

The impact on modern technology on TESCO

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- Background & History
- Aim & Objectives
- Mission and Vision
- Services offered
- Challenges before technology



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Insights of Modern Technology



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Impacts of Modern Technology



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The impact of Modern Technology on TESCO

Introduction

Tesco is currently the UK's biggest supermarket chain.

Their market share stands at 27%. More than Asda, Sainsbury's and Morrisons which are the main competitors.

As of the financial year 2018/19, they employed >344,000 people in the UK and >100,000 worldwide.

They have 7000 stores around the world.

Outside of the UK they also operate in Central Europe and Asia.



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(About Us, 2020)

Noemi Baglieri (1916148) – Slides 1, 2, 3, 4, 5, 6.

Slide 1 – Introduction

Tesco is the leading supermarket chain in the UK as they hold 27% of the market share, more of their main competitors such as Asda (15.4%), Sainsbury's (15.3%) and Morrisons (10.14%). Although the majority of their presence is - to a large extent - in the UK, they also operate in Central Europe (Ireland, Czech Republic, Hungary, Poland and Slovakia) and Asia (Malaysia, China and India) counting around 500,000 employees and 7000 stores worldwide.

(About Us, 2020)



Background and History



- Jack Cohen started his business in 1919, which was simply selling leftover groceries on a booth in East London.
- In 1924 he sold the first own-brand product and created the name Tesco.
- First store was opened in 1929 in Edgware, North London.
- Cohen revolutionised UK supermarkets by introducing self-service shopping, in 1946.
- 1995, Tesco Clubcard is launched.
- Tesco goes online by introducing Tesco.com, in 2000.
- Tesco Mobile started in 2003, offering Pay As You Go service.

(About Us, 2020)

Slide 2 – Background & History

Jack Cohen established his business in 1919 by simply selling leftover groceries on a stall in East London. He would later (1924) start selling his own branded product, when he bought tea from T E Stockwell. This is how the name Tesco was born. Jack took the first three letters in T E Stockwell, his main supplier, and added the first two letters of his surname (CO), to make TE S CO. The first Tesco store was opened in 1924, in Burnt Oak, Edgware, in North London, and was closely followed by the first Tesco headquarters in Edgware, also North London in 1934. Jack quickly began to expand into other cities and suburbs of London. Tesco was the first grocery store to adopt the American “self-serve” shopping model. This revolutionised UK shopping, as it moved from customers being directly and exclusively served by someone behind a counter, to being allowed to walk around freely and choose the items they wanted themselves, to pay for at the end. In 1995, Tesco launched the Tesco Clubcard. While it was not the first supermarket loyalty card, it did change how loyalty cards are used to this day. Instead of simply collecting points, as cards had done previously, it now collected information on customer spending habits, and allowed for discounts to be given on often purchased items.

(About Us, 2020)

Aim & Objectives.

Every little helps

- Ensuring a clean and tidy store
- Make sure the customer can get what they want
- Competitive prices
- Less waiting times, shorter queues
- Helpful staff

(Little Helps Plan: Working together to make a big difference)

Tesco's main aim is to give their customers the best possible shopping experience.



Slide 3 – Aim & Objectives

Tesco's main aim is to give customers the best, and easiest shopping experience possible. This is where their slogan "every little helps" comes from. It has been engrained in the company since their formation. Tesco strive to achieve this aim by: 'Ensuring a clean and tidy store'. No one wants to shop in a dirty store, especially a food store. By keeping the shop clean and tidy, they convey not only a better image, but also make it easier for customers to find what they are looking for. 'Make sure the customer can get what they want'. This is crucial to running a successful grocery chain. If you do not stock what the customers want to buy, then customers will not come to your shop, it is that simple. Tesco always maintains a high level of stock and has a broad selection of different products to fit most tastes. 'Competitive prices'. Price is one of the main factors a customer looks at when choosing where to shop. By ensuring they have some of the most competitive prices around, Tesco can keep people coming through their doors, rather than a competitor with higher prices. 'Less waiting times, shorter queues'. This is massive for a supermarket. If you have lots of people standing in a queue, and not shopping, then your store will get clogged up, and people will be less likely to return, as they have had an unpleasant experience. To tackle this, Tesco introduced self-service checkouts, so people with fewer items, or those in a hurry, could quickly buy the items themselves, without the need of a cashier. 'Helpful Staff'. At the centre of any successful business, is their staff. Helpful staff can help customers find what they want, then it improves the overall shopping experience.

