

Hawk Capture

-Marks your presence

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Contents

- Problem
- Market need
- Solution
- Innovativeness
- Benefits
- Competitive landscape
- Business model
- Road map
- Sustainability
- Go to market strategy
- Conclusion

Problem Space

- Manual attendance or Fingerprint based Biometric/ RFID chips based monitoring systems is time-consuming process in this present age of technology.
- There are always chances of proxies and alteration of data.
- To overcome this problem there is a need to incorporate the technology which is fully automated and less time consuming into the existing system

Market Need

- As per statistics which is shown in Fig 1.1 shows how many are willing to adopt to new system.

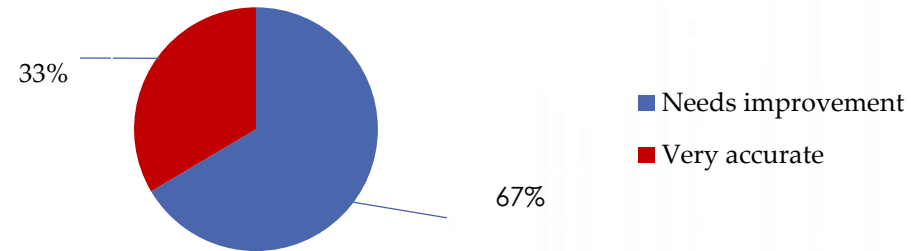


Fig 1.1 Willingness to adapt to new system

- The statistics of loss of effective working hours in the present system is as shown in the Fig 1.2

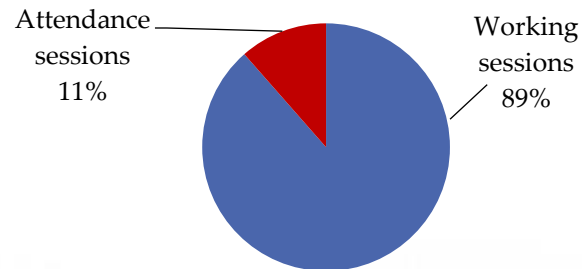


Fig 1.2 Loss of effective working hours

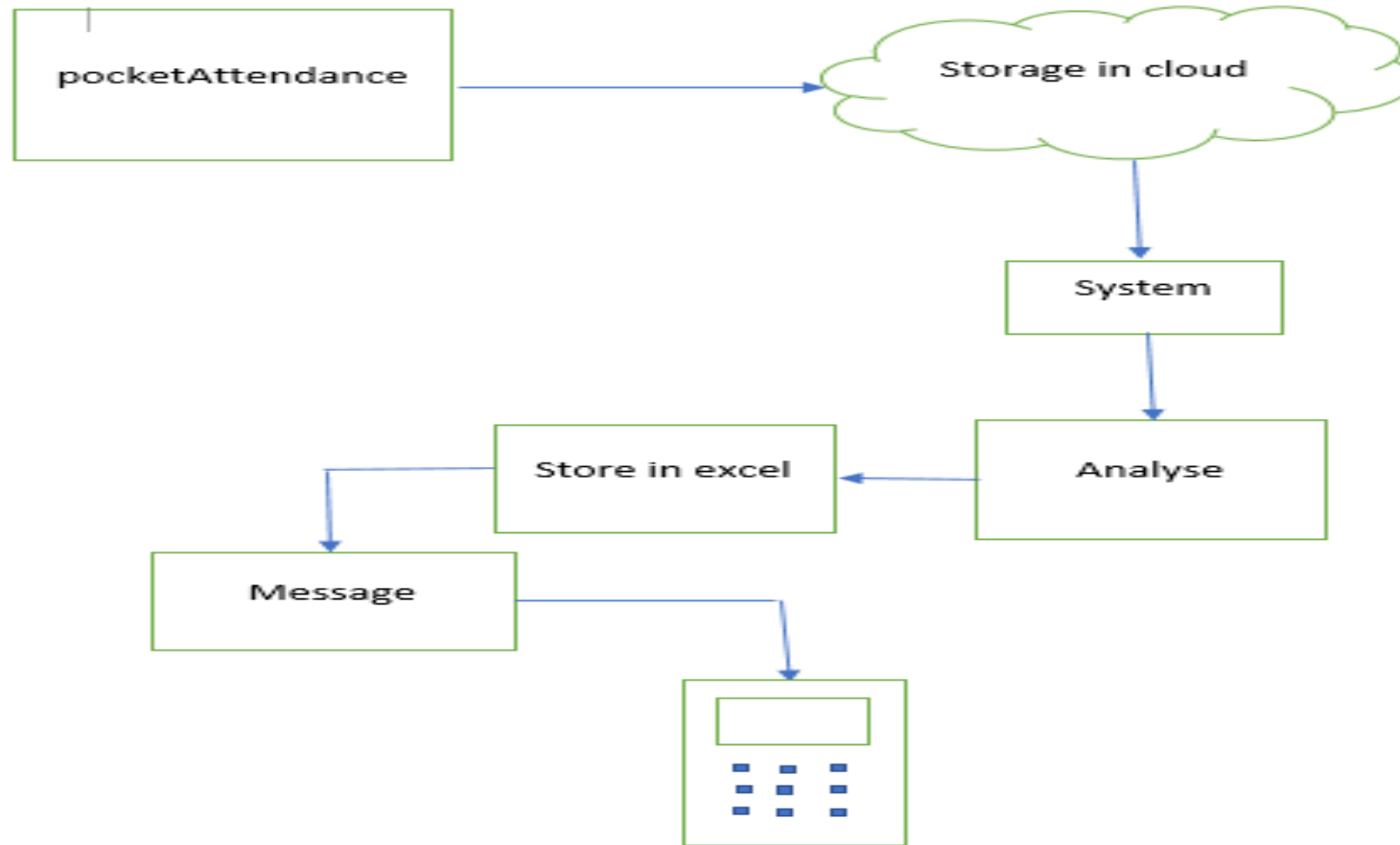
- The trend of expected growth in face recognition technology(2012-2022)



