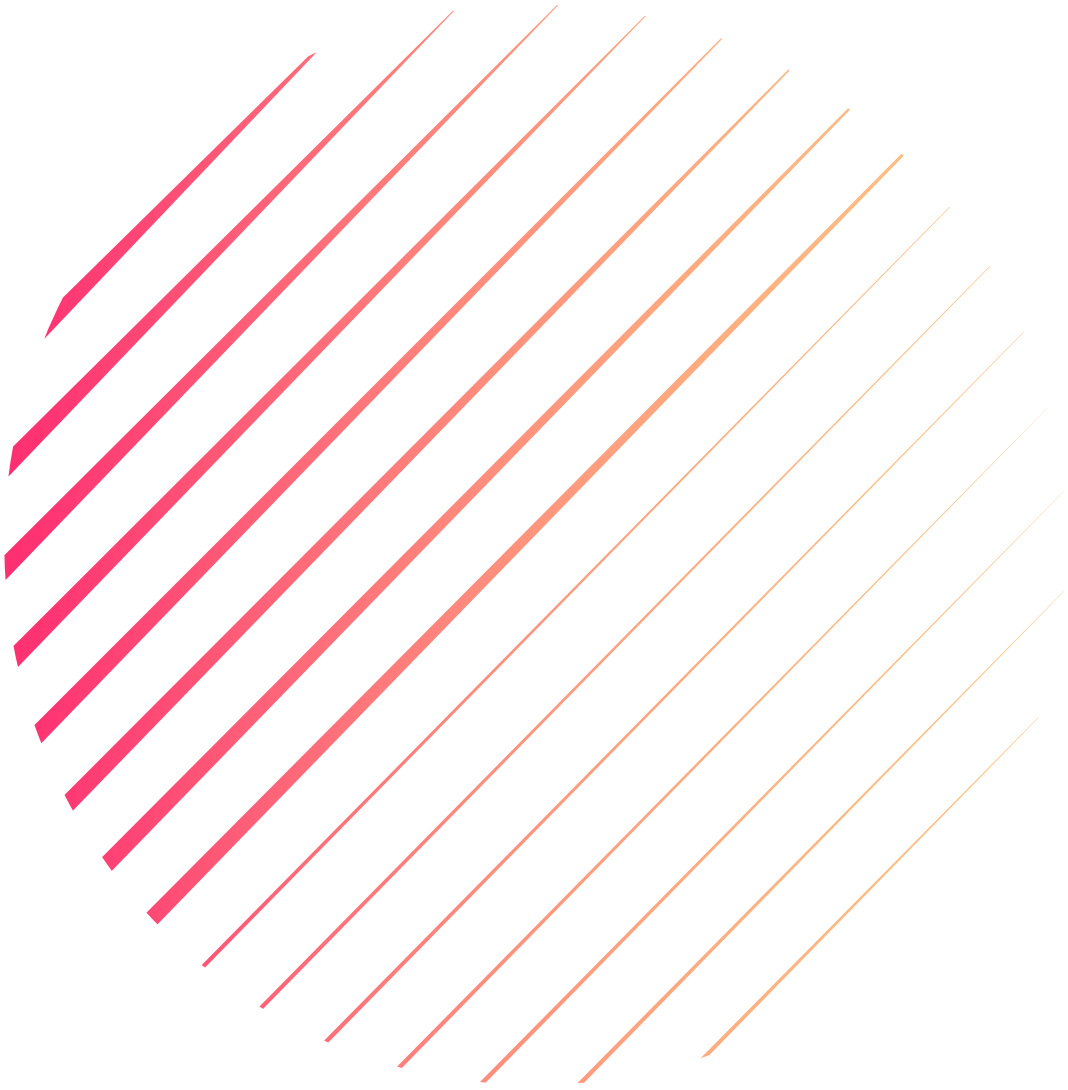
The Impacts of the Modern Technology On Royal Mail



Digital Skills and Research Methods
(BMSW4003_LON)

Mr. Suneth Fernando.

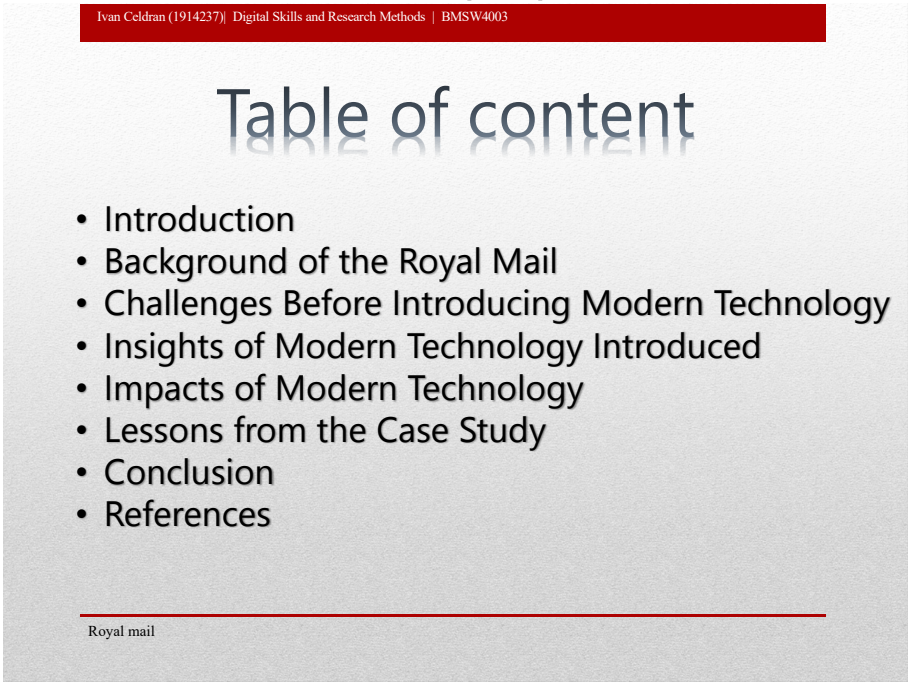
Student Names

- Alia Ashrafi – (1916229)
- Dewan Ashrafi – (1916230)
- Forida Yasmin – (1914427)
- Ivan Celdran – (1914237)

