



BMSW4003

**DIGITAL SKILLS AND RESEARCH
METHODS**

TRANSPORT FOR LONDON (TFL) LONDON UNDERGROUND SERVICE



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TRANSPORT FOR LONDON (TFL) LONDON UNDERGROUND

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INTRODUCTION

THE PURPOSE OF THIS PRESENTATION IS ANALYSING THE IMPACTS OF TECHNOLOGY IN A ORGANISATION

LONDON UNDERGROUND? CLAIMS OF THE FIRST UNDERGROUND TRANSPORTATION SERVICE EVER CREATED ON THE PLANET IN 1863. AT SUCH A TIME FRAME THIS REALLY ADVANCED THE UNITED KINGDOM AS IT WAS A MASSIVE STEP FOR TECHNOLOGY AND ENGINEERING. NOW USED BY THOUSANDS WITHIN THE CAPITAL CITY EVERY DAY, TECHNOLOGY HAS A LARGE PART ON MAKING THE LONDON UNDERGROUND SERVICE ONE OF THE GREATEST TRANSPORT SYSTEMS ON THE EARTH. THE LONDON UNDERGROUND ONLY RELEASE A LIMITED AMOUNT OF INFORMATION REGARDING HOW THEY OPERATE DUE TO SECURITY REASONS. BUT IN THIS SLIDE SHOW I HOPE WE CAN GIVE YOU A BROADER INSIGHT TO THIS GREAT COMPANY.

THE BACKGROUND OF THE LONDON UNDERGROUND (TFL)

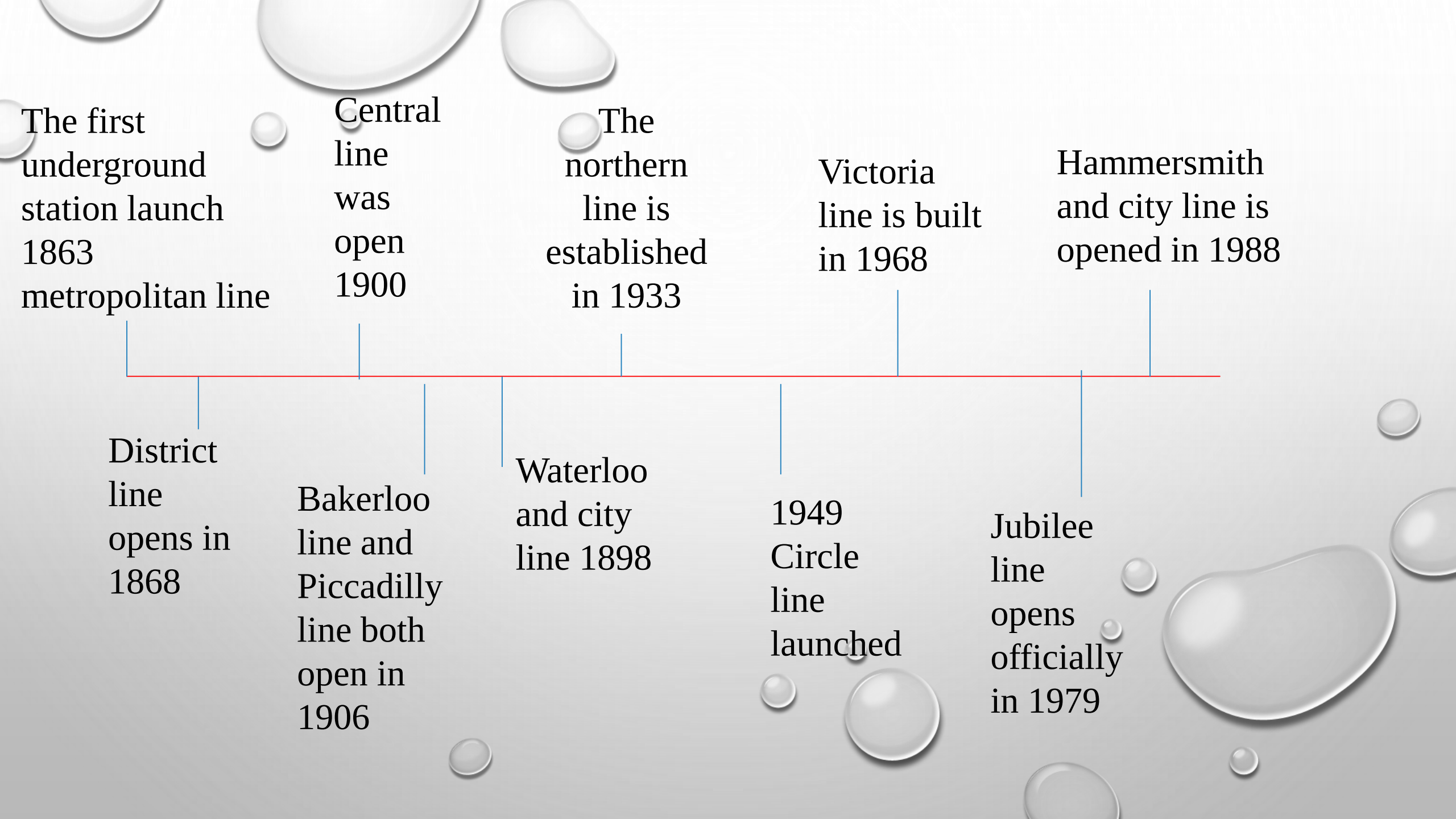
- ❖ LONDON UNDERGROUND HISTORY DATES BACK TO 1863 LAUNCHING ITS FIRST UNDERGROUND STATION BETWEEN PADDINGTON AND FARRINGDON SERVING SIX STATIONS ONLY
- ❖ TFL NOW PROVIDE 270 STATIONS AND 11 LINES DEEP INTO THE CITY AND RURAL AREAS.
- ❖ THE CITY DEVELOPMENT WOULD NOT HAVE BEEN AS SUCCESSFUL WITHOUT THE MOVEMENT WHICH WAS PROVIDED BY THE UNDERGROUND BETWEEN 19TH, 20TH AND 21ST CENTURY.
- ❖ IN THE 20TH CENTURY ELECTRIC TRACTION WAS INTRODUCED AND IMPLEMENTED INTO THE RAILWAY SYSTEM, DUE TO THE AMOUNT OF WORK BEING DONE TO MAKE THE TUNNELS DEEPER THIS INCREASED JOB OPPORTUNITY'S FOR LONDON. (TFL.GOV.UK)ACCSESSED 24 NOVEBER 2019



