Institute of Policy Studies

NCSS National Council of Social Service

3rd SOCIAL SERVICE RESEARCH NETWORK (SSRN)
"Transforming Research into Solutions"

Tuesday, 16 February 2016

Lecture Theatre, Level 2
Lifelong Learning Institute

Lee Kuan Yew School of Public Policy
National University of Singapore

Getting Insights from Data

Mr Eric Sandosham
Chairman
SAS User Group
&
Ms Tan Poh Choo
Operations Director
SAS User Group

HOW TO USE DATA EFFECTIVELY

ERIC SANDOSHAM & TAN POH CHOO

SAS USER GROUP 2016

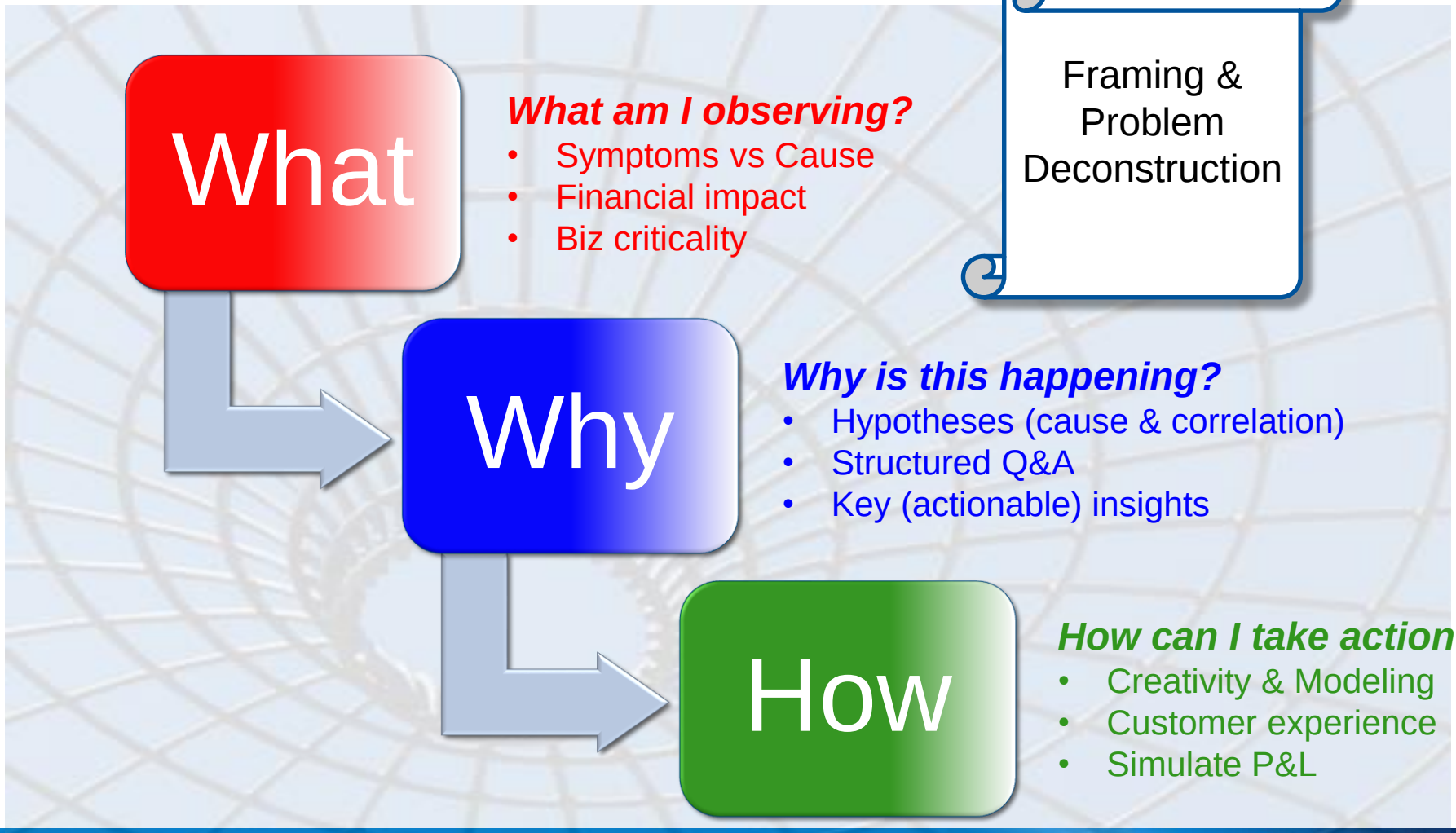
Copyright © 2012, SAS Institute Inc. All rights reserved.