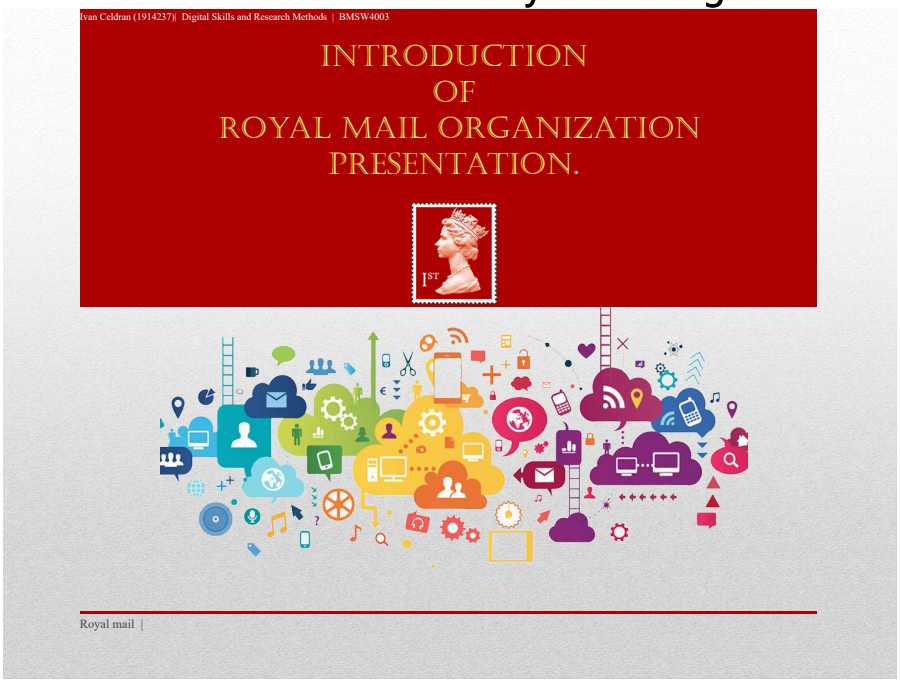
Table of Content. Slide 01-

•Introduction – (Ivan. 1914237)
•Background of the Royal Mail – (Ivan. 1914237)
•Challenges Before Introducing Modern Technology – (Forida. 1914427)
•Insights of Modern Technology Introduced – (Dewan. 1916230)
•Impacts of Modern Technology – (Alia. 1916229)
•Lessons from the Case Study – (Dewan. 1916230)
•Conclusion – (Ivan. 1914237)
•References

Slide 01- Table of Content -(Ivan)



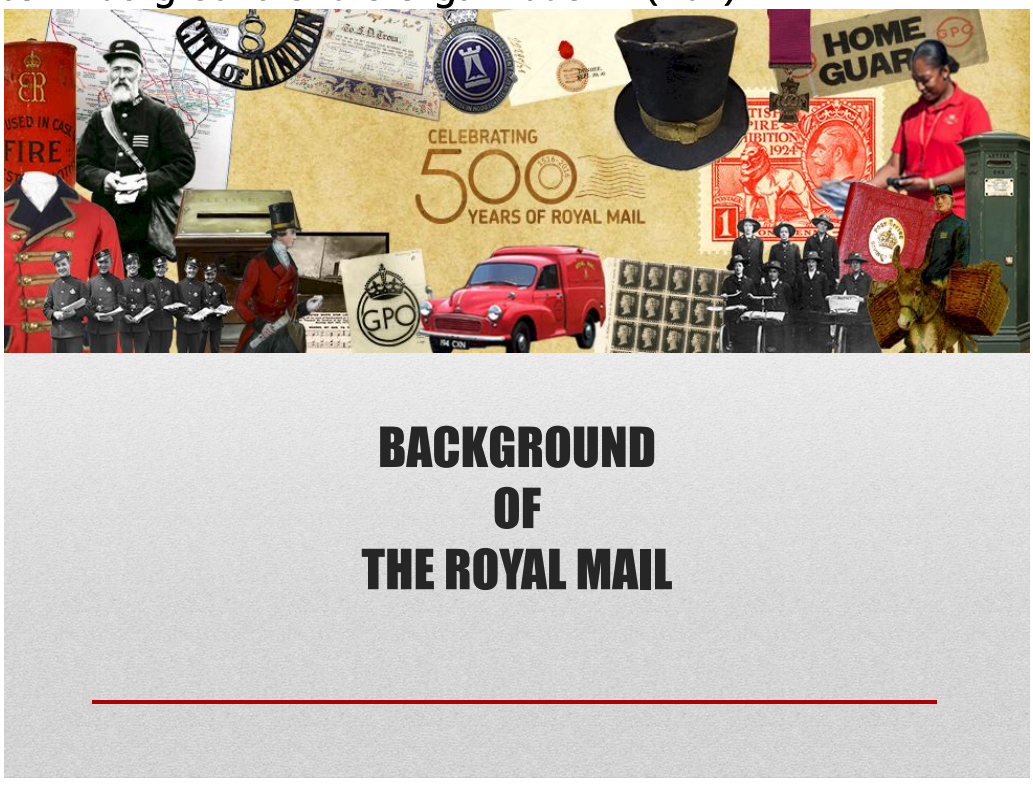
Slide 02- Introduction of the Royal Mail Organization -(Ivan)



