Supply in demand

The digital transformation needed to secure a competitive edge

$4.5 billion

current annual spend on plant floor technology

Even before the pandemic hit, consumer goods companies were dealing with more suppliers, faster product development cycles and more demanding consumers than ever before. Combined with globalisation and evolving technology and consumer trends, it's making it harder and harder for traditional sales and distribution channels to stay relevant.

To compete in the future, you'll need a 360-degree, data-driven view of your operations and supply chains, as well as a deep understanding of your customers and what they want.

Source: Building a Smarter, More Connected Plant Floor with IoT

While **88% of manufacturers say they are capturing data** from their assets and operations, **only 18% connect that data to their business systems** to improve operations.

Meeting new demand means getting the foundations right

Right now, there's uncertainty around business models, locations and even which products and services to provide. With the pace of change having increased like never before, you need to shape your infrastructure to reflect your changing business. And fast.

The key to success is combining the right technology with the right security, service, management, expertise and commercials so you can mould the infrastructure to support your digital transformation.

In complex supply chains, visibility is key

Optimising business processes, enhancing information, reducing costs, lowering risks and shortening project timelines will depend on the convergence of your IT and physical, operational technology (OT). The entire organisation will also need to collaborate across teams and vast distances at scale and at speed.

Digital manufacturing needs a smart workforce

As factories of the future implement new, innovative technologies such as digital twins, 3D printing, automation, Internet of Things (IoT), machine learning and virtual and augmented reality, they will rely on the pace at which employees can adapt, just as much as the speed of production to remain competitive.

Everything has changed, almost overnight

Trends have accelerated at a pace that was unimaginable just a short time before; changes that otherwise might have taken a decade happened in a matter of weeks. Digitisation, online ordering and delivery, and remote working became widespread practically overnight.

You need to find new ways to succeed

"Servitisation" is a relatively recent concept adopted by process manufacturers that want to shift from selling just products to offering services wrapped around those products.

Customers always expect more

Social media and digital techniques are transforming marketing, with digital technologies reinventing brand relationships to create a rich dialogue between company and consumer. The best-performing consumer goods companies are pushing the boundaries by providing rich product information and content online.

73%
of consumers would change purchase habits to help the environment

Source: Nielsen

Only 22%
of consumer goods companies have a fully integrated supply chain

Source: Tear down walls to optimise the supply chain – Supply Management (cips.org)

The digital future of consumer goods

To remain competitive and relevant among all these changes, you need to be agile in your ability to innovate and engage with customers directly. Smart, connected devices – the internet of things (IoT) – is the single biggest driving force for digital transformation in the industry.

At BT, we believe that you need to focus on five keys areas in order to stay ahead – connectivity, digital supply chain, intelligent manufacturing, smart workforce and channels to market.

Connected factory
With secure, robust connectivity, we're improving factory productivity and helping companies respond quickly to changes.

Digital supply chain
Increased visibility and enhanced transparency help control costs, minimise efficiencies, support new business growth and exceed customer expectations.

Intelligent manufacturing
Monetise existing data to generate insights to drive efficiencies like reduced downtime, lower energy consumption and less held stock.

Smart workforce
Put technology into the hands of your employees to collaborate across a wide range of functions, disciplines and geographically dispersed markets.

Channels to market
Actively engage consumers by consistently delivering highly personalised, authentic and valuable brand experiences across marketing channels.

Connected factory

Connectivity has often been a secondary consideration. When the network served fewer devices, manufacturers were satisfied as long as the communications technology worked – and they could work around any weaknesses. That's no longer true.

Connectivity
More and more factories are moving beyond traditional automation to a fully connected and flexible plant, using a constant stream of data from connected operations to learn and adapt to new demands.

To operate, smart factories need to maintain a constant connection between equipment on the floor and an IoT platform in the cloud. If the connection is broken or network security is breached, you'll get service disruptions and unexpected downtime.

Our edge solution goes way beyond deploying devices; it's about setting up an infrastructure that can support IoT solutions as well as compute capacity outside the data centre – as well integrating legacy networks that just can't do this.

5G
With a 5G-enabled smart factory, real-time communication among millions of sensors, devices, and systems will be possible – improving environmental safety as well as quality control.

Over time, 5G will reshape how you connect equipment, sensors, processes and products, as well as communication with employees. It will power smart factory initiatives and accelerate more agile digital transformation.

Intelligent automation
Higher output and increased productivity have been two of the biggest reasons in justifying the use of automation. But it can also give you more efficient use of materials, better product quality, improved safety, shorter workweeks for labour, and reduced factory lead times.

What we offer

Connectivity options – 5G, SD-WAN and cloud

Expert infrastructure design and tailored set up

Computer vision – to track packages, safety and environment

Automation – from factory floor to workflow

Data driven planning and predictive analytics

Digital supply chain

We make supply chains faster and more efficient, and workers safer and more productive, with automated material handling, mobility computing, and voice, sensing and safety solutions.

