

# INTERACTIVE MAPS—BASED DECISION SUPPORT MODELS FOR MEASLES AND RUBELLA IN JAKARTA

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## Objective

- ◆ Measles and Rubella is an infectious disease that is highly contagious
- ◆ Riskesdas In 2010, the national proportion of children 12-23 months who are immunized against measles is 74.5% while the standard is 90%.
- ◆ It is expected that the development of applications to visualize the patient associated with measles and rubella in the Special Capital Region (DKI) Jakarta interactive map

## Motivation

- ◆ Build a model and application architecture in an interactive map that can be used to support medical decisions in conducting routine immunization against measles and rubella in Jakarta
- ◆ assist in monitoring measles and rubella in Jakarta
- ◆ detecting statistical changes measles and rubella outbreaks in Jakarta
- ◆ Can be used as a decision support regional elections in Jakarta to be immunized

## Materials & Methods

- ◆ Data taken from the Jakarta Health Department on April, 7th 2016.

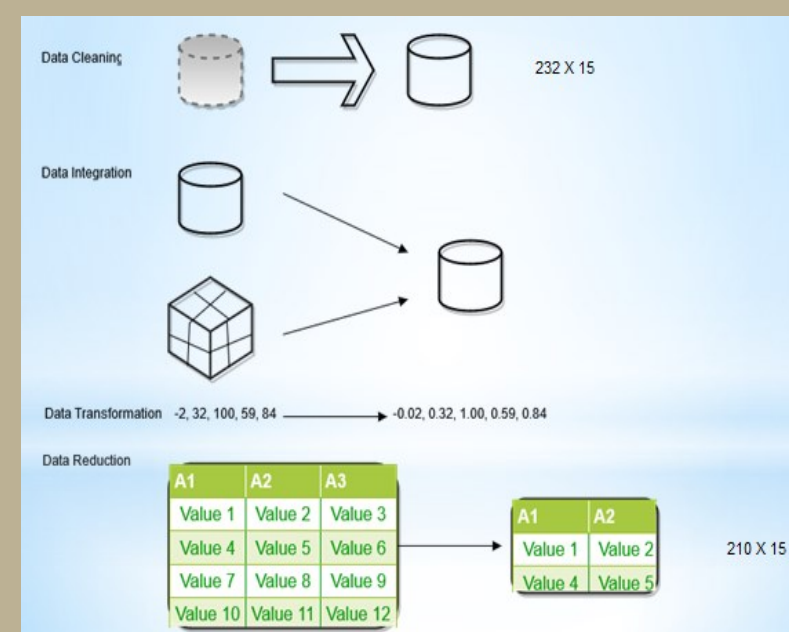


Fig 1. Data Preprocessing

## ◆ System Architecture

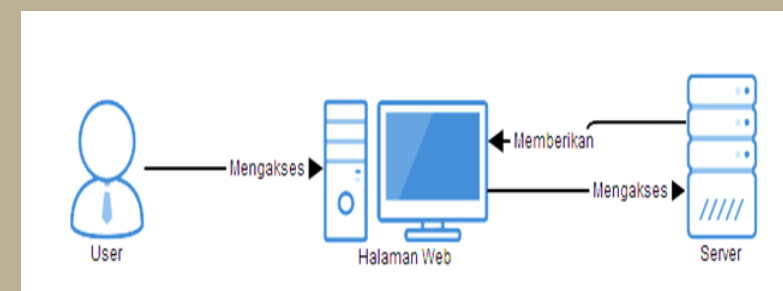


Fig 2. System Architecture

## ◆ Decision Support Architecture

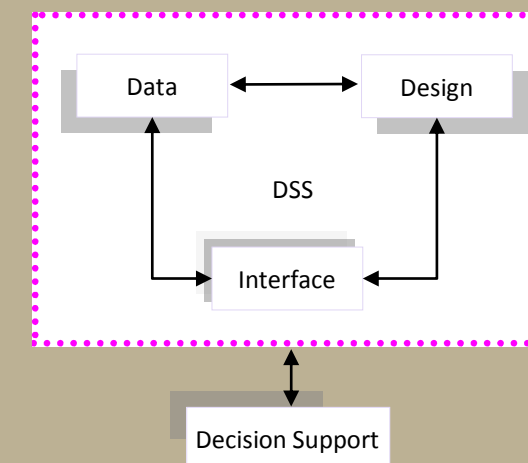


Fig 3. DSS Architecture

## Result & Discussion

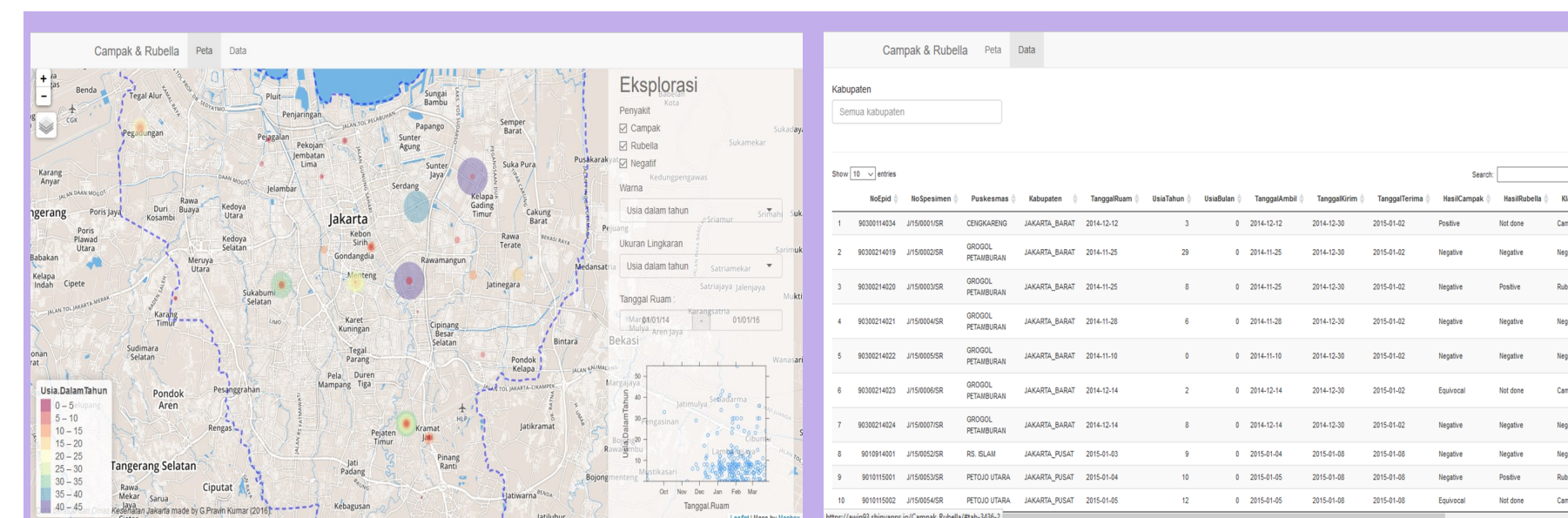


Fig 4. Main View (map) & Data View

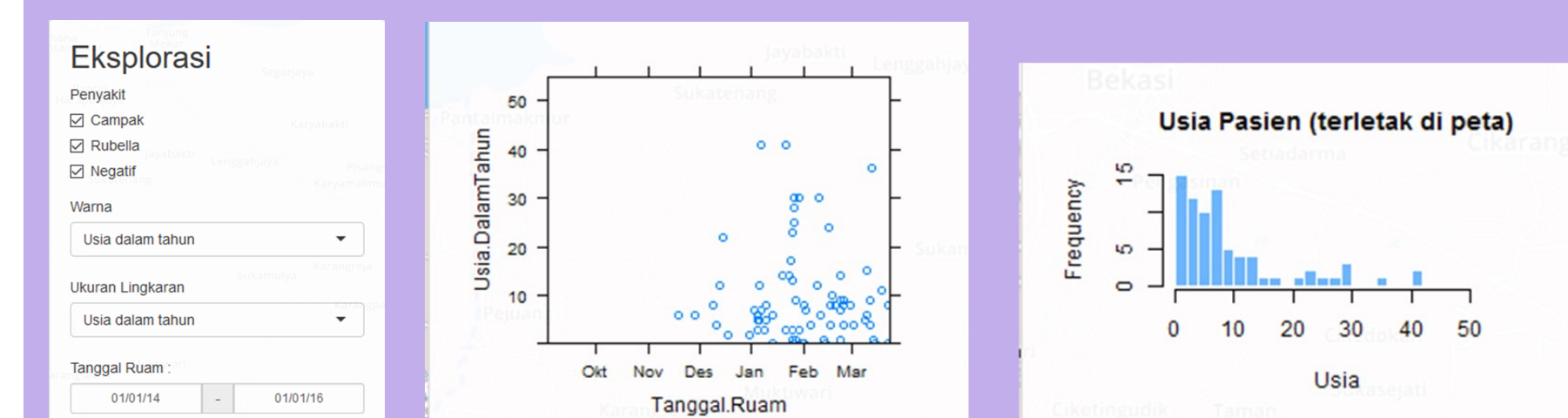


Fig 5. Map Exploration & Chart Features

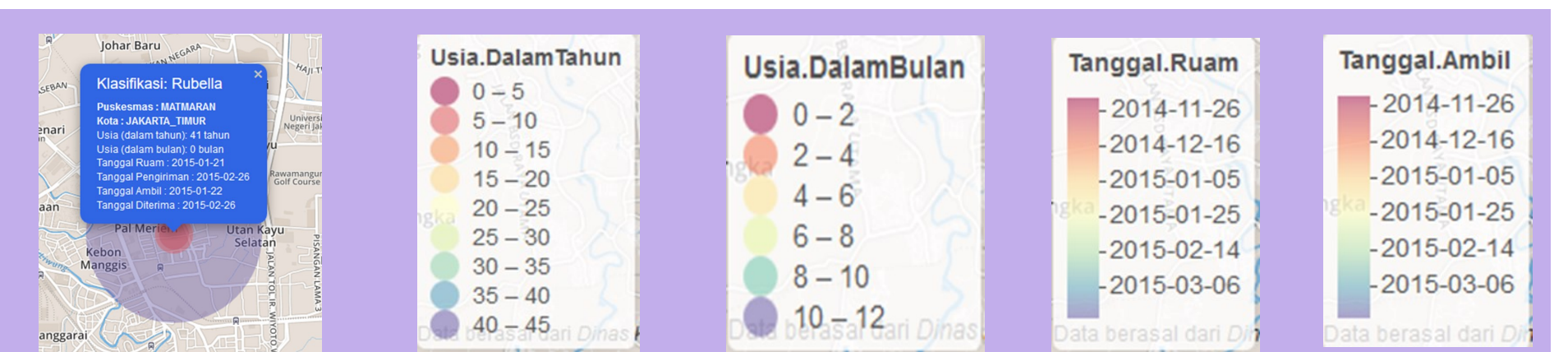


Fig 5. Marker Pop up View

Fig 6. Legend View




Fig 7. Data Selection Feature View

## Conclusion

- ◆ The designed application is already in the form of an interactive map and shows measles and rubella data in DKI Jakarta
- ◆ The designed application already displays maps with data from the Jakarta Health Office
- ◆ The decision support system is based on an interactive map of measles and rubella data in Jakarta

## Acknowledgement

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