(Little Helps Plan: Working together to make a big difference)



Mission.
Serving Britain's shoppers a little better every day
Tesco's aim is to be the champion for their customers by helping them to enjoy a better quality of life and an easier way of living.

Vision.
To be the most highly valued business by: the customers they serve, the communities in which they operate, their employees and their shareholders.

Values

- No one tries harder for customers.
- Treating people how they want to be treated.
- Trading responsibly.
- To be a great employer.
- To lead food waste reduction.
- To reduce the impact on the environment.
- To support local communities.

(Core Purposes and Values, 2020)

Slide 4 – Mission and Vision

“Serving Britain’s shoppers, a little better every day” it is Tesco’s core mission. Customers and employees are at the heart of everything they do, and they want to ensure all their needs are fulfilled. By making sure that all the small things are taken care of, Tesco can provide a high quality of service, so that customers have one less thing to worry about.

Community is also at the heart of what Tesco stands for. They provide many community projects and incentives to help the local areas they operate.

(Core Purposes and Values, 2020)



- Tesco Clubcard
- Tesco Mobile
- Tesco Pharmacy
- Tesco Bank
- Tesco Fuel
- Tesco Click & Collect
- Tesco Home Delivery
- F&F Clothing / Home

(Tesco, 2020)

Slide 5 – Services

Even though Tesco is best known for their grocery stores, they offer a variety of different services.

Tesco Clubcard: This is Tesco's loyalty programme. It collects data on your shopping habits, and sends personalised discounts based on what you buy most. It also accumulates points to give money off when you shop.

Tesco Mobile: Tesco branched into the mobile phone industry in 2003, as a joint venture with O2. They offer Pay-as-you-go, no contract sims, and pay monthly options. It operates almost exclusively online but is available in 500 shops.

Tesco Pharmacy: Some Tesco Extra stores have a pharmacy inside. This allows customers to 'kill two birds with one stone' and collect any prescriptions as they do their food shopping.

Tesco Bank: in 1997, Tesco started Tesco Bank, in association with Royal Bank of Scotland. Customers who use Tesco bank, receive bonus Clubcard points, showing how Tesco have begun synergising their services.

Tesco Fuel: Tesco have been selling fuel since 1974. It is another example of the synergy between all their services, as again, it allows customers to do most of what they need to, at a Tesco store. Customers also receive Clubcard points from buying fuel at Tesco, and can use points to get money off, which is a great incentive. Tesco Fuel also tends to be cheaper than dedicated Fuel only stations.

Tesco Delivery, and Click & Collect: Customers are able to order their groceries online, and have them delivered to their homes, or they can go to a store which has click and collect, to collect their shopping.

F&F Clothing & Home: Tesco have launched their own home and clothing brand called F&F. It can be found in large Tesco Extras, and covers everything from plates, to duvets, to curtains. They also sell clothing, including school uniforms. This is a great way for Tesco to provide the best possible shopping experience, by allowing customers to buy everything they need in one trip.

(Tesco, 2020)

Challenges before introducing Modern Technology

Limited market research – Clubcard allows Tesco to perform automated market research.

Slow check-outs – Self-service machines have allowed Tesco to reduce queues.

Traditional training – It is now replaced with online training, which is faster and less expensive.

Waste and stock management – Easier and more precise as new Tesco apps for colleagues are introduced.

Hiring methods – Potential employees can now upload CVs online directly, and complete assessments.

Shopping – Online shopping means a bigger range of customers have access to Tesco.

Communication – More advertising methods are introduced and staff can relay important information.



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Slide 6 – Challenges before introducing Modern Technology

Market research – Clubcard allows Tesco to perform automated market research and monitor people's purchasing habits instead of using old fashioned questionnaires

Slow check-outs – Self-service machines have allowed Tesco to reduce queues by giving people an alternative for when they have a few items.

Traditional training – With online training, Tesco can make sure all their employees are prepared without having to organise physical training sessions, which minimises time waste and costs.