Warehouse efficiency

Warehouses have a crucial role to play in maximising organisational efficiency, and in turn, revenue. They have perhaps the biggest role in the supply chain, and the management of your warehouse can have a significant impact on your bottom line – so it really does pay to give it the attention it deserves.

Our warehouse efficiency solutions collect and analyse untapped data from the supply chain, revealing actionable business insights.

Inventory visibility and management

If you don't have the technology that keeps you up to date on where your products are, you could be left with not enough or too much at different points in your supply chain.

Today's shopper wants visibility into the entire order fulfilment process – from accurate availability at purchase to tracking information during shipment. Fulfilment visibility is now essential to compete and improve your bottom line.

Transport logistics

Make sure your last mile doesn't become the first reason your customers look elsewhere. We can help you determine cost-efficient delivery routes and get deliveries to your customers quickly with fleet management.

You can optimise rotas and ensure a seamless transition between shifts with workforce scheduling, so work remains uninterrupted. And with scanners, PDAs and smart printing services you'll boost efficiency. Our yard and terminal management solutions also cut costs by utilising space through effective planning and movement tracking.

What we offer

Field Force Automation:
• workforce scheduling
• yard management
• route optimisation
• PDAs, scanners, printing

Warehouse efficiency

Artificial and augmented intelligence tools

Intelligent manufacturing

We can help you limit the impact of supply chain disruptions on your business by using our AI tools to identify risks within your wider supply chain. We'll make sure you can deliver supplies consistently and on time, giving you advanced warning of where you may need to enact contingency plans.

Digital manufacturing
Our Digital Manufacturing solution gives factory managers valuable insights into the workings of the factory. It uses both wired and wireless connectivity, so data can be processed in real time at the edge or in the cloud.

By bringing IT and OT together and having the right analytical tools to make sense of the data, there are huge gains to be realised such as less downtime, increase productivity, energy savings, asset utilisation, reduce maintenance costs and adhere to compliance.

We can identify when a failure is likely, then prescribe the best course of action for maintenance teams to be more productive, taker safer actions and increase asset lifetime. It's all about energy efficiency, production optimisation and predictive maintenance.

Accelerating product development
Bringing new products online is faster and more flexible with digital design and prototyping. From digital twins, mobile to desktop, RFID, 3D and industrial printers, we provide intelligent managed print services to proactively monitor and maintain the printer estate. Our visualisation technologies like virtual reality (VR), augmented reality (AR), and 3D printing can also improve the rate and flexibility of your R&D.

A VR prototype can be built in a matter of days, rather than five or six weeks assembling a physical one. The effective use of VR can reduce R&D costs and time to market by 10-15%.

Auditing suppliers
Companies with global suppliers have found it increasingly difficult to audit their processes, whether for hygiene adherences or checking processes are being followed. Using our AR immersive tools you can speed up decisions and accelerate outcomes.

What we offer

Energy efficiency

Supply chain risk assessment

Production optimisation

Predictive maintenance

Augmented maintenance
Maintenance is an area that is always being improved and perfected over time. Our augmented reality technology drives savings and productivity, thanks to real-time two-way audio and video capabilities.

Health and safety
Our computer vision technology is a game changer. With applications like PPE detection, it can help limit the number of accidents, safeguard situations and give you deep insight into your warehouse and manufacturing operations.

Intelligent manufacturing

Analytics and Insights

There's one significant asset that consumer goods companies have not yet optimised: their own data.

Process industries generate enormous volumes of data, but most don't make any use of this mountain of potential intelligence. We bring data from multiple sources together to take advantage of machine learning models and visualisation platforms.

This helps uncover new ways to optimise processes, from the sourcing of your raw materials to the sale of your finished products.

Blended training

In a recent study, employees who had taken VR training said they felt 40% more confident to act on their training than classroom learners and 35% more confident than e-learners. They also felt four times more focused than e-learners – and completed their programs 1.5 times faster.*

*PwC study

What we offer

Livestreaming and VR

Smart cameras with real-time detection

Augmented maintenance

Digital manufacturing analytics

Smart workforce

First line workers are the backbone of your organisation. Your employees represent your brand, and poor performance can impact your bottom line. High-performing employees contribute to your business's success, offer innovative ideas and keep your customers happy.

Building the digital workforce

Connected digital factories require a new way of working, so you'll need to build a digital workforce. Recruitment and retention of the right people is key. Just as important will be working closely with your people before and during the implementation of any new technologies.

We can put technology into the hands of your employees so they can collaborate across a wide range of functions, disciplines and geographically dispersed markets, as well as specialised applications and systems.