Speaker note Slide 02-

In this presentation we are going to discuss and give some information about one of the oldest organizations in the world, The Royal Mail. Firstly, we will see a bit of the background and history of the organization, but due to the antiquity of the same we won't go too deep in this because it would be a very extended presentation. Then secondly all the challenges before the modern technology are going to be explained so we can understand better how they operated when there weren't all the facilities that we have today. Now we have seen the past of the company and how they operated without modern technology, we will move forward and see when Royal mail started using the new technology and therefore lately how this technology impacted in them.
And last but not the less important, we will show a case study.

Slide 03 – Background of the Organization – (Ivan)



Slide 04 – History of the Royal Mail – (Ivan)



Speaker notes Slide 04-

Royal Mail is one of the oldest organizations in the world, its origin dates back on 1516, it is more than 500 years old. It was established by *Henry VIII knights Brian Tuke*. Although the Postal service start to operate for the public 119 years after, until that moment was operating only for the *King* and the *Court*.
The name *Royal Mail* is given to the service when mail coaches become a familiar sight across the country in 1784.
Throughout the following years *Royal Mail* expanded across *Scotland, England* and *Wales*. It reached Ireland in 1808, and 32 years later the world's first stamp is created, ***The Penny Black.*** This leads to a great increase of popularity of mail and with that they jump to more than a billion letter a year by 1875.
with the entry of new technology in 1907 the first motor vehicle enters the Postal Service.
In 1914 The Great War started and the ***Post Office*** plays a vital part. So much so that ***The Post Office Rifles*** received 145 awards for gallantry, and three General Post Office employees were awarded the Victoria Cross.
Jumping in to the 21st Century with all the new technology and the Digital age the ***Royal Mail*** launches the UK's first *digital stamp*.
All the new technological advances allow Royal mail to launch Sustainable Mail®.
In 2017 they bet on the electric future purchasing 100 plug-in electric vans for their UK fleet moving on towards safe and sustainable practices at a very low cost (Royal Mail, 2020).

Slide 05- Mission & Vision/Current Status – (Ivan)



Speaker Notes Slide 05-

The mission of the company is to connect customer companies and countries across the UK and make the easiest possible to deliver a one-price-goes-anywhere. Their vision is to be the best delivery company in the UK across Europe (Royal mail, 2020).
Making as easy as possible to send and receive any letter or parcel and generate a good impact in the society and adapting to the new technologies without damaging the environment is the purpose of the company with all the initiatives to contribute like *Action for children, Mental health* (Royal Mail, 2020).

Slides 06 & 07- Challenges Before Introducing Modern Technology- (Forida)



Speaker notes slides 06 & 07-

The challenges royal mail faced before modern technology are: delayed post, greater employment to sort mail manually, no tracking system, lost many post/parcels.
Delayed post this was a very common issue as well as missing parcels/post. This is because the employers couldn't control the capacity of post.
Before modern technology, they needed more people to sort out the post which became very time consuming.

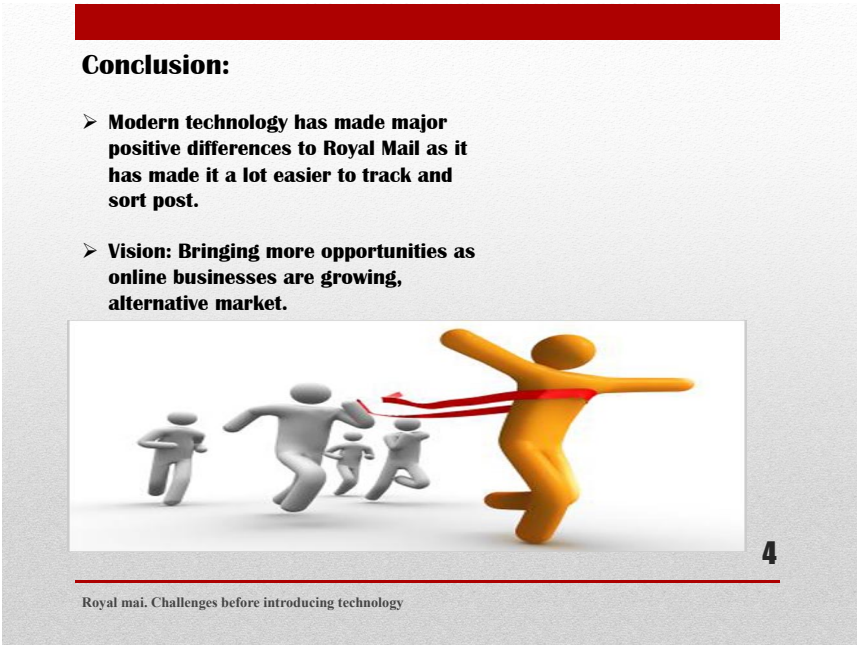
Slide 08- Continue- (Forida)



Speaker notes slide 08-

There was no tracking system which made people unaware of when their package will be sent or received.