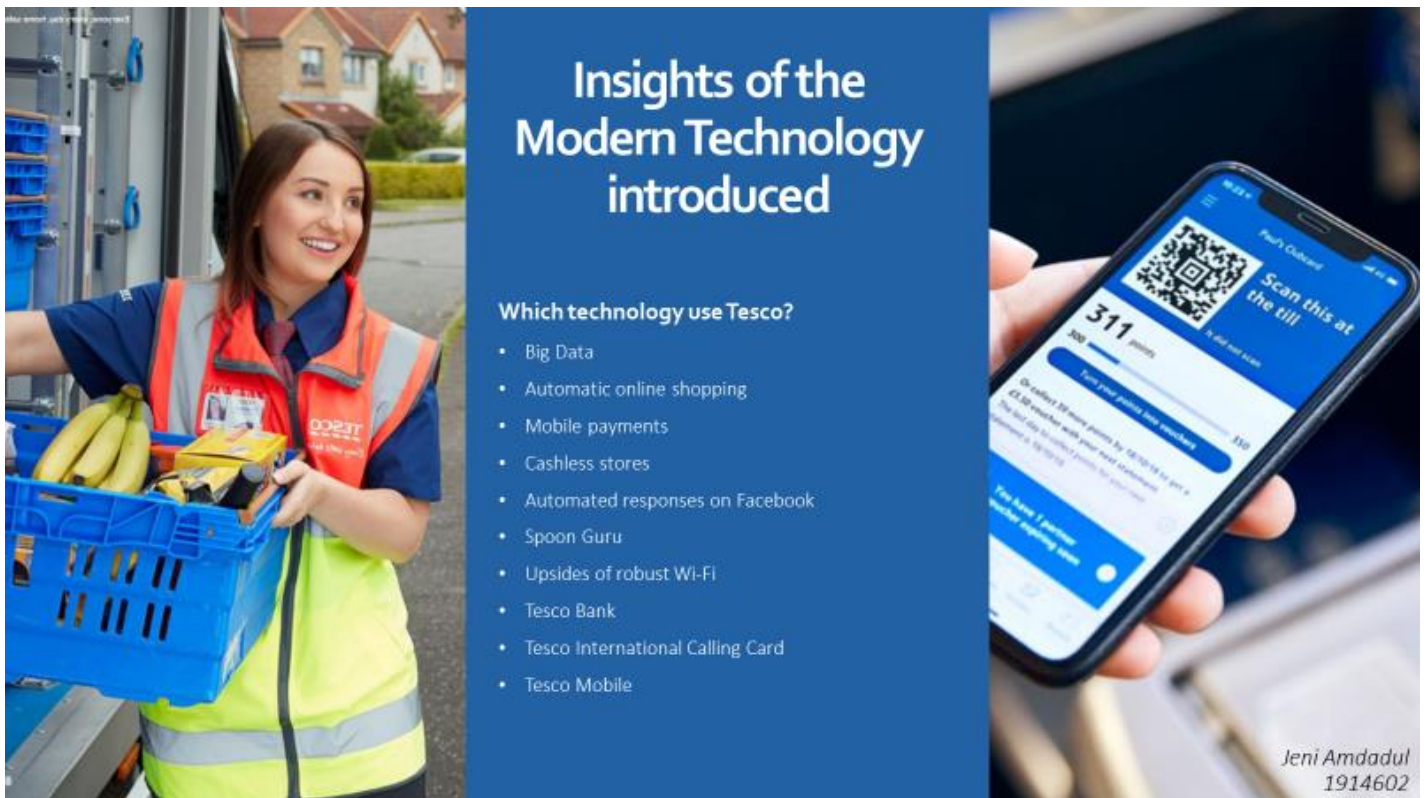
Waste and stock management – Better computers and hand held devices have made it much easier to manage and record stock levels in store.

Hiring methods – Potential employees can now upload CVs online directly, and Tesco are able to quickly narrow down the best candidates by having them complete online testing.

Shopping – With the creation of online shopping, it has never been easier for customers to shop. Now, even those who would otherwise not be able, can shop at Tesco, and either have it delivered, or collect it from the store without leaving their cars.

Communication – Advancements in phones and electronic devices have helped staff stay in touch while working, and management are able to communicate better with those working, and not working. An example would be if an item must be recalled, it is now much easier to get information to all stores. They can also reach more people by advertising with new technologies such as TV adverts, e-mail subscriptions or app notifications.

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Insights of the Modern Technology introduced

Which technology use Tesco?

- Big Data
- Automatic online shopping
- Mobile payments
- Cashless stores
- Automated responses on Facebook
- Spoon Guru
- Upsides of robust Wi-Fi
- Tesco Bank
- Tesco International Calling Card
- Tesco Mobile

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Slide 7 – Insights of Modern Technology

Tesco started its debut with the new technology in mid-2018, closing the Tesco Direct business (bringing non-food to its main e-commerce site) and opening a cashless shop that included a proof of a "Type proposal Scan and Go.

Tesco said it is using heat sensing technology to monitor lines at tills. They also said tht improved scanners, better self-service tills and checkout cameras were being used to reduce queues. Tesco has also said that about a fifth of all profits now comes from a self-service checkout till.