What we offer

First line worker solutions

Integrated voice and data communications

We're entering a new era of man-machine interaction and it's critical not to underestimate the importance of people in the digital factory.

Channels to market

If you want to actively engage consumers you need to deliver a consistent, highly personalised, authentic and valuable brand experiences across all your marketing channels.

Omnichannel

The pandemic has changed how consumers shop, with greater emphasis on digital channels. Consumer-decision journeys now involve more digital touchpoints and are becoming more complex, but consumers still expect a consistent presence – online and offline.

Different channels are often siloed in different parts of the business, constrained by historical organisational fit rather than today's omnichannel consumer. But delivering meaningful value to consumers requires a holistic, full-funnel approach to commerce, including the right balance of distribution channels and tightly integrated routes to market. So you need to focus on the consumer and drive connections at every point along the customer journey.

Growth of direct-to-consumer and subscription services

To remain competitive, many consumer goods companies that have traditionally only sold their products through retailers are beginning to experiment with their own direct-to-consumer (D2C) models. This channel will be incredibly powerful to get closer to consumers, obtain insights and take any learning to the rest of the business.
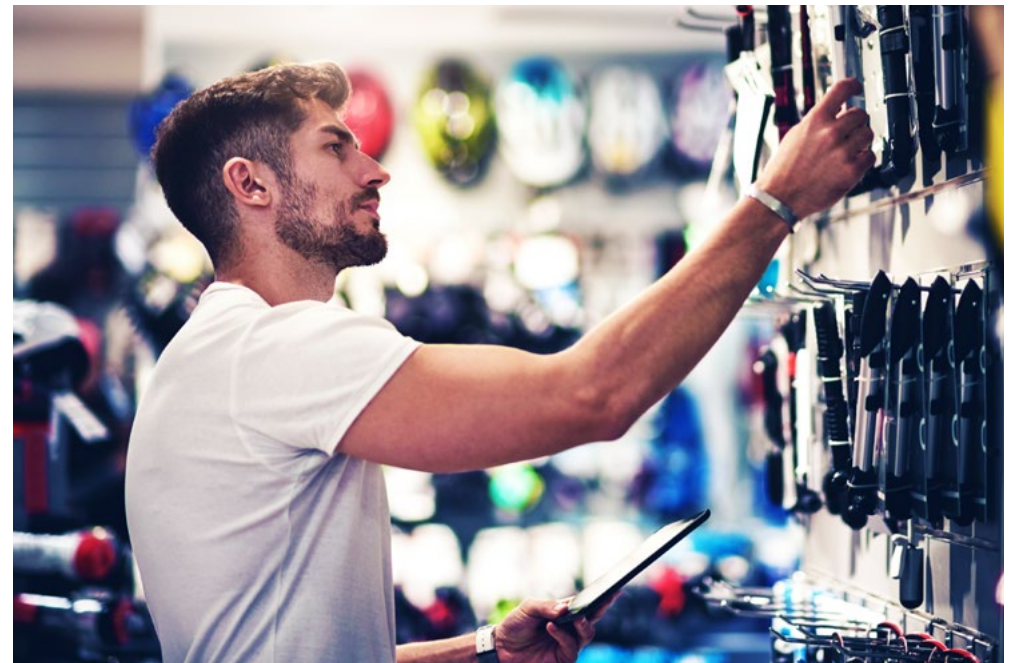
D2C strategies can help you gain a deeper understanding of the consumer, informing strategic digital investments in operations, business model transformation, and distribution channel management.

What we offer

Cloud customer experience solutions

Direct messaging platform

Livestreaming

Why work with us?

With a massive choice of different platforms, services and applications to try and knit together, it's very easy to end up with disjointed, dislocated experience. That's when the technologies that were meant to make things simpler and better, just make things more complex to manage.

However, as part of an integrated solution that includes the right security and connectivity, they will deliver you great business results.

That's why we're investing in a totally new cloud native business environment; offering you and your customers a great experience whatever the combination of choices you make.