Slide 09- Continue- (Forida)

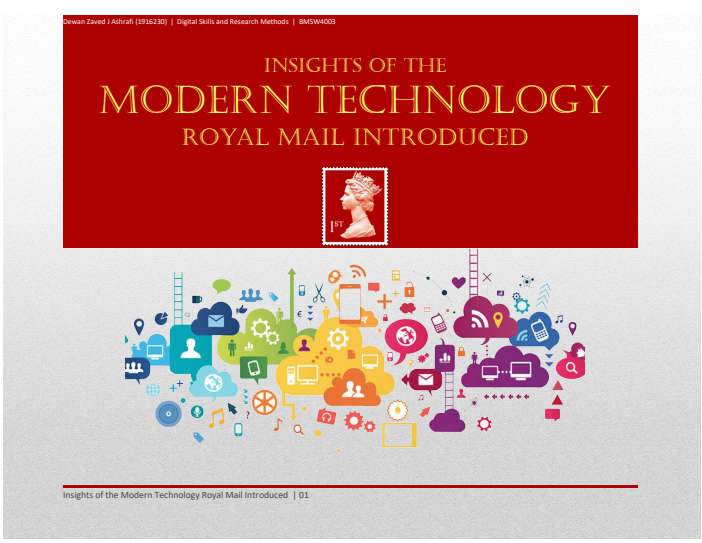


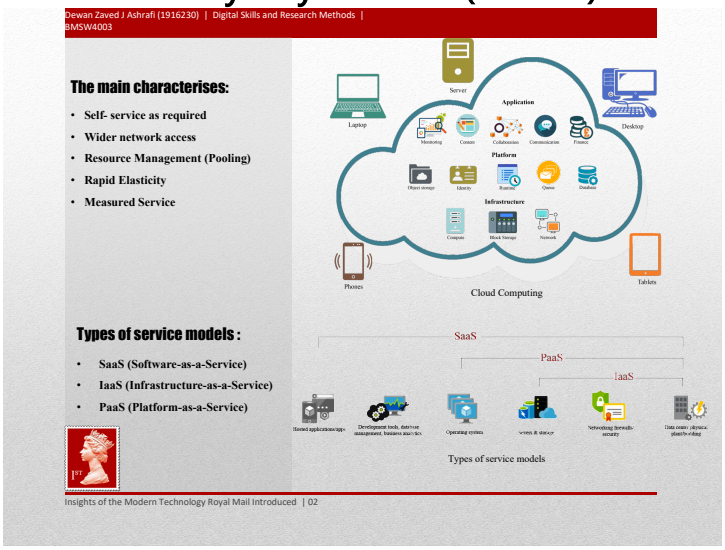
Speaker notes slide 09-

Conclusion and vision: Modern technology has made major positive differences to Royal Mil as it has made it a lot easier to track and sort post. Bringing more opportunities as online businesses are growing, alternative markets

Nowadays Royal mail are one of the UK's largest employers, with one in every 194 jobs in the UK, delivering 'one price goes anywhere' service to over 30 million addresses.
On the other hand, the number of letters has decreased drastically since 2008 due to the digital world, so the company is moved forward with it and because of this, investing in technology and innovation is a core part of their growth strategy.

Slides10 & 11 – Insights of the Technology Introduced by Royal Mail – (Dewan)

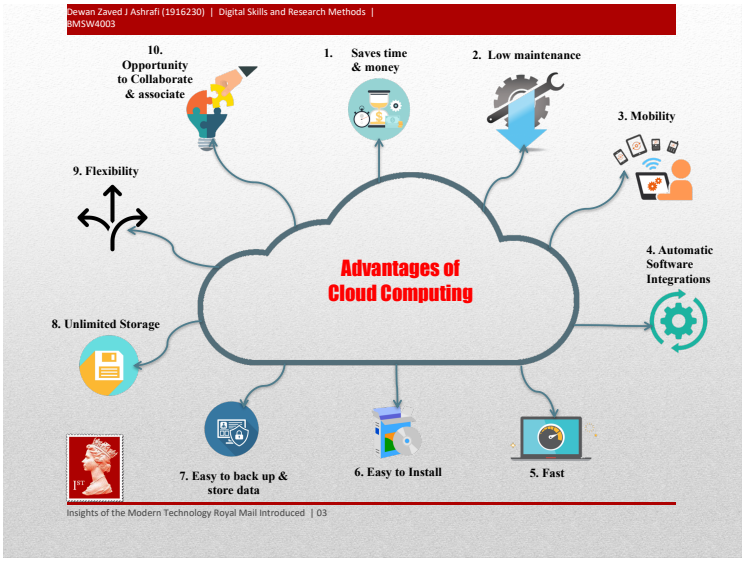




Speaker notes Slides 10 & 11-

Since late 90's as traditional forms of communication (Letters, Postcards etc) were being replaced by more convenient and fast alternatives such as electronic messaging services, Royal mail started to face a big challenge. (Left, 2002). Volumes of letters began to drop which contributed a big part on a few consecutive years of net loss. (Tran, 2003). In January 2006, another blow hit them hard; 350 years of monopoly business in British Postal Market by Royal mail ended when competitors were allowed full access in postal markets. (BBC, 2005).
However, as UK online retail market was growing significantly over the years (Statista, 2012) Royal mail reacted smartly and launched their 'Online postage service'. For the first time customers could buy their postal stamps online. (BBC, 2006). Introducing this modern technology back then has been playing a massive role on Royal mail business ever since. 3 years later, on 2009, Royal mail adopted 'Cloud Computing' to reduce IT cost, improve online efficiency, connecting their staff and services, to improve customer service and for more security. (Techdesk, 2009)
'Cloud Computing' is to store and access data, run programmes and utilities over the internet rather in computer's physical hard drive. It can serve the purposes just for one organisation or many in groups.