THE BACKGROUND OF THE LONDON UNDERGROUND (TFL)



- ❖ THE 50 YEARS THAT FOLLOWED AFTER THE INTRODUCTION OF ELECTRIC TRACTION, THERE WAS AN INITIAL PLAN TO EXTEND THE LINES INTO MORE RURAL AREAS AROUND THE CITY.
- ❖ IN 1933 THE VAST AMOUNTS OF PRIVATE COMPANIES RUNNING DIFFERENT LINES WERE NATIONALISED AND INTEGRATED INTO A SINGLE BODY
- ❖ THE LONDON PASSENGER TRANSPORT BOARD
- ❖ IN 2003 THE LONDON PASSENGER TRANSPORT BOARD BECAME TRANSPORT FOR LONDON (TFL)



The first underground station launch 1863 metropolitan line

District line opens in 1868

Central line was open 1900

Bakerloo line and Piccadilly line both open in 1906

The northern line is established in 1933

Waterloo and city line 1898

Victoria line is built in 1968

1949 Circle line launched

Hammersmith and city line is opened in 1988

Jubilee line opens officially in 1979

CHALLENGES BEFORE INTRODUCING MODERN TECHNOLOGY

- -FIRST ELECTRIC TICKET MACHINE 1908
- -FIRST ESCALATOR IN EARLS COURT STATION 1911
- -AUTOMATIC OPENING DOORS 1929
- -DOT MATRIX DESTINATION INDICATORS 1983
- FIRST AIR-CONDITIONED TRAIN ON THE METROPOLITAN LINE 2010

INSIGHTS ON
MODERN
TECHNOLOG
Y USED



OYSTER CARD

- PURCHASES ARE MONITORED
- LOCATIONS ARE TRACKED
- SIMPLE WAY OF PAYING FOR TRAVEL
- RFID CHIP

CCTV SURVEILANCE

- 13,211 CAMERAS OVERALL ON THE LONDON UNDERGROUND
- NOT ALL CAMERAS ON THE UNDERGROUND ARE FIXED
- TRAIN CAMERAS ARE ONLY ON WHEN THE TRAINS ARE IN SERVICE
- NOT ALL TRAINS HAVE CAMERAS INSTALLED, MAYBE A SAFETY ISSUE

NAVIGATION TECHNOLOGY

- 25 MILLION POUND INVESTMENT IN 2013
- LOCATIONS ARE DISCLOSED AND KEPT SECRET FOR SAFETY



IMPACTS OF
MODERN
TECHNOLOGY
INTRODUCED

Health and safety

Station CCTV

Platform CCTV

Body camera's

Tube CCTV

Oyster card

Affordable transport

Durable

Ticket machine

Time management

Online ticket collection

Monitor screens

Tube arrivals

Notification of delays
time

London Underground

London Underground was first established in 1863.

it allowed people who did not have cars or any sort of vehicle to travel and get to where they needed to get to.