1. How Tesco uses Big Data in practice

The supermarket is faced with numerous obstacles, which varies from customer behavior and the need to reduce food waste, up to the balance to new competitors. Tesco challenges by residing in cutting-edge analysis in real time and in the most updated data.

Mike Moss, head of forecasting and analysis at Tesco says that by using analysis and clustering and the like, we found that the way the company thought the products were united, the way they bought the products, it's not really the way in which the products behave. Using this knowledge, the company can order products in the right way, making sure they are always available, while reducing waste.

Sensor data is also increasingly being used, for example, in monitoring the temperature of fridges and freezers across the network of stores. Every machine is monitored centrally, and predictive algorithms are used to determine when a particular unit will need servicing.

2. Automating online shopping

Paul Wilkinson, former head of technology research at Tesco Labs now head of the product for space, range and display says that with the connected house it connects people's consumption with their purchasing actions - so it can help the individual to make purchases real.

Tesco uses this connection with the help of the Google Home voice assistant and the If This Then That (IFTTT) platform. This allows shoppers to automate their online shopping by adding specific items to their shopping cart following the activation of certain conditions, for example if the price of a certain product reaches a certain level.

3. Mobile payments

Tesco started mobile payment with the launch of Pay + replacing the previous PayQwiq solution. It connects directly to the Clubcard loyalty program. Customers can also link multiple payment cards on the app.

Mark Loch, digital portfolio manager and strategy manager, says customers nowadays prefer to pay with Pay +. This offers a quick and easy payment experience, a transaction limit of up to £ 250 and automatic collection of Clubcard Points in one scan at the cashier.

4. Cashless store

Tesco launches its first cashless store at Welwyn Garden City. This allows customers to scan their items and pay on their mobile phone thus avoiding the need to go through a payment procedure.

5. Automated responses on Facebook

Tesco also has a Facebook page where it addresses the simplest and most common questions customers ask.

Shoppers with the more frequently asked questions such as store opening times, the facilities available at specific outlets, and requests for information about product availability will find the responses they receive will have been generated automatically.

6. Spoon Guru

According to Simon Mayhew, IGD's online retail manager, it is difficult for people with specific dietary needs to search for products on their website, so Tesco collaborated with Spoon Guru who uses artificial intelligence and expert nutritional experience to bring out many other products. "

With the help of Spoon Guru Tesco has managed to bring 80 new dietary labels into Tesco products. This allowed the grocery store to satisfy customer requests thanks to the broad understanding obtained by Spoon Guru.

7. Upsides of robust Wi-Fi

Andrew Mann, former director of the Tesco Clubcard, says that the most robust Wi-Fi among supermarket groups is Tesco, which offers numerous advantages: "They use it to manage their in-store systems, including replenishment

and since each shop it is modeled differently in the store selectors must have solid connectivity while their devices guide them in the stores. "

In addition, there are also advantages for customers as they can check prices and access the loyalty program. High-quality Wi-Fi will become even more important as Scan and Go solutions become more popular in the supermarket.

8. Tesco bank

In 1997 Tesco founded its first British Bank Tesco Bank. It offers loans, savings, credit cards, mortgages insurances, travel, products and checking account from 2014. Tesco uses its bank to sell financial products which allow customers to earn points in the Tesco Clubcard.

Tesco satisfied customers with an average of 87.7% which earned third place in the British Bank Awards.

Tesco international calling card

An international calling card allows you to make low cost international calls to destinations all across the world from the UK. You can use any landline phone, any mobile or even a payphone.

10. Tesco mobile

Tesco Mobile Limited (known as Tesco Mobile) is a mobile virtual network operator born in May 2003 and widespread in Great Britain, Ireland, the Czech republic and Slovakia. The British network also offers a 4G service for its customer who pay monthly.

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Impacts of Modern Technology Introduced

Positive impacts

- The Internet can be used at home, at work or on the move depending on what device you are using.
- the speed at which we can now access almost any piece of information as computers and the Internet have made the dissemination of information and knowledge easier and much faster
- Internet provides this by connecting a computer to networks and using applications such as web browsers and search engines to access information, the Internet stores this information in the form of databases and webpages
- the modern technology allows the students to communicate with their families and associates instantly using application
- Processes of communication have been increasingly limited to computer systems with the rapid transmission of information and immediate access to their national or international offices

Negative impacts

- technology has negative affects society
- effects people's daily life such as language proficiency, social life and health
- Internet users may come across inaccurate information and lead to misinformation or even slightly skewed way of thinking, this may confused the student understanding through some information
- confuse the difference between communication in social networks and even when they communicate face to face
- They have to know the good and bad of our technology in this society

Meryem Fakhri
1916139

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Slide 8 – Impacts of Modern Technology

In 1822, mathematics professor Charles Babbage, began the development of a machine that would have been the first general-purpose computer, the Analytical Engine.