Slide 12 – Advantages of Cloud Computing – (Dewan)



Speaker notes Slide 12-

The main characterises:

- **Self-service as required:** User can optimise, Improve or expand computing capabilities (Server time, network storage) solitarily without any human interaction from service provider.
- **Wider network access:** Features are available in network and all platforms users (Simple devices or complex ones) can use them by accessing through simple standard mechanism.
- **Resource Management (Pooling):** It can be either physical or virtual pooling or can be both. To serve multiple consumers, cloud service provider can assemble many physical or virtual resources and dynamically assign or reassign resources as per consumer demands.
- **Rapid Elasticity:** To meet consumers demand cloud system can be provisioned and released its capabilities
- **Measured Service:** By Measuring and monitoring the provision on services cloud computing can automatically optimise and control the resource of services.

Types:

There are three types of service models available:

1. SaaS (Software-as-a-Service)
2. IaaS (Infrastructure-as-a-Service)
3. PaaS (Platform-as-a-Service)

Slide 13 – Disadvantages of Cloud Computing – (Dewan)



Speaker notes Slide13-

Advantages of Cloud Computing:

1. Saves time and money
2. Low maintenance
3. Mobility
4. Automatic Software Integrations
5. Fast
6. Easy to Install
7. Easy to back up and store date
8. Unlimited Storage
9. Flexibility
10. Opportunity to Collaborate and associate

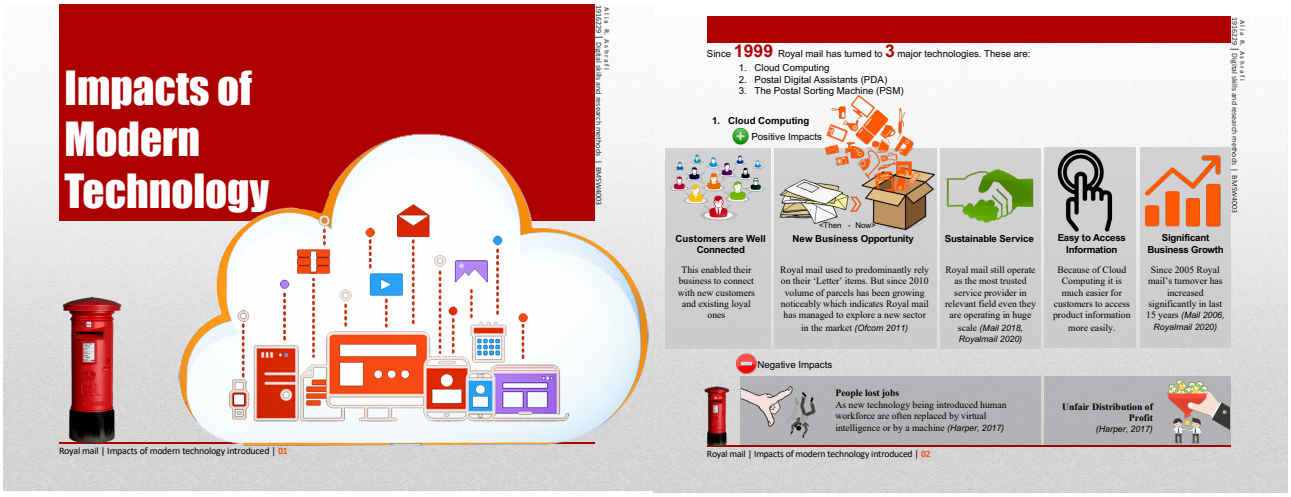
Disadvantages of Cloud Computing:

- Limited Options or Features
- Over dependency on network connection
- More generic settings and less optimisations opportunities
- Insecure
- Loss of control

Importance of Cloud computing:

As Online market is growing bigger each year, so is postal market, (Ofcom, 2019). Postal services like Royal mail need effective budgeting, more staff, space and updated technology to maintain their efficiency and to meet customers' demands. To accommodate all major ingredients to have successful business, Royal mail turned to cloud computing in 2009 (Techdesk, 2009). Royal mail's online postal helped their service to witness significant growth on sales since 2006. (Mail, 2006) (Commission, 2011)(BBC, 2013) (Ofcom, 2019).

Slide14 & 15 – Impacts of Modern Technology – (Alia)



Speaker notes Slides14 & 15-

My Name is Alia Ashrafi. I am going to discuss 'Impacts' of Modern Technology that have been introduced by Royal Mail. 'Modern Technology' can be a tricky term. When Royal mail first purchased a motor vehicle in 1907 to upgrade their logistic capability a 100 years ago that was a massive step to integrate with modern technology. (Royalmail, 2020). A 500 years old company obviously has been adopting new or modern technologies in every step. So, this presentation will only concentrate on the last 20 years of usage of technology in Royal mail for better understanding. As Royal mail have adopted many technology and mechanisms in last 20 years this presentation will only concentrate on the ground-breaking or the most influential ones.