As people will imagine at the upbringing of the tubes and trains, technology had not been invented yet so there was no such thing as cameras that would keep people safe, there was no such thing as boards at the train station that would guide a passenger to his destination, or even phones with apps for train times.

The most information passengers could get whilst traveling was a map on a paper that would tell them where they need to go.

As we are now going into 2020 it should be understood that London underground has changed a lot over the years.

Now we have technology around that people have put into the London underground to make it better as much as they can so that it's easier for passengers to get from A to Z

155 YEARS



Pictures in 1863

London Underground



Cameras In train stations

- There's oyster cards to travel with and people can also travel by card
- There are lifts and escalators.
- Wi-Fi (Overground), Cameras, Emergency buttons
- Apps on phones so people can check the train times
- Sockets for chargers
- Passengers can buy tickets from machines



There are boards now in trains stations to notify people who are travelling what time there trains are coming.



Conclusion

In conclusion Since 155 years ago things have changed a lot with London Underground.

- Before there was no cameras
- No escalators or lifts for families with push-chairs
- No emergency buttons if ever there was an emergency going on

But now that there is such thing as technology it has changed a lot of things

This is why I believe there has been a drastic upgrade with technology on the underground train services

With the cameras, emergency buttons, Machines people can use to buy tickets and so much more.

To be honest in another 155 years the things that technology we do to help London underground be a better service for the public will be even more of a drastic upgrade.



QUESTION S AND ANSWERS



REFERENCES

- [HTTPS://TFL.GOV.UK/CORPORATE/ABOUT-TFL/CULTURE-AND-HERITAGE/LONDONS-TRANSPORT-A-HISTORY/LONDON-UNDERGROUND#ON-THIS-PAGE-12](https://tfl.gov.uk/corporate/about-tfl/culture-and-heritage/londons-transport-a-history/london-underground#on-this-page-12)
- [HTTPS://WWW.ALPHR.COM/TECHNOLOGY](https://www.alphr.com/technology)
- [HTTPS://WWW.BUSINESSINSIDER.COM/INTERNATIONAL?R=US&IR=T](https://www.businessinsider.com/international?r=US&ir=T)
- [HTTPS://WWW.ITPROPORTAL.COM/](https://www.itproportal.com/)
- [HTTPS://WWW.INDEPENDENT.CO.UK/LIFE-STYLE/HISTORY/150-FACTS-FOR-150-YEARS-OF-THE-LONDON-TUBE-8444153.HTML](https://www.independent.co.uk/life-style/history/150-facts-for-150-years-of-the-london-tube-8444153.html)

TFL LONDON, INFORMATION, AVAILABLE FROM: <[HTTP://TFL.GOV.UK/CORPORATE/PRIVACY-AND-COOKIES/CCTV](http://TFL.GOV.UK/CORPORATE/PRIVACY-AND-COOKIES/CCTV)>. [06 DECEMBER 2019]

ALPHR, HOW DOES AN OYSTER CARD WORK, AVAILABLE FROM:
<[HTTP://WWW.ALPHR.COM/TECHNOLGY/1002164/HOW-DOES-AN-OYSTER-CARD-WORK](http://WWW.ALPHR.COM/TECHNOLGY/1002164/HOW-DOES-AN-OYSTER-CARD-WORK)>.
[04 DECEMBER 2019]

IT PRO PORTAL, TRANSPORT AND TECH, AVAILABLE FROM:
<[HTTP://WWW.ITPROPORTAL.COM/2014/09/15/TRANSPORT-AND-TECH-A-HISTORY-OF-LONDONS-INNOVATIONS/](http://WWW.ITPROPORTAL.COM/2014/09/15/TRANSPORT-AND-TECH-A-HISTORY-OF-LONDONS-INNOVATIONS/)>.[02 DECEMBER 2019].