The concept was a breakthrough in technology at the time as it outlined the required elements of the modern computer system; perforated cards containing operating instructions that acted as input devices, a memory that could store up to a thousand numbers, a control unit that could process the instructions in any sequence and an output device that would produce printed results, the essential elements of the modern day computerised system.

The Modern Era have a many new innovative technologies have been developed that have altered of our daily life. We are now considered to be living through the Information Age, and the decisive technology of this age would have to be the Internet. It would be rare to find an organisation or household that does not experience the use of the Internet.

Ashvin Ramhit
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Traditional:	Modern:
One-on-one customer service – No human contact	
Flexibility - Black & White approach	
Time consuming – Fast & quicker pace	

- Meet demand and supply more accurately
- Improve the business understanding of trend changes
- Create a more personal shopping experience

- Increased in labour costs
- Discrepancies in stock level
- Lost contact with customers
- No loyalty
- Time consuming



Ashvin Ramhit (1914730) – Slides 9, 10.

Tesco's retail format has allowed itself to adapt to the fast-evolving world. It refers to the overall makeup, design and function to target the mass consumers. Typically, supermarkets focus on selling consumer packaged goods (CPGs) and similar consumable products. In general CPGs are more necessities than desires. Technology has also improved the way customers shop and helped saved money and increase customer satisfaction.

<u>Traditional</u>	<u>Modern</u>
Labour dependant – slower pace	Speed, Efficiency and Flexibility
Needs to be manned	Automation
Could have miscommunications at various points	Effective Communication
Pressured filled process	Freedom to shop at ease

By constantly updating its technology Tesco has proven that it is matching its customer demands and making sure it can keep up with the supply. Thanks to the modern technology, a computer system called 'electronic point of sale' or EPOS it can

- Monitor and control stock
- Perform sales analysis
- Collect data from customer's loyalty cards

However, as we move into the future and in terms of how things evolve very quickly nowadays, Tesco has already a few new technologies lined up and some already on trial. Improved scanners, better and more customer friendly

self-service tills and checkout cameras are being used to reduce queues. In addition to that they already have operational heat sensing technology to monitor lines at the tills. Their latest trial called Scan Pay & Go can be defined as shopping with a cashier-less store. It will allow customers to walk around its stores, load up their shopping bags and walk out without putting them through a till.

Moreover, Tesco's innovation team aims to go from initial idea to a minimum viable product within six weeks. They run workshops once or twice a year where people work intensively to develop working prototypes of ideas for business challenges.

Consequences of not using modern technology

This is probably a non-imaginable scenario in today's living age. The various technologies developed and adapted to specific needs and tailor made to retain customer shopping habits information.

The non-use of these fundamental data could be catastrophic. Here are a few examples: -

- Lost contact with customer shopping trends
- Inaccuracy in stock control levels (i.e. Replenishment, inventories etc)
- No tracking of accounts and cost
- Less automation in store and increased in labour cost
- No build to long term relationships for repeat business

Ashvin Ramhit
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Conclusion



Modern Technology has revolutionized the way Tesco trades

Digital devices has been integrated to reflect customer behaviours

Shops are being altered to maximise customer interactions

Technologies are always being developed and kept up to date

Social retailing has now incorporated modern age living, creating fierce online competition

Slide 10 - Conclusion

Modern Technology has clearly revolutionized shopping experience at Tesco. From its early days up to the present day it has thrived if not help in boosting various developments in the retail sector. The speed at which change is taking place is faster than predicted by analysts. Digital devices are shaping the shopping journey. It has enabled consumers to make decisions in-store into how they shop.

Tesco has also integrated digital devices with customer experience. It has adopted an omnichannel strategy which merges the store, the desktop and the Smartphone together. Stores are getting transformed and altered to become

more technology enabled. This in turn will attract the modern customer in getting inside the stores which is the vital footfall they all need.

Social retailing is also rising and online research drives buying. Groceries, baby products, clothing, pet products and books drive the highest rates of conversion. There is also the very high competition as every other supermarket retailer try to get a bigger piece of the pie.

Tesco are always looking to adapt new technology to make their systems and organization more efficient and cost-effective. They are also changing in accordance with the newer ways that are now available for them to engage with tech-savvy customers.

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