TECHNOLOGICAL SOLUTIONS FOR BAGGAGE HANDLING ON TIME PERFORMANCE
**Baggage Handling On Time Performance Management**, is a system to monitor passenger’s baggage from the aircraft through Baggage Claim area. This mobile-based application is expected to help passenger to provide valid and reliable about their luggage, especially the longest estimated time of baggage delivery (Last Baggage).
BAGGAGE HANDLING FLOWCHART

OPERATION FLOW

Airlines Block On

- Loading Baggage

APPLICATION FLOW

Airlines Block On

- CMS
  1. Baggage Monitoring
  2. Reporting

- CONVEYOR READY OK!
- PRESS BUTTON FOR 1st Baggage & Last Baggage
- CHANGE CONVEYOR

- PIC Ground Handling operator presses the START button on the application when the Block On plane, which next countdown time will start and is displayed on the Conveyor Board

- BAGGAGE HANDLER

- Ready for Display on Conveyor Board

TERMINAL

Data FIDS

CONVEYOR BELT

Number

BAGGAGE CLAIM

BELT 9

FLIGHT NUMBER

FLIGHT ORIGIN

FIRST BAGGAGE

LAST BAGGAGE

Garuda Indonesia Duty Free

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**BEFORE COLLABORATION**

1. Loading & Unloading
2. Set the luggage into conveyor
3. Manual monitoring First Baggage & Last Baggage

**AFTER COLLABORATION via Mobile Application**

1. Loading & Unloading
2. Set the luggage into conveyor
3. Monitoring Baggage via CMS
4. Set the information to passenger about First Baggage & Last Baggage

**IMPACT**

1. Missed communication
2. Less secure luggage handling
3. Input data manually and not terinfo well to PT AP II
4. There is no definite information about the luggage waiting time for passengers

1. Provide flight information data
2. Provide conveyor belt facilities
3. Provide conveyor board display for information to passenger about flight number & origin flight

**IMPACT**

1. Integrated Communication between PT AP II & Stakeholder
2. Integrated data monitoring
3. More Secure Baggage Handling
4. Real time monitoring via APPS & CMS
5. Fast responses monitoring
6. Real time information for Passenger about first & last baggage handling
On the first page of the application, user is required to log in.

An active email is required to apply a username.

Every user and password will only valid for one person.

Each user will be treated its confidentiality.

After successful login, user will choose any specific airport on the next page.
Select Airport

Click the AP II Internal Button, To bring up sub categories in the app

Select Sub Categories Partners to further enter into the Baggage handler application (Baggage OTP & Monitoring)
BAGGAGE ON TIME PERFORMANCE & MONITORING
To start baggage handling, the user selects Category BAGGAGE OTP, which is then directed to select the appropriate Airport where User uses Baggage Handling application.
Furthermore after selecting the appropriate Flight, User is aimed at Home Page Menu to be able to process the Baggage. On This Page Users press the First Baggage Button first baggage until the conveyor belt and last baggage button at the last baggage until the conveyor belt

After the First Baggage button is pressed, the baggage delivery time calculation has started and is displayed on the Board conveyor

Regarding the Extra Time & Total Baggage button will be explained on the next page
ON PROGRESS & FINISH PAGE

For handling Baggage by Apps, User must select flight and press the First Baggage button, after that the process will be displayed at On Progress field.

The finish column is information about the flight that has been done baggage handling by the officer.
TOTAL BAGGAGE HANDLING

Total Baggage Handling page on application must be done by user, after ending baggage handling process (press finish button).

Users must fill in the columns in addition to calculate amount of baggage that has been handled (press FINISH button).

The user presses the SUBMIT key when the column is filled in correctly.
This page will appear when the User presses the Extra Time button, this button works if the baggage handling process is delayed due to some constraints (weather, tools, operation .etc)

1. If the extra time is less than 10 minutes from Block On , then the officer will be redirected to the additional time page (Page Evidence 1);
2. If the extra time is more than 10 minutes from Block On or the extra time button has been clicked twice in less than 10 minutes since Block On , then the officer must fill the evidence for the report (Page Evidence 2)

(Evidence Page 1)

(Evidence Page 2)
**EXTRA TIME 1**

**EVIDENCE 1** Column Filling is done if the extra time is less than 10 minutes since Block On.

- Additional time is filled according to estimated requirement in baggage handling.
- Constraints are selected according to the state of the field.
- The user presses the SUBMIT key if the time column and the cause of the constraint are filled correctly.
EXTRA TIME 2

EVIDENCE 2 Column Filling is done if the extra time is more than 10 minutes since Block On or if the extra time button has been clicked 2x in less than 10 minutes since Block On.

Additional time is filled according to estimated requirement in baggage handling

Constraints are selected according to the state of the field

The user uploaded an event photo in the field (upload can be done with take picture / from gallery)

Users provide information when the occurrence of constraints and handling
CONTENT MANAGEMENT SYSTEM (CMS)
BAGGAGE HANDLING ON TIME PERFORMANCE
On the first page after logging in, the user can see on the top left side, there are User Profile and some Menu there is Overview, Report & User Management. On this Overview page, the user can see the view of a data on Flight Handling Chart presented in the form of Pie Chart & Bar Chart.

The Blue on Pie Chart shows the baggage handling results achieved (First Baggage Below 20 Minutes and Last Baggage Below 40 Minutes), and the Yellow Color on the Chart Pie shows the baggage result that is not reached (First Baggage over 20 minutes and Last Baggage above 40 minutes).
Bar Chart Flight Handling is still contained in the overview page, the user can see the data handling luggage per day, on this page the user can change the date as needed to view the data.

The Blue Color on the Chart Bar shows the baggage handling results achieved (First Baggage Below 20 Minutes and Last Baggage Below 40 Minutes), and the Yellow Color on the Chart Pie shows the baggage handler results are not reached (First Baggage over 20 minutes and Last Baggage above 40 minutes)
Report Baggage menu is a detailed reporting of aircraft that have been in the handle or not in the handle.

Report flight list serves to see the last update input data reclaim_first_bag_time (onblock) from API PT AP 2, field name last update is LUP.

For monitoring Block On time, if Block On time is still 0 but the time is more than 3 minutes sta_time_stamp, then the status will delay, but if Block On time is filled, then the status is done.
DIGITALIZE EFFECT
FOR PASSENGER EXPERIENCE
Digitalize baggage arrival monitoring

Uncertainty - Uninformed

Before

- Informative
- Scheduled

After
CCTV MONITORING AT BREAKDOWN AREA
THANK YOU!