- SAS User Group (Singapore) is an independent, volunteer organization run by SAS users
- It provides a platform for users to meet, share knowledge and experience, and learn more about SAS solutions from colleagues, peers and professionals

Copyright © 2012, SAS Institute Inc. All rights reserved.

Don’t focus on the data!

Always start with the problem.



Copyright © 2012, SAS Institute Inc. All rights reserved.

Recognise the problem.

Apply the right technique!

Deviation Problems

Monitor

- Quality Control Sampling
- Regression Trending

Anticipation Problems

Predict

- Forecasting
- Correlating

Allocation Problems

Assign

- Matching
- Scheduling
- Queuing
- Routing

Copyright © 2012, SAS Institute Inc. All rights reserved.

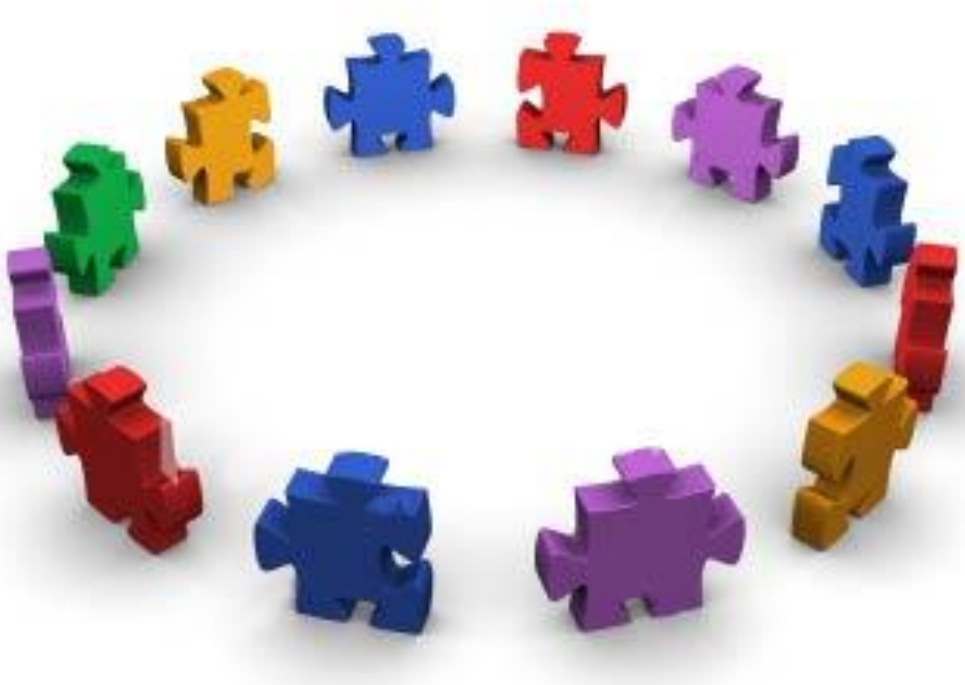
The team's the key!

Secret sauce in Analytics powerhouse

SAS USER GROUP

Business-
Embedded Function

Focus on
Innovation



Authority &
Accountability

Strong P&L
Foundation

Copyright © 2012, SAS Institute Inc. All rights reserved.

LEVERAGING ANALYTICS IN SOCIAL SERVICES

TAN POH CHOO

Copyright © 2012, SAS Institute Inc. All rights reserved.

APPROACHABLE ANALYTICS - SCENARIOS

What If…

1

We can identify shelters with the most critical health risks

We can uncover shelters experiencing a dangerous mix of overcrowding, unsafe drinking water and solid waste disposal problems

The School Pocket Money Fund GOT HEART THE STRAITS TIMES

海悦辅导中心

O'Joy Care Services

"Bringing oceans of joy to those we serve"

Copyright © 2012, SAS Institute Inc. All rights reserved.

Home
Yolanda Script
File Insert View Help
Log Off
Objects Data
Yolanda
Affected Persons
BRGYS
Evacuation Centers - Cumulative
Evacuation Centers - Update
Frequency
IDP Families inside Evacuation Centers - Cumulative
IDP Families inside Evacuation Centers - Update
IDP Families outside Evacuation Centers - Cumulative
IDP Families outside Evacuation Centers - Update
IDP Persons inside Evacuation Centers - Cumulative
IDP Persons inside Evacuation Centers - Update
IDP Persons outside Evacuation Centers - Cumulative
IDP Persons outside Evacuation Centers - Update
MUNICIPALITY_LAT
MUNICIPALITY_LONG
Partially Damaged House
PROVINCE_LAT
Property Value
Name MUNICIPALITY_LONG
Role Measure
Format
Aggregation
Sort Options
Yolanda Script
Introduction Family Housing Current Status
Tree Map of IDP Families and Persons - Cumulative
Total IDP Family and Persons per Municipality
Municipality STD
BOGO CITY
SAGAY CITY
ORMOC CITY
CADIZ CITY
TACLOBAN CITY (CAPITAL)
SAN CARLOS CITY
SIBALOM
SARA
GUIUAN
MEDELLIN
CARLES
TAFAZ
PASSI CITY
PALO
DULAG
BANTAYAN
ROXAS CITY (CAPITAL)
CALINOG
IBAJAY
SIGMA
BATO
Properties Roles Styl... Dis... Inte... Filt...
Tree Map of IDP Families and Persons - Cumulative
Name: Tree Map of IDP Families and Persons - Cumula
Title: Total IDP Family and Persons per Municipality
Format: Arial 16
Description:
Show legend
Placement
1
Typhoon Haiyan
PEOPLE
FAMILIES
HOUSING
File Insert View Help
Log Off
Objects Data
Tables
List Table
Crosstab
Graphs
Bar Chart
Targeted Bar Chart
Waterfall Chart
Line Chart
Pie Chart
Scatter Plot
Time Series Plot
Bubble Plot
Treemap
Dual Axis Bar Chart
Dual Axis Line Chart
Dual Axis Bar-Line Chart
Dual Axis Time Series Plot
Gauges
Bullet
Slider
Thermometer
Dial
Speedometer
Controls
Drop-Down List
List
Button Bar
Text Input
Range Slider
Yolanda Script
Introduction Family Housing Current Status
REGION VII (CENTRAL VISAYAS)
REGION VIII (EASTERN VISAYAS)
REGION XIII (CARAGA)
Pie Chart of Total House Damaged
Total House Damaged per Region
Total Number of House Damaged
PALAWAN 55.5%
ROMBLON 22.7%
Province Standard
MARINDUQUE OCCIDENTAL MINDORO ORIENTAL MINDORO
PALAWAN ROMBLON
Total Number of House Totally and Partially Damaged per Municipality
Totally Damaged House
Partially Damaged House
Municipality STD
Totally Damaged House Partially Damaged House
Cumulative Numbers of Evacuation Centers and IDP for Families and Persons inside and outside Evacuation Centers
Municipality STD | Evacuation Ce... | IDP Families in... | IDP Persons in... | IDP Families ou...
AGUTAYA 14 1625 7475
ARACELI 27 573 2511 101
BUSUANGA 36 828 2578 3359
CAGAYANCILLO 2 10 41 0
CORON 23 1244 6093 7081
CULION 40 702 2808 2298
CUYO 9 389 1708 618
Properties Roles Styl... Dis... Inte... Filt...
Pie Chart of Total House Damaged
Name: Pie Chart of Total House Damaged
Title: Total House Damaged per Region
Format: Arial 16
Description:
Pie
Data labels:
Show category labels
Show actual values
Show values as percentage of total
Grouping style: Stack
Create "Other" slice for minimal values
Minimum percentage for "Other": 4
Show legend
Placement
USER GROUP

APPROACHABLE ANALYTICS - SCENARIOS

What If…

1. We can identify shelters with the most critical health risks

   We can uncover shelters experiencing a dangerous mix of overcrowding, unsafe drinking water and solid waste disposal problems

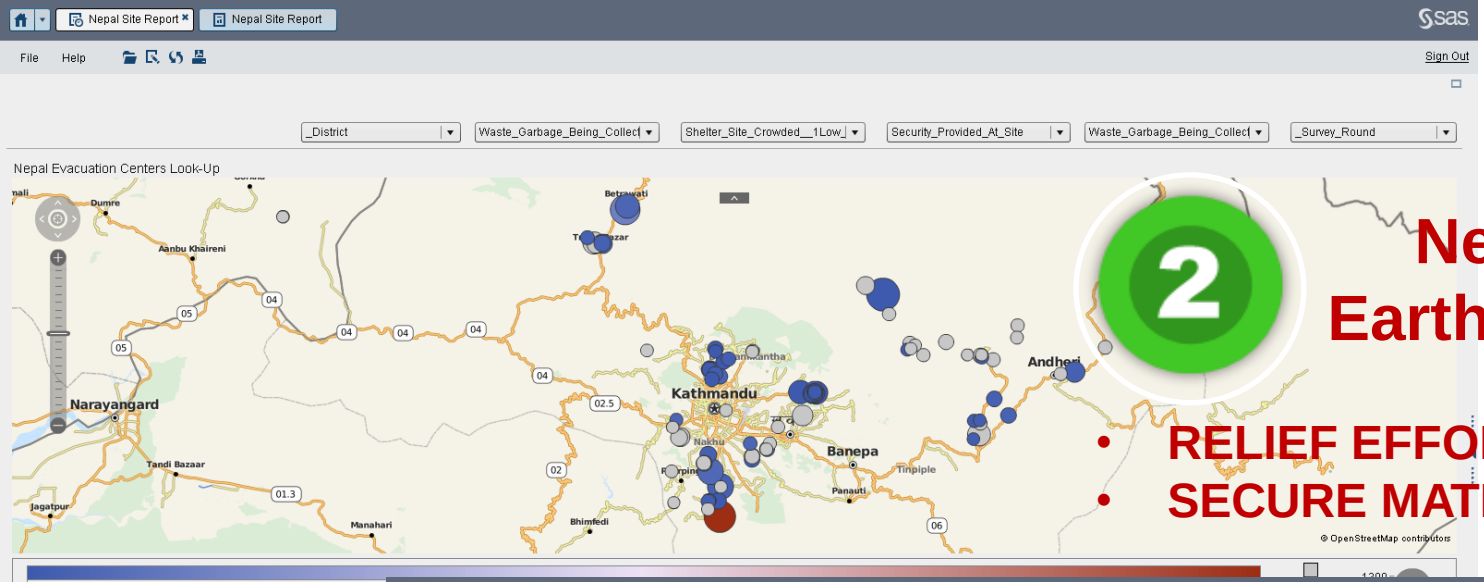
2. We can have quick and relevant insights to guide relief efforts

   We can secure materials more quickly and put roofs over 63,000 families to create a level of stability and protection, in anticipation of next monsoon season

The School Pocket Money Fund
GOT HEART
THE STRAITS TIMES

海悦辅导中心
O'Joy Care Services
"Bringing oceans of joy to those we serve"

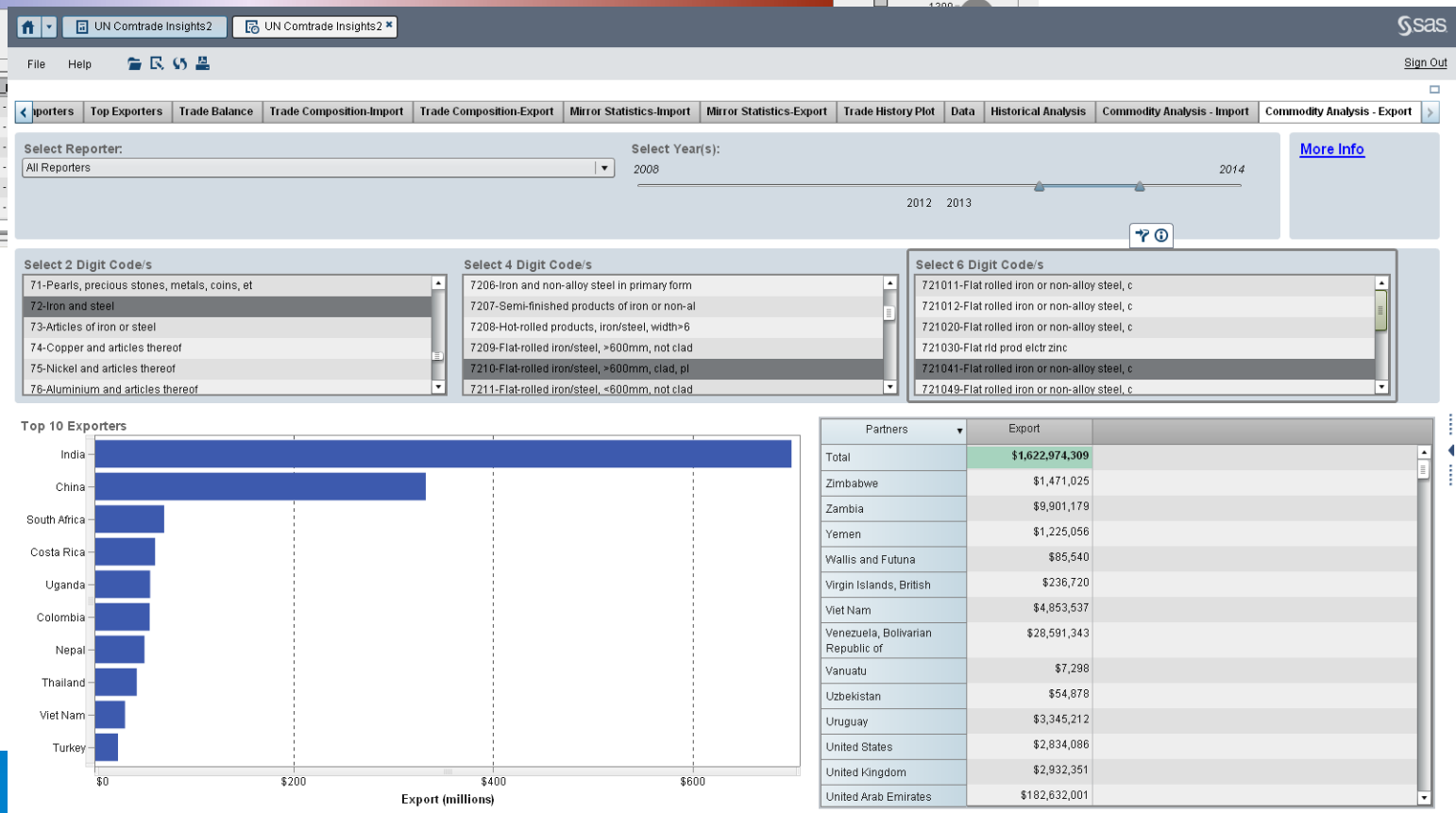
Copyright © 2012, SAS Institute Inc. All rights reserved.



Nepal Earthquake

- RELIEF EFFORTS
- SECURE MATERIALS

_Site_Name	_District	_Survey_
Aamchaur	Sindhupalchok	Round 1 -
Gumba Danda	Sindhupalchok	Round 1 -
Melamchi Bazar	Sindhupalchok	Round 1 -
Pipaldanda	Sindhupalchok	Round 1 -
sangachok, bhanjhyang	Sindhupalchok	Round 1 -
Sangbote	Sindhupalchok	Round 1 -



Copyright © 2012, SAS Institute Inc. All rights reserved.

APPROACHABLE ANALYTICS - SCENARIOS

What If…

SAS USER GROUP

The School Pocket Money Fund

GOT HEART

THE STRAITS TIMES

海悦辅导中心

O'Joy Care Services

"Bringing oceans of joy to those we serve"

1. We can identify shelters with the most critical health risks

   We can uncover shelters experiencing a dangerous mix of overcrowding, unsafe drinking water and solid waste disposal problems

2. We can have quick and relevant insights to guide relief efforts

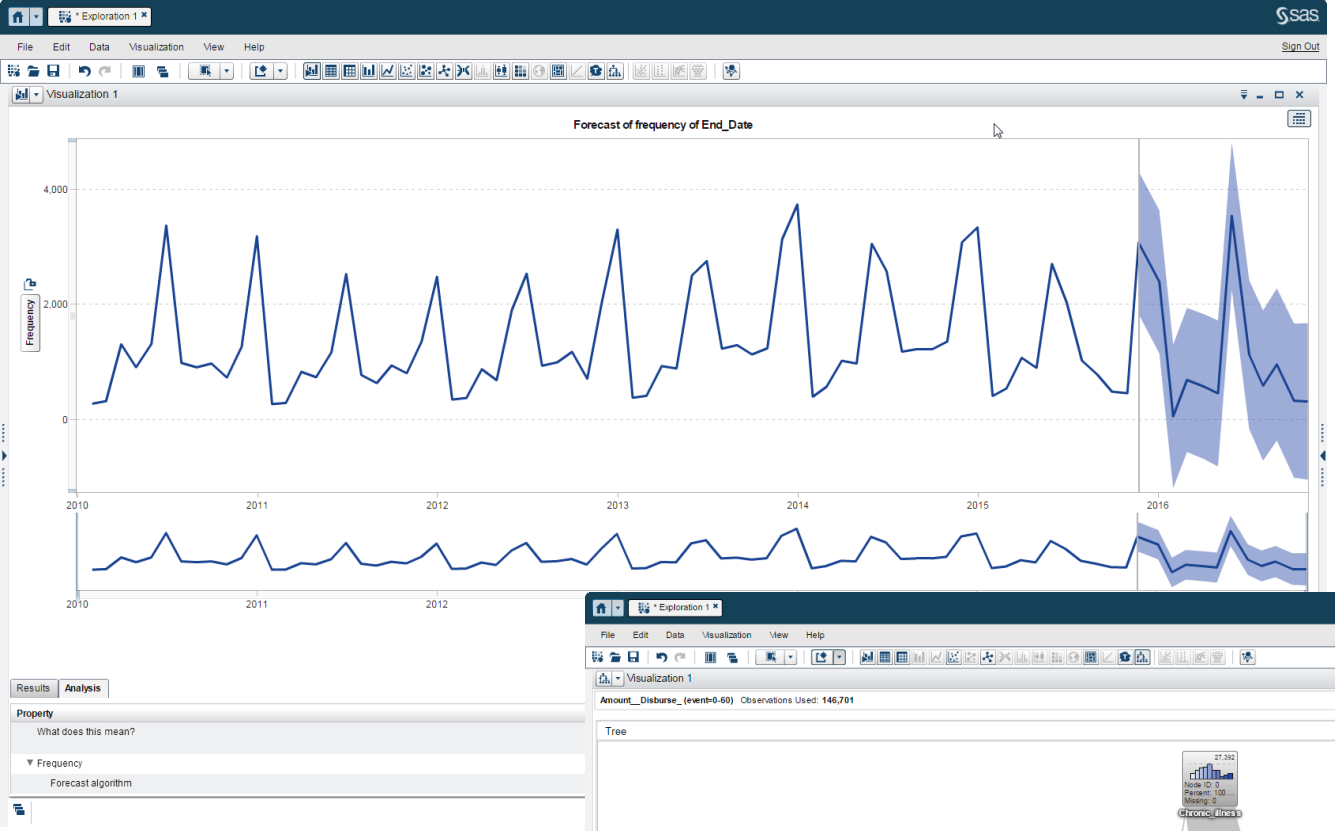
   We can secure materials more quickly and put roofs over 63,000 families to create a level of stability and protection, in anticipation of next monsoon season

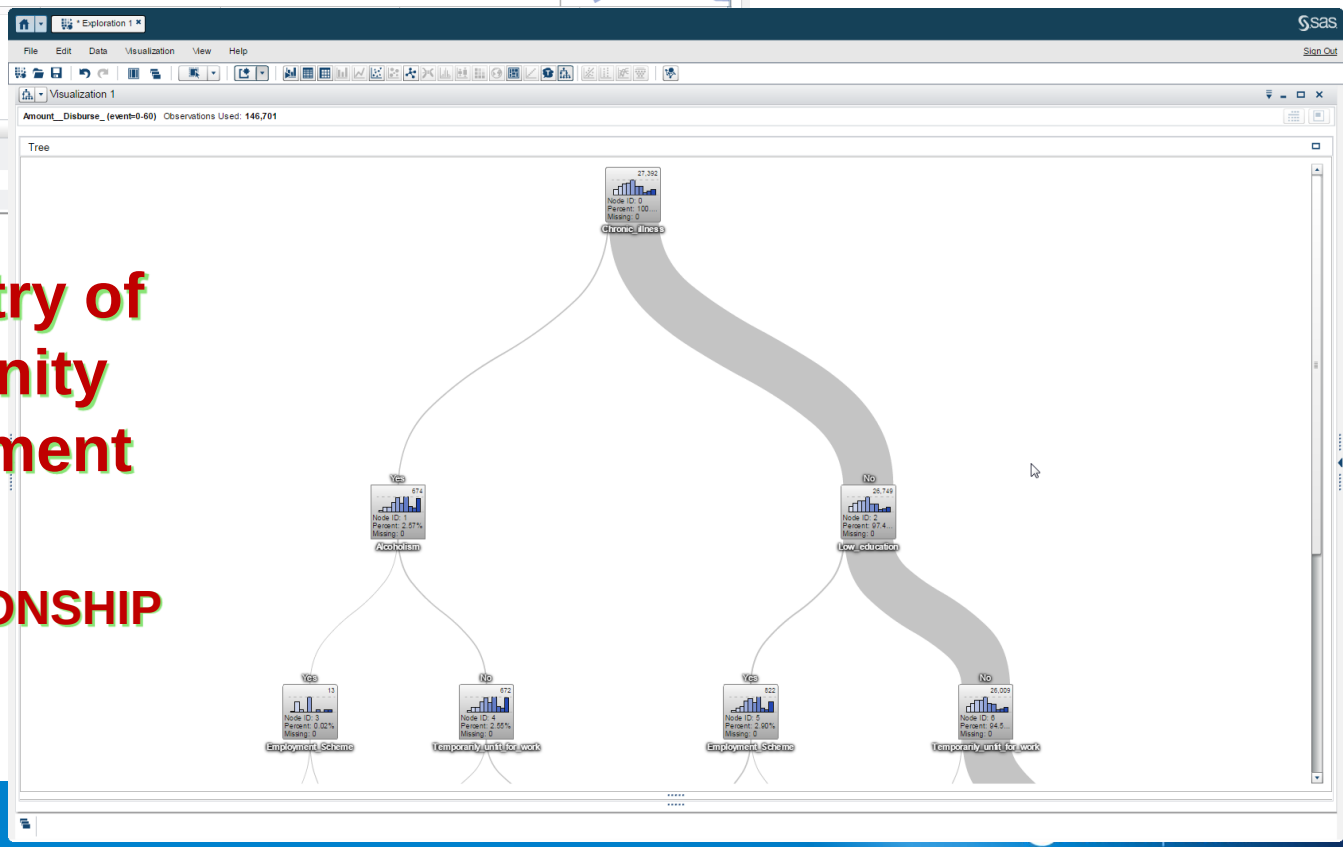
3. We are able to identify who are most at risk (delinquency, committing crimes, etc.)

   We are able to analyse the relationship between historical background and later outcomes

sas THE POWER TO KNOW.

Copyright © 2012, SAS Institute Inc. All rights reserved.





3 NZ Ministry of Community Development

- AT RISK
- CORRELATIONSHIP

Copyright © 2012, SAS Institute Inc. All rights reserved.

APPROACHABLE ANALYTICS - SCENARIOS

What If…

SAS USER GROUP

The School Pocket Money Fund

GOT HEART

THE STRAITS TIMES

海悦辅导中心

O'Joy Care Services

"Bringing oceans of joy to those we serve"

1. We can identify shelters with the most critical health risks

   We can uncover shelters experiencing a dangerous mix of overcrowding, unsafe drinking water and solid waste disposal problems

2. We can have quick and relevant insights to guide relief efforts

   We can secure materials more quickly and put roofs over 63,000 families to create a level of stability and protection, in anticipation of next monsoon season

3. We are able to identify who are most at risk (delinquency, committing crimes, etc.)

   We are able to analyse the relationship between historical background and later outcomes

4. We can understand the demographics of the beneficiaries that need greater support

