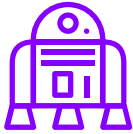Self-learning capabilities that rapidly improve to solve complex problems or deliver "intelligent" interfaces

ROBOTICS
Using automation to support or substitute human effort in repetitive tasks to improve productivity and reduce costs

AUTONOMOUS VEHICLES
Using self-driving vehicles, parcel carriers and drones to create new delivery models

DATA ANALYTICS
Applying analytical tools and techniques to large data sets to optimize activity and predict behavior

AUGMENTED REALITY (AR)
Providing real-time information and guidance to improve productivity, reduce errors and minimize paperwork

INTERNET OF THINGS (IoT)
Connecting assets across warehousing, sortation, transportation and delivery to create visibility and control

THESE TECHNOLOGIES APPLY TO THE ENTIRE SUPPLY CHAIN

COLLECTION
- **Mobile applications** enabling real-time, 24x7 order processing
- **Self-service kiosks** replacing staff in retail locations

SORTATION
- **Automation** enabling faster and more effective sortation
- **Telematics-enabled predictive maintenance** that optimizes maintenance schedule and cost

TRANSPORTATION
- **Routing algorithms** reducing time, costs and emissions
- **Telematics** improving vehicle management to optimize fleet performance

LAST MILE
- Marketplaces/aggregators use **AI** to place goods for faster, cheaper last mile
- **Tech-driven startups** bring new offers with different, low-cost profiles
- **Drones and self-driving vehicles** improve speed and reduce cost of last mile
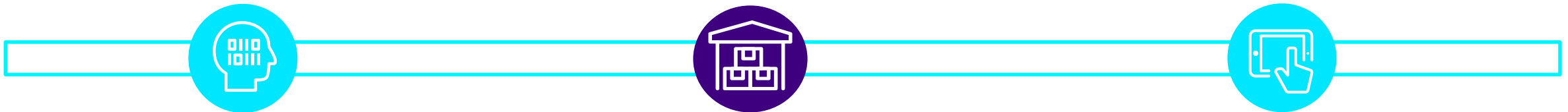
NETWORK ADMINISTRATION
- **IoT** using sensors to enable better management of assets
- **AI** enabling more accurate demand forecasting and better network management

WAREHOUSING
- **AR/wearables** improving accurate, efficient retrieval
- **Robotics** enabling rapid storage and retrieval while reducing physical footprint

SUPPORT FUNCTIONS
- **Robotic Process Automation** in Finance, HR, and IT support functions driving better corporate decisions and reducing costs
- **Digitalization** of processes and reduction in paperwork

DIGITAL: MAKING A DIFFERENCE

ARTIFICIAL INTELLIGENCE
FASTER, SMARTER, BETTER

VIRTUAL ASSISTANTS
Chatbots or virtual assistants[1] automate and improve call center or website interactions to expand capacity and improve customer satisfaction

OPTIMIZED DELIVERY ROUTE
A platform that self-learns to dynamically coordinate fastest and most cost-effective delivery routes

ANTICIPATORY CUSTOMER EXPERIENCE
Understanding motivations (the why) behind customer behavior to anticipate requests for control of last-mile deliveries

62% of consumers are comfortable with an AI application responding to their query.[2]

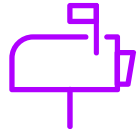**10%** cut in vehicle use and **30%** reduction in travel distances as a result of AI-equipped vehicles.[3]

68% of eTailers want two-way communications between the delivery provider and customers to coordinate delivery.[4]
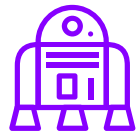
ROBOTICS
DEVELOPING NEW POSSIBILITIES

SELF-SERVICE MAILBOX
Creating post office collection points that weigh, price and collect mail and parcels as well as answer queries

24/7
availability of a prototype that can weigh a package, calculate postage, and more.[5]

WAREHOUSE ROBOTICS
Robots and guided vehicles accelerate and optimize the movement of content through warehouses while reducing physical footprint

3x
improvement in fulfilment center efficiency as a result of AI guided robots.[6]

HUMAN AUGMENTATION
Leveraging robotics to augment human activity, allowing people to accomplish more while reducing injuries

30%
of all new robotic deployments will concern smart cobots that operate three times faster than current robots and are safe for work around humans.[7]
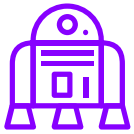
AUTONOMOUS VEHICLES
USING AI AND DELIVERY ROBOTS FOR THE LAST MILE

SELF-DRIVING CARS
Autonomous and semi-autonomous vehicles create reduced need for experienced drivers representing cost savings for last-mile deliveries

DELIVERY ROBOTS
Self-driving delivery robots with sensors and cameras to navigate for door-to-door shipping of small packages

DRONES
Using autonomous drones (unmanned aerial vehicles), especially in logistics operations, to automate and optimize logistics and last mile

>10M
forecast of cars with self-driving features globally by 2020.[8]

15-30 minutes
the time taken for six-wheeled couriers to finish deliveries.[9]

74 cents
the estimated cost of drone delivery.[10]

AUGMENTED REALITY
EMPOWERING THE WORKFORCE IN NEW WAYS

WAREHOUSING AND SORTATION
Enabling the workforce with real-time information and guidance to improve productivity, reduce errors and minimize paperwork

40%
reduction in picking errors.[11]

SALES
Empowering sales teams and part-time workers with customer data and internal information to create a unified vision of customers across teams

40%
reduction in overhead costs. [12]

CUSTOMER EXPERIENCE
Creating AR experiences as an overlay on a package to add to the customer's parcel experience, especially in gifting

$13.9B
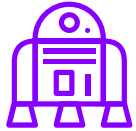worldwide spending on augmented and virtual reality in 2017 (USD).[13]

IoT & ANALYTICS
NEW DATA, USED DIFFERENTLY

PREDICTIVE MAINTENANCE
Using sensor data to reduce unnecessary maintenance and prevent unexpected breakdowns

FLEET TELEMATICS
Monitoring vehicle performance and driving behavior to reduce maintenance and maximize efficiency and safety

TRANSPORTATION AND DELIVERY
Dynamic route planning and delivery instructions to optimize delivery and reduce errors

CONNECTED LOCKERS
Using lockers for last-mile delivery to improve customer access and create more flexible, efficient deliveries

15%-30%
reduction in maintenance costs across industries.[14]

15%
reduction in safety incidents.[15]

3.3%
reduction in fuel usage against **1.8%** increase in parcel volumes.[16]

10%
increase in parcels delivered for **50%** less fuel usage.[17]

PUTTING DIGITAL TO WORK

GETTING DIGITAL RIGHT

Digital will have a profound impact on post and parcel organizations. To thrive, there are some things they will need to get right.

DIGITAL IN CORE OPERATIONS
Data-driven operations excellence that uses insight and prediction to realize efficiency gains in processing and fulfilment

DIGITAL CUSTOMER INTERACTIONS
Reinventing the customer experience to offer more personalized, efficient and convenient services for both consumers and businesses

NEW DIGITAL DELIVERY MODELS
Radically altering the cost profile and capabilities of last mile delivery networks

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ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world's largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 425,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at **www.accenture.com**.

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