Our approach is ecosystem based. We curate partners with emerging technologies to tried and tested solutions, from ISPs to third party consumer goods specific solutions alongside our own capabilities, so you don't have to. We use our ecosystem partners to innovate and deliver the most compelling solutions.
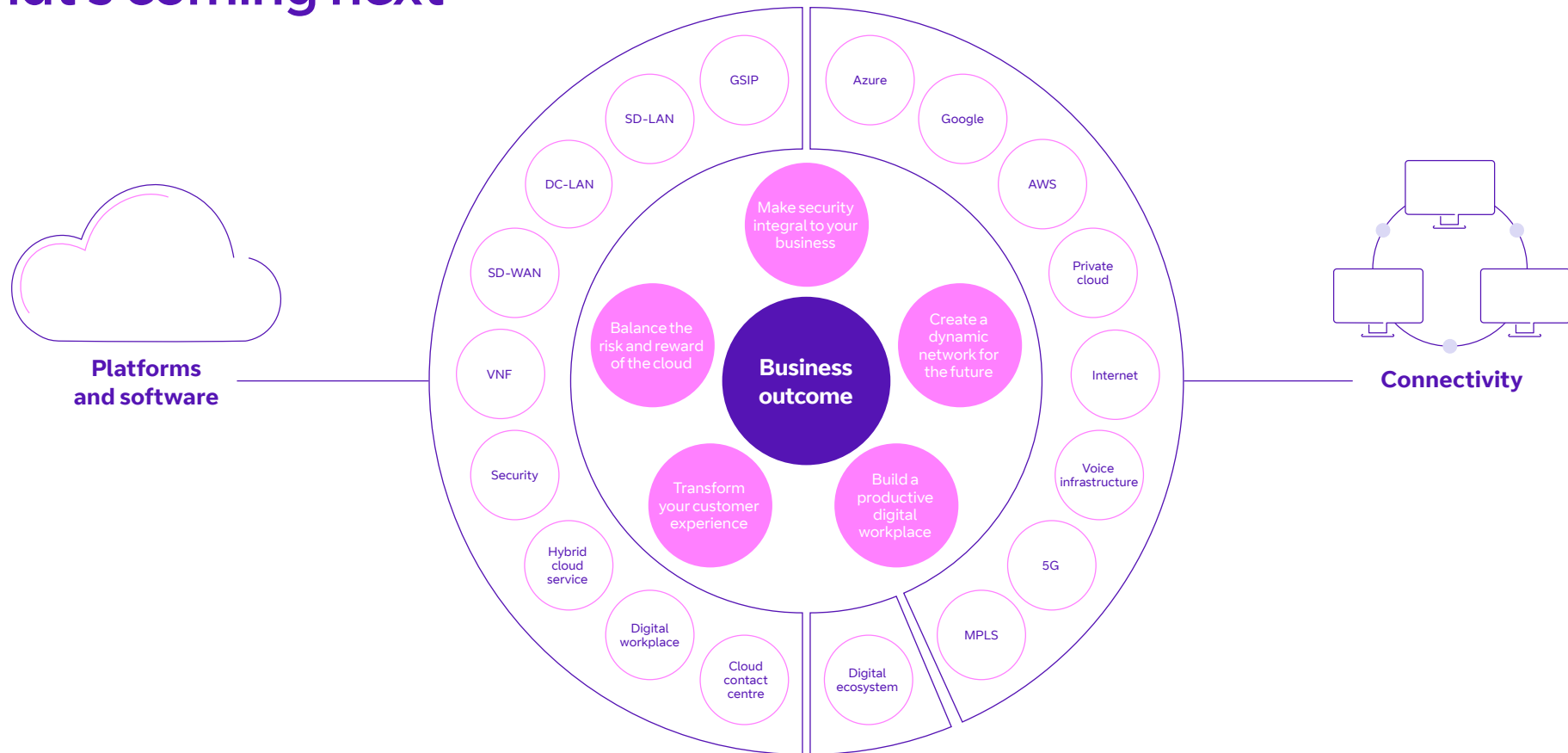
We're helping our customers improve their digital journey from the supply chain to the store experience.

Our customers are navigating change at an unprecedented pace and we want to inspire new possibilities for them by helping transform their infrastructure, expand applications and analytics, address their security needs, and empower their teams.

We want to help them achieve growth and provide stand out experiences by transforming our customers' operating models, deepening customer engagement and increasing loyalty.

We deliver the scale so that you can consume innovative solutions quickly and securely and be ahead of the opportunities and problems that may be coming your way. Together, we can achieve a smarter digital future – for your customers and for your colleagues.

Wherever you are on your digital journey, we'll prepare you for what's coming next

Platforms and software

Connectivity

GSIP
SD-LAN
DC-LAN
SD-WAN
VNF
Security
Hybrid cloud service
Digital workplace
Cloud contact centre

Azure
Google
AWS
Private cloud
Internet
Voice infrastructure
5G
MPLS
Digital ecosystem

Make security integral to your business

Balance the risk and reward of the cloud

Create a dynamic network for the future

Business outcome

Transform your customer experience

Build a productive digital workplace

We work with...

80%
of the top 10 FMCG companies
Source: Deloitte's Global Powers of Retailing 2019

90%
of the top food and beverage companies
Source: Food Engineering 2019

90%
of the top 10 household/personal care and cosmetics companies
Source: Deloitte's Global Powers of Luxury Goods 2019

100%
of the UK's top 10 retailers
Source: Top 10 UK retailers, Retail Economics 2019 (Financial reports, Consumer Surveys, Retail Economics analysis)

For more information

Talk to your account manager

Visit www.bt.com/digital-consumer-goods

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