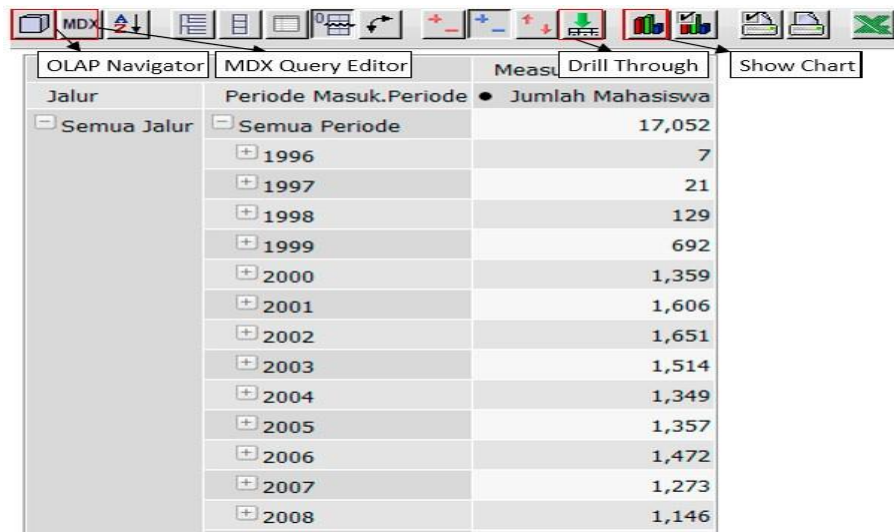


# Data warehousing with IBM cloud db2 warehouse

## Implementation and testing

In this section will be discussed about the implementation of the system in accordance with the analysis and system design. The structured data comes from PostgreSQL databases, while unstructured data comes from social media such as Facebook, twitter and LinkedIn.

shows the analysis page. In this application, users could create new analysis so the report can be customised as they need. In every analysis, it is possible to produce some graphs or charts to support the generated report. Some advanced users need OLAP Navigator and MDX Query Editor to create powerful report.



Analysis page of DSS application.

The sample chart can be seen in User can customised the type of the chart, so the generated report will be more meaningful for the reader.

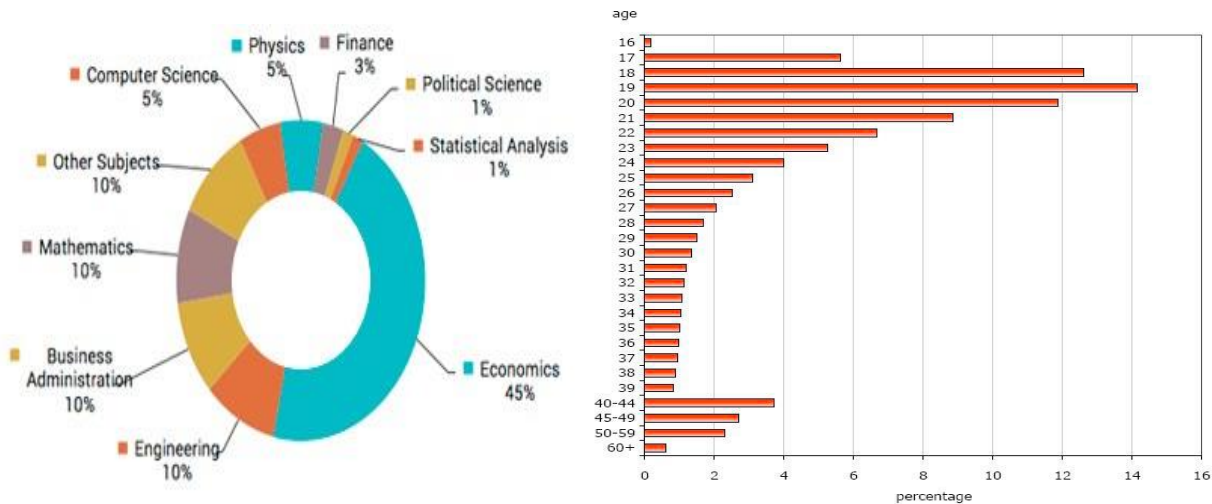
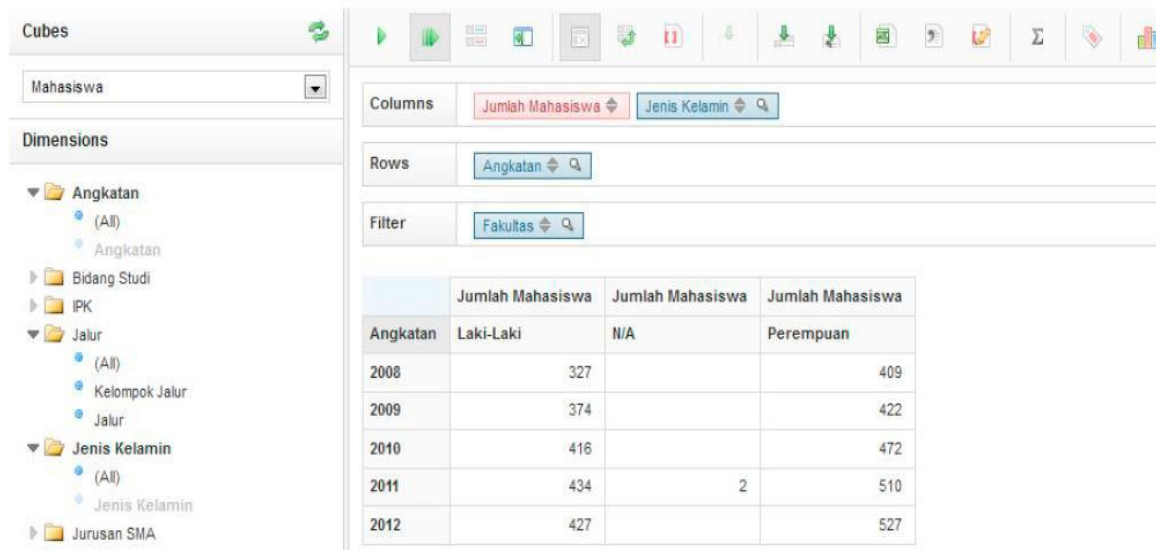


Chart page of DSS application.

The more advanced interface for analytical feature can be seen in Fig. 5. Advance users could drag and drop item dimensions in the left panel, then put into the column, row or filter in the right panel to produce the insightful report.



Advanced analysis of DSS academic

Questionnaires were distributed among thirty university staffs which cover from top management, middle management and bottom management. Rector and vice rectors are categorized as top management. In the middle management, it contains dean, vice dean and their staffs. Head of departments are grouped into bottom management. The assessed indicators include application interface, graphic customization features, ease of use of the application, ability to meet the user needs, and overall application. Detailed assessment of application usage can be seen in Table 2.

Description of the rating scale:

- Value 1: Very bad
- Value 2: Bad
- Value 3: Enough
- Value 4: Good
- Value 5: Very good

From the questionnaire responses, 77% of users has good user experience. Mostly, the respondents said the graphics customization feature is good. According to the users, 87% of application is easy to use. 93% of users said the applications meet the business requirements. Overall, 97% of survey respondents said that the application is good.