Solution Space

- Face Recognition is the booming area of technology. *Hawk Capture* uses face detection and face recognition algorithms to solve the problem of attendance monitoring.
- *Hawk Capture* captures the frames from a streaming video and face detection algorithms are applied to the image for detecting the faces.
- The next level is to recognize the faces and mark the presence.

Flow Chart



INNOVATIVENESS

- Face recognition is least intrusive and fastest biometric technology which is hygienic and 100% touch free biometric authentication
- *Hawk Capture* utilizes push to cloud technology providing a comprehensive solution.
- The *Hawk Capture* provides access to real-time student attendance data, a fully automated attendance monitoring system that reduces the administrative burden.
- This system works even if the internet connection is lost, as back-up of the data is maintained

BENEFITS

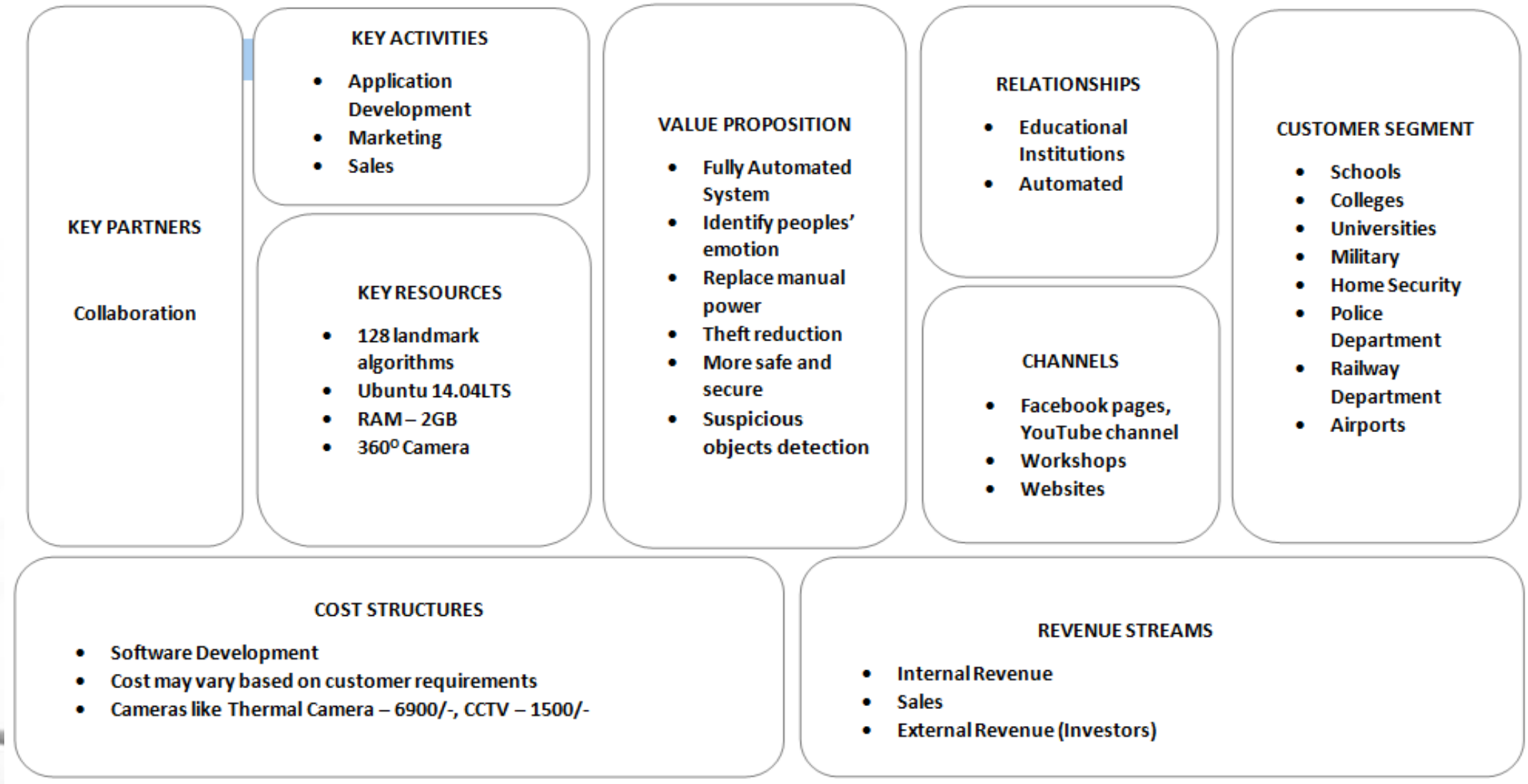
- Reducing the use of paper as electronic revolution was supposed to.
- Quick and easy to set-up in any kind of space.
- No mandatory need of Internet connection.
- Minimum attention from academic staff is required.
- *Hawk Capture* improves error reduction, saves time, security and increases employee productivity.

COMPETITIVE LANDSCAPE

- Business analysis of our product enables us to identify the competitors which uses face recognition technology. They include-
 - 1) Creatrix: Automated control of attendance using cloud-based biometric and RFID attendance management software system.
 - 2) SecurAX: Facial recognition based time and attendance solutions.
 - 3) RealTime: Contributor of unique fingerprint impression center innovation.

