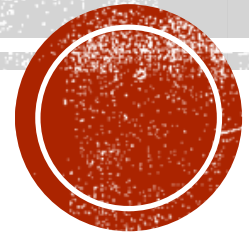




**DRONE
DELIVERY**

**BY ROYAL
MAIL**



DRONE DELIVERY BY ROYAL MAIL

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Digital Skills and Research Method

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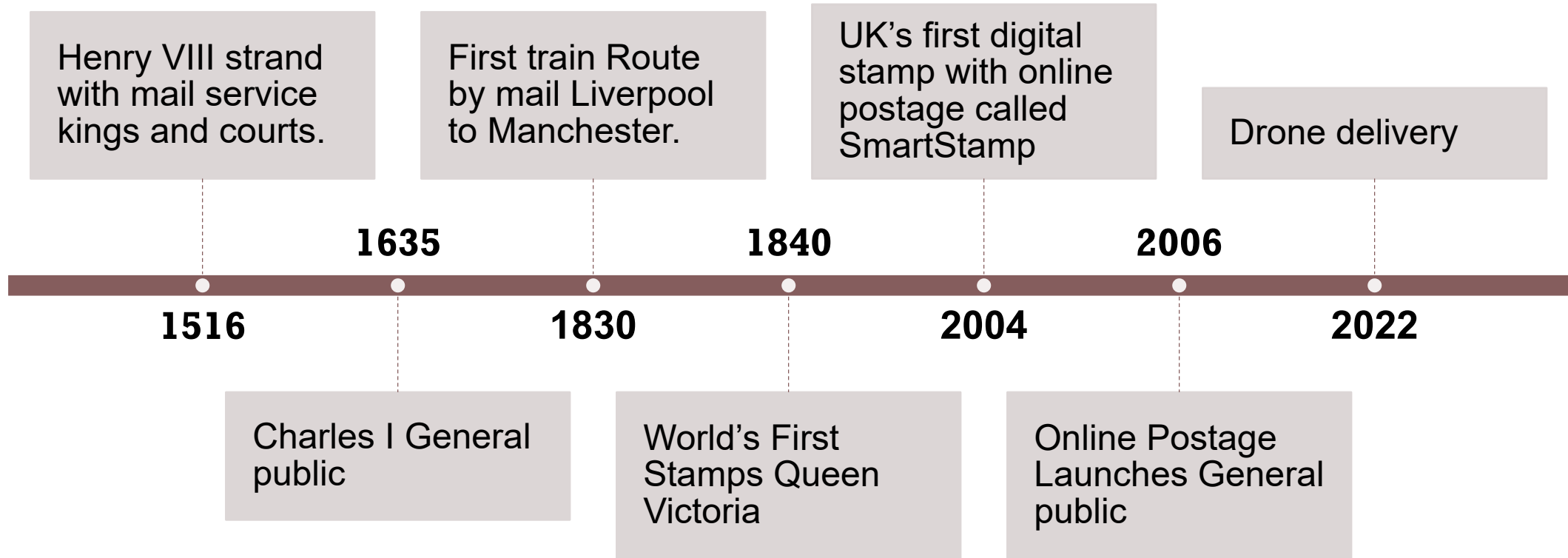
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ROYAL MAIL BACKGROUND BY RUBAN





ROYAL MAIL BACKGROUND BY RUBAN

- 31 Million Address in one week 16 billion in year
- Royal mail Parcel force General Logistic Systems
- 140,000 Employees
- 37 Mail Centre's
- 11500 Local collection



AIM OBJECTIVE AND VALUES BY RUBAN

- To build a more balanced and diverse parcels-led, international business.
- To connect customers, companies and countries.
- Shaping culture, underpin everything royal mail do, focusing on customers and on providing reliable and convenient value-for-money services. Royal mail wants people to be proud to work for their businesses.



VISION AND MISSION BY RUBAN



- To be recognized best delivery company in the UK and around the world
- 500 drone servings all corners off UK
- To access to a unique set of skills and free tools
- 40 delivery offices using electric vehicles since Spring 2022
- Delivering letters and parcels though drone in high remote areas



CHALLENGES BEFORE DRONE TECHNOLOGY AT ROYAL MAIL BY ARIF



- **Environmental**

- **Climate change**

UK's volatile weather always make disruption.

- **CO2 emission**

UK Gov set the target in law that cutting emission 78% by 2035 and net zero by 2050.



CHALLENGES BEFORE DRONE TECHNOLOGY AT ROYAL MAIL BY ARIF



- **Financial**
- **Largest fleet management**
- Royal mail operate largest fleet in UK with 50,800 vehicle.
- **3rd party Expenses**
- Channel Shipper, Store feeder, Intersoft.



OTHER CHALLENGES BY ARIF



- **Workforce**
- Union Strike
- Long process of training & recruit
- **Open market competition**
- Adopt with new technology to compete with other competitors; UPS, DHL, TNT, FedEx, Evri, Amazon Prime & others.



OTHER CHALLENGES BY ARIF



- **Corporate responsibility**
- Royal Mail will introduce 50 new Drone route next 3 years in order to comply with UK Government rules.
- Sustainable resourcing
- Just in Time (JIT) adaptability for its long-standing reputation.



INSIGHTS OF MODERN TECHNOLOGY INTRODUCED BY IVO



Definition of
Drone
Technology



Unmanned
Aerial
vehicles (AV)



Remote
control



Synchronisation
of GPS



Software-
controlled



Can use for
firefighting



INSIGHTS OF MODERN TECHNOLOGY INTRODUCED BY IVO

Type of Drones



Single Rotor



Multi Rotor



Fixed Wing



INSIGHTS OF MODERN TECHNOLOGY INTRODUCED BY IVO

Advantages of Drones

- Environmentally friendly
- Cost-effective
- Always operational
- Improved access

Disadvantages of Drones

- Limited capabilities
- Legal limitations
- Safety
- Training
- Expensive



IMPACTS OF MODERN TECHNOLOGY INTRODUCED BY IVO

- **Positive Impact**

- Film making
- Transport goods
- Medical/commercial
- Traffic management and mapping



IMPACTS OF MODERN TECHNOLOGY INTRODUCED BY IVO

- **Negative Impact**

- Human psyche
- Loss of privacy
- Insecurity/fear
- Changes in social dynamics.



LESSONS DRAWN FROM THE CASE STUDY BY VITOR



Not weather dependent or to external factors



Connection to remote areas



Environmentally friendly less emissions, fuel consumption



Faster service



LESSONS DRAWN FROM THE CASE STUDY BY VITOR

- Big step on the improvement of the delivery system in the UK
- We learn that royal mail is committed to increasing the drone routes.
- Getting more electric and hydrogen vehicles.



CONCLUSION BY CAROLINE

- Royal mail switching to the use of drones will be beneficial to the company, communities and the environment through reduction of CO2 emissions, fast and reliable mail deliveries within the remote communities.
- It will be a viable commercial logistics solutions for the company such as purchasing of the drones, reduction of labour cost and will be autonomous.
- This will be a revolutionised logistical solutions.



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