Since 1999 Royal mail has turned to 3 major technologies. These are:

1. **Cloud Computing**
2. **Postal digital assistants (PDAs)**
3. **Automatic Parcel Sorting Machine (PSM)**

1. Cloud Computing:

Positive Impacts:

a. **Customers are well connected:** Royal mail launched their online post on 2006 (BBC, 2006) but as their business was growing them turned to 'Cloud Computing' on 2009 (CBR, 2009). This enabled their business to connect with new customers and existing loyal ones. Residential customers can purchase product directly from Royal mail in reduced price. Business customers can get even bigger discount. Through websites customers can easily leave feedback, raise queries as well.

b. **New business Opportunity**: Royal mail used to predominantly rely on their 'Letter' items. But since 2010 volume of parcels has been growing noticeably which indicates Royal mail has managed to explore a new sector in the market. (Ofcom, 2011)

c. **Sustainable Service**: Royal mail still operate as the most trusted service provider in relevant field even they are operating in huge scale. (Mail, 2018) (Royalmail, 2020)

d. **Easy to Access Information**: Because of Cloud Computing it is much easier for customers to access product information more easily.

e. **Significant Business Growth**: Since 2005 Royal mail's turnover has increased significantly in last 15 years. (Mail, 2006) (Royalmail, 2020)

Negative Impacts:

a. **People lost jobs**: As new technology being introduced human workforce are often replaced by virtual intelligence or by a machine. (Harper, 2017)

b. Unfair Distribution of Profit (Harper, 2017)

Slide16 – Postal Digital Assistants (PDA) – (Alia)



Speaker notes Slide16-

2. Postal Digital Assistants (PDA):

Positive Impacts:

a. **Improved Customer service**: Since came in effect on 2007, from sender to receiver delivery can be tracked more effectively. (Royal Mail, 2016)

b. **Easy Payment System**: This device can receive payment from card or phone (Apple, Android). (postandparcel, 2017)

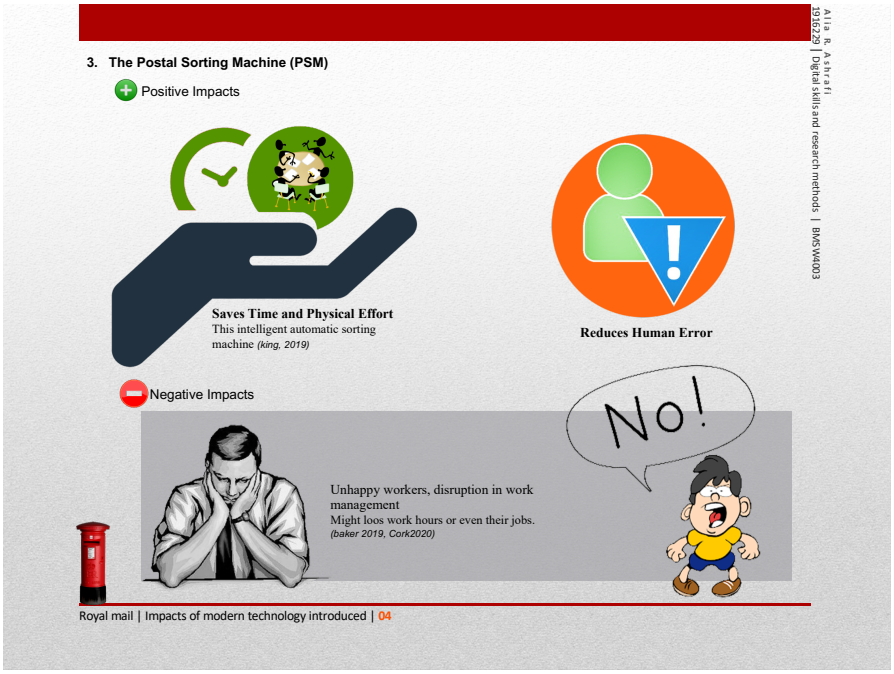
c. **Ensure Extra security for employees**: As this machine has GPA navigation carriers can be easily located which offers more security.

Negative Impacts:

a. To train up employees to use this modern device can be time consuming and additional budget (postandparcel, 2017)

b. Expensive

Slide17 – The Postal Sorting Machine (PSM) – (Alia)



Speaker notes Slide17-

3. Parcel Sorting Machine (PSM):

Positive Impacts:

a. This intelligent automatic sorting machine saves time and physical effort (King, 2019)

b. Lower the chances of human error

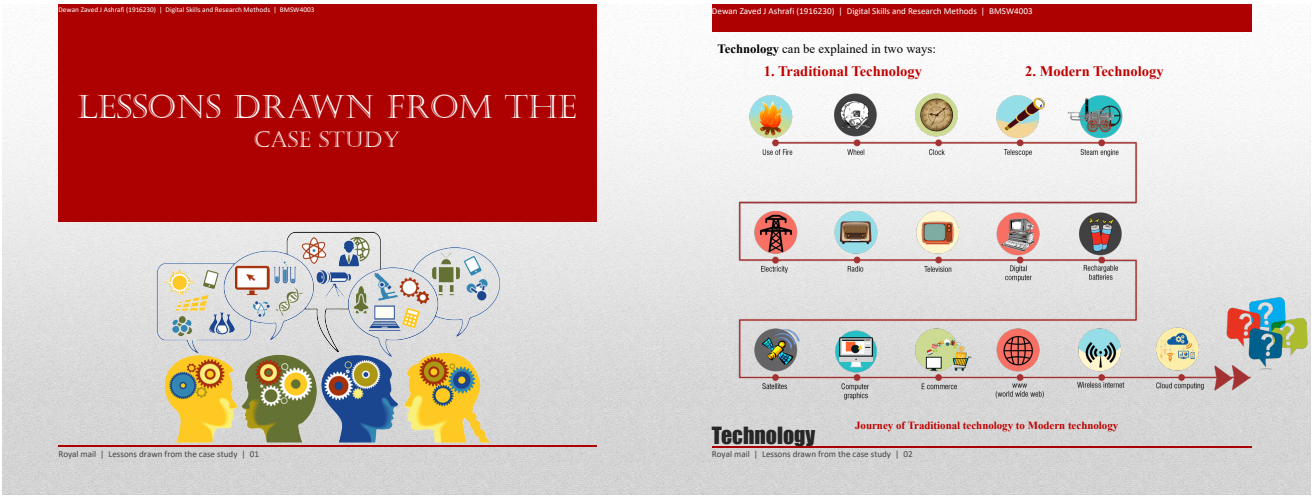
Negative Impacts:

a. Employees might lose work hours or even their jobs. (Baker, 2019)

b. Unhappy Workers and disruption in work management (Cork, 2020)

c. Advanced training might need which can cost additional expenses.