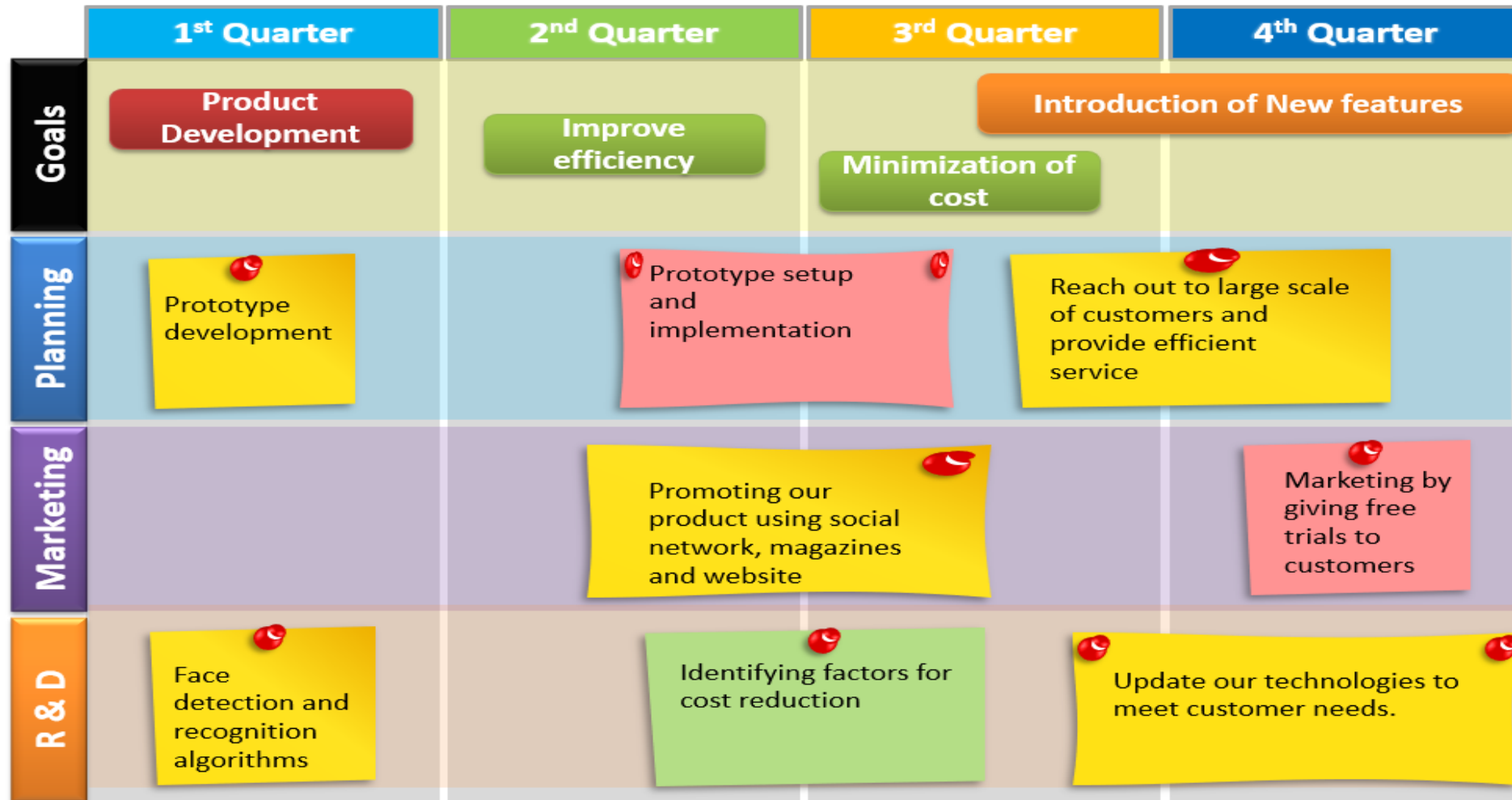
BUSINESS MODEL

The system involves smooth implementation for modelling the various features as shown below.



ROAD MAP

- The product/service framework for guiding the mobilization of a start-up around its strategic plan is as shown below



SUSTAINABILITY

- This system is built with opensource libraries without any proprietary software .
- Hence, this Product costs less when compared to the market competitors with the chance of providing customized services.

GO TO MARKET STRATEGY

- We are planning to use Social networks, YouTube, Blogs, Workshops, News Coverage.
- We use internal resources at the pre-incubation stage and later plan for collaboration partnership.
- After the prototype development phase we would like to extend our product to provide customized services to reach the targeted customer and market segments.

Conclusion

- Traditional and contemporary monitoring system is time-consuming process in this era of Technology.
- Automated monitoring system involves face recognition algorithms, Deep learning techniques and utilizes the features and concepts of Neural networks.
- Proposed System can also be integrated with home security systems and can be extended to be used with public security systems
- Future work of the proposed system involves effective monitoring of the employee working hours.



THANK YOU