



# Final Project

Use of RFID in baggage handling

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**It is hereby to declare that we are submitting this report which is a solitude outcome of our dedication, hard work and commitment regarding to subject. It is really such a great opportunity for student to learn by practically observing the things and indubitably it must be a great add on to our learning skills. With all these things, I also would like to mention and express my gratitude to my teachers, coordinated staff and honorable director of department which really have provided an environmental soar to excel and flourish with a quality cognitive atmosphere.**

## **1.1 ABSTRACT:**

In this portion, there is a description about how to transform and build up radio frequency identification concept initiation to facilitate baggage handling more effectively at airports to placate the hassle and to leverage a smooth working environment connectivity with the coordinated operations with other functionalities fully quixotic at the most prime area at land. By the time there is a significant soar sighted in traffic either domestically or internationally and the volume is diminished to rise at humongous level. Furthermore, there is a mantra in the exploitation of RFID to control the mishaps and mismanaging of baggage related concerns which not only control the inconsistencies and inappropriacies but also pacify and empower the efforts towards increasing the automation at airport and its application structuration in a more convenient way. If the system is adopted then on improving and it would be having visible impacts on the amelioration of security, swift processing which would be healthier in saving time efficiency and workforce in terms of human resource. In this project, RFID technology is applied for the purpose of getting the pinnacle of reliability and functionality of effective baggage processing through reducing the errors at very lowest and almost evitable at certain point. After once being done with the formulation of its shape and design the next most thing is the feasibility along with viability regarding to ergonomics principles but pervasively it is regarded as more lenient and delineated way of acting the providence of accessories more frequently and safely to conduct the operation flow more instantly.

## 1.2 INTRODUCTION:

Aviation industry which is also entitled as 21<sup>st</sup> in the world in terms of GDP producing, if it would have been a country. Apart from all these positive aspects there is also an affecting point which is spoiling its outcomes and having an impactful influence on the disruption to enhancing of its operations and escalation of frequencies just because of single factor known as mishandling of baggage. The industry has suffered through an enormous and elevating figure of loss around 2.09 billion dollars. According to stats, 3.13 billion passengers travelled through airlines and among them 21 million pax (passengers) and 21.8million bags were mishandled and this data was extracted in 2013. It is a worrisome concern for the travelers who are not reluctant to travel across the country or within either for business, leisure or VFR (Visiting Friends and relatives) purposes. Frequently mishandled baggage practices are left behind at origin airport, wrong dispatching of bags to other destination, failure to load in a connecting flight carrier and baggage loss. Baggage has to pass through multiple steps to finally make it to destination and these steps are comprised of followings as under:

- Check in
- Screening
- Sorting
- Loading
- Transfer at transit airport
- Arrival etc.

If there is any negligence occurred in any stage of baggage processing then it could be resulted in the mishandled baggage and the use of Radio Frequency Identification is quite supportive in the baggage management system enables to track a bag while passing through different stages within an airport as well as across the airports.