Slides18 & 19- Lessons Drawn from Case Study – (Dewan).



Speaker notes Slides18 & 19-

Technology is usages of scientific knowledge combinations of skill, process or methods which comes from experiences, study, experiments to be used in practical purposes.

With a huge network of 162,000 regular employees, operating in 44 countries across the world, 37 mail centres in the UK, 11500 post boxes across the country, around 30 million delivery points in the UK, Royal mail handled and delivered around 13 billion letters and around 1.3 billion parcels in a year. Their sister concern GLS (GENERAL LOGISTICS SYSTEMS) delivered 634 million parcels across North America

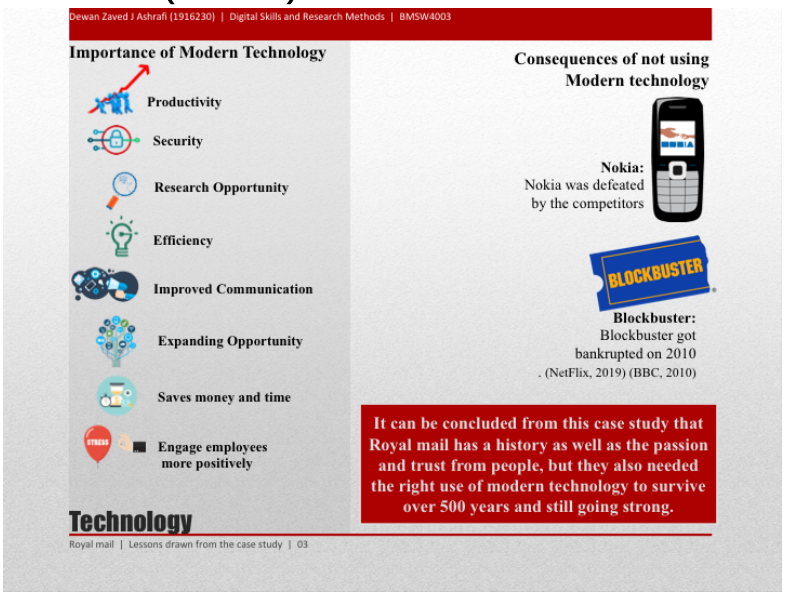
for its c.300,000 clients by a workforce of 19000 people. Royal Mail Group PLC is still successfully managing this huge task to achieve net income of £175 million from £10,581 million turnover. (Mail, 2019). To regulate, collaborate and operate such a huge business, at the same time facing all challenges successfully, compete with competitors and sustain their profits with credibility, Royal mail needs to keep their door open for new technologies.

Technology can be explained in two ways:

1. Traditional Technology
2. Modern Technology

Traditional Technologies are those type of skills, methods which have been used for many years and have become a part of our tradition, culture or daily lives. Once these technologies were first invented or generated, they were modern too. Men adopted these and have moved onto develop new, modern technologies based on the previous ones. It is not easy to put a certain timeframe on technologies to tag what is old or new but once a new technology evolves, generated or invented from previous ones, the new one is certainly modern and old ones can be called as 'Traditional'. For example, Abacus is a traditional technology. From abacus, electronic calculator was invented, and later computer was invented, the modern technology.

Slide20 – (Dewan)



Speaker notes Slide20-

For any successful company technology bring significant effects.

- **Productivity:** Modern technologies can ensure increase of productivity.
- **Security:** It gives security from any inside or outside threats, protects sensitive information, keeps confidentiality and exclusiveness intact.
- **Research Opportunity:** A business with modern technology always can research for newer technologies and stay ahead of competitors.
- **Efficiency:** Technology helps business to operate in proper order, take right decision on right time, Understands the importance of time and worker management.
- **Improved Communication:** It enables better communication between co-workers. Better communication also means trust from Customers which enables positive feedbacks and loyalty.
- **Expanding Opportunity:** New technology often comes with new field, new market which can help company grow immensely.

- **Saves money and time:** Replacing older technology with a newer one often proved to be money and time saving.

- **Engage employees more positively:** With new technology in hand employees work with less stress but with more authority.

Consequences of not using technology:

1. **Nokia:** Once a global leader in mobile phone industry, Nokia, failed to be evolved and adopt newer technologies like its competitors did. They concentrated mostly on their phone's hardware features when other companies (Apple, Android) were busy developing software. Now, when Apple and Androids are dominating world mobile phone market Nokia stays way behind. (Surowiecki, 2013).

2. **Blockbuster:** This Video-Rental company was a big name in early 2000. It was in their peak in 2004. They survived transformation from VHS to DVD but when technology like 'Video streaming online' appeared they failed to integrate this idea. They even refused 'Netflix' to form a partnership. Netflix became a $20 billion and Blockbuster got bankrupted on 2010. (Netflix, 2019) (BBC, 2010)

Conclusion – (Ivan)

After gathering and analyzing all this information we can see how the technology has played a very determining part in not only in the Royal Mail but in absolutely everything.
A good question is… *is the technology good or bad?* In our deduction, it can be as good as bad, actually is not the technology itself good or bad, is the use that we give to it if there is a balance and an appropriate use of the technology, we can make really good things.

References

BBC, 2013. *www.bbc.co.uk.* [Online]
Available at: https://www.bbc.co.uk/news/business-22605734
[Accessed 24 April 2020].

mail, R., 2019. *www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/media/10795/annual-report-2018-19.pdf
[Accessed 24 April 2020].

NetFlix, 2019. *www.netflixinvestor.com.* [Online]
Available at: https://www.netflixinvestor.com/financials/financial-statements/default.aspx
[Accessed 222 April 2020].

Surowiecki, J., 2013. *https://www.newyorker.com.* [Online]
Available at: https://www.newyorker.com/business/currency/where-nokia-went-wrong
[Accessed 25 April 2020].

Baker, H., 2019. *www.business-live.co.uk.* [Online]
Available at: https://www.business-live.co.uk/technology/royal-mail-installs-robotic-machines-16605819
[Accessed 26 April 2020].

BBC, 2006. *http://news.bbc.co.uk.* [Online]
Available at: http://news.bbc.co.uk/1/hi/business/5358436.stm
[Accessed 20 Apr 2020].

CBR, 2009. *www.cbronline.com.* [Online]
Available at: https://www.cbronline.com/software/csc_signs_cloud_computing_agreement_with_royal_mail_091123/
[Accessed 21 April 2020].

Cork, T., 2020. *https://www.bristolpost.co.uk.* [Online]
Available at: https://www.bristolpost.co.uk/news/bristol-news/royal-mail-announce-redundancies-bristol-3895883
[Accessed 27 April 2020].

Harper, A., 2017. *www.independent.co.uk.* [Online]
Available at: https://www.independent.co.uk/voices/royal-mail-shareholders-strike-workers-not-benefitting-from-automation-a8005326.html
[Accessed 21 April 2020].

King, H., 2019. *https://www.parcelandpostaltechnologyinternational.com.* [Online]
Available at: https://www.parcelandpostaltechnologyinternational.com/news/sorting-systems/royal-mail-rolls-out-advanced-technology-to-speed-up-parcel-sorting-in-its-bristol-mail-centre.html
[Accessed 27 April 2020].

Mail, R., 2006. *www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/media/10151/annual_report_and_accounts_2005-06_final_acrobat_7.pdf
[Accessed 21 April 2020].

Mail, R., 2018. *www.royalmail.com.* [Online]
Available at: https://www.royalmail.com/business/system/files/delivery-matters-uk-edition-2018.pdf
[Accessed 20 April 2020].

Ofcom, 2011. *www.ofcom.org.uk.* [Online]
Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0019/24364/uk_post_charts.pdf
[Accessed 20 April 2020].

postandparcel, 2017. *https://postandparcel.info.* [Online]
Available at: https://postandparcel.info/78971/news/royal-mail-pda-roll-out-continues/
[Accessed 23 April 2020].

Royal Mail, 2016. *500years.royalmailgroup.com.* [Online]
Available at: http://500years.royalmailgroup.com/gallery/##items
[Accessed 20 April 2020].

Royalmail, 2020. *www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/en/about-us/our-story
[Accessed 20 04 2020].

BBC, 2005. *news.bbc.co.uk.* [Online]
Available at: http://news.bbc.co.uk/1/hi/business/4274335.stm
[Accessed 24 April 2020].

BBC, 2006. *http://news.bbc.co.uk.* [Online]
Available at: http://news.bbc.co.uk/1/hi/business/5358436.stm
[Accessed 20 Apr 2020].

BBC, 2013. *www.bbc.co.uk.* [Online]
Available at: https://www.bbc.co.uk/news/business-22605734
[Accessed 24 April 2020].

Commission, P. S., 2011. *Annual Report and Account 2010-11.* [Online]
Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/229288/0975.pdf
[Accessed 24 April 2020].

Left, S., 2002. *www.theguardian.com.* [Online]
Available at: https://www.theguardian.com/technology/2002/mar/13/internet.postalservice
[Accessed 24 04 2020].

Mail, R., 2006. *https://www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/media/10151/annual_report_and_accounts_2005-06_final_acrobat_7.pdf
[Accessed 25 April 2020].

mail, R., 2019. *www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/media/10795/annual-report-2018-19.pdf
[Accessed 24 April 2020].

Mail, R., n.d. *www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/media/10795/annual-report-2018-19.pdf

Ofcom, 2019. *www.ofcom.org.uk.* [Online]
Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0028/186139/annual-monitoring-update-postal-market-18-19.pdf
[Accessed 24 April 2020].

Royalmail, 2020. *www.royalmailgroup.com.* [Online]
Available at: https://www.royalmailgroup.com/en/about-us/our-story
[Accessed 20 04 2020].

Statista, 2012. *https://www.statista.com.* [Online]
Available at: https://www.statista.com/statistics/283188/online-share-of-retail-sales-in-the-united-kingdom-uk/
[Accessed 24 April 2020].

Techdesk, 2009. *www.accountingweb.co.uk.* [Online]
Available at: https://www.accountingweb.co.uk/tech/tech-pulse/news-from-the-cloud-royal-mail-turns-to-the-cloud
[Accessed 23 April 2020].

Tran, M., 2003. *www.theguardian.com.* [Online]
Available at: https://www.theguardian.com/business/2003/nov/13/postalservice.money
[Accessed 24 April 2020].

Anon., n.d. [Online].

Royal mail, 2020. *Indeed.* [Online]
Available at: https://www.indeed.co.uk/cmp/Royal-Mail/about
[Accessed 24th April 2020].

Royal Mail, 2020. *Royal Mail.* [Online]
Available at: https://www.royalmailgroup.com/en/about-us/our-story/
[Accessed 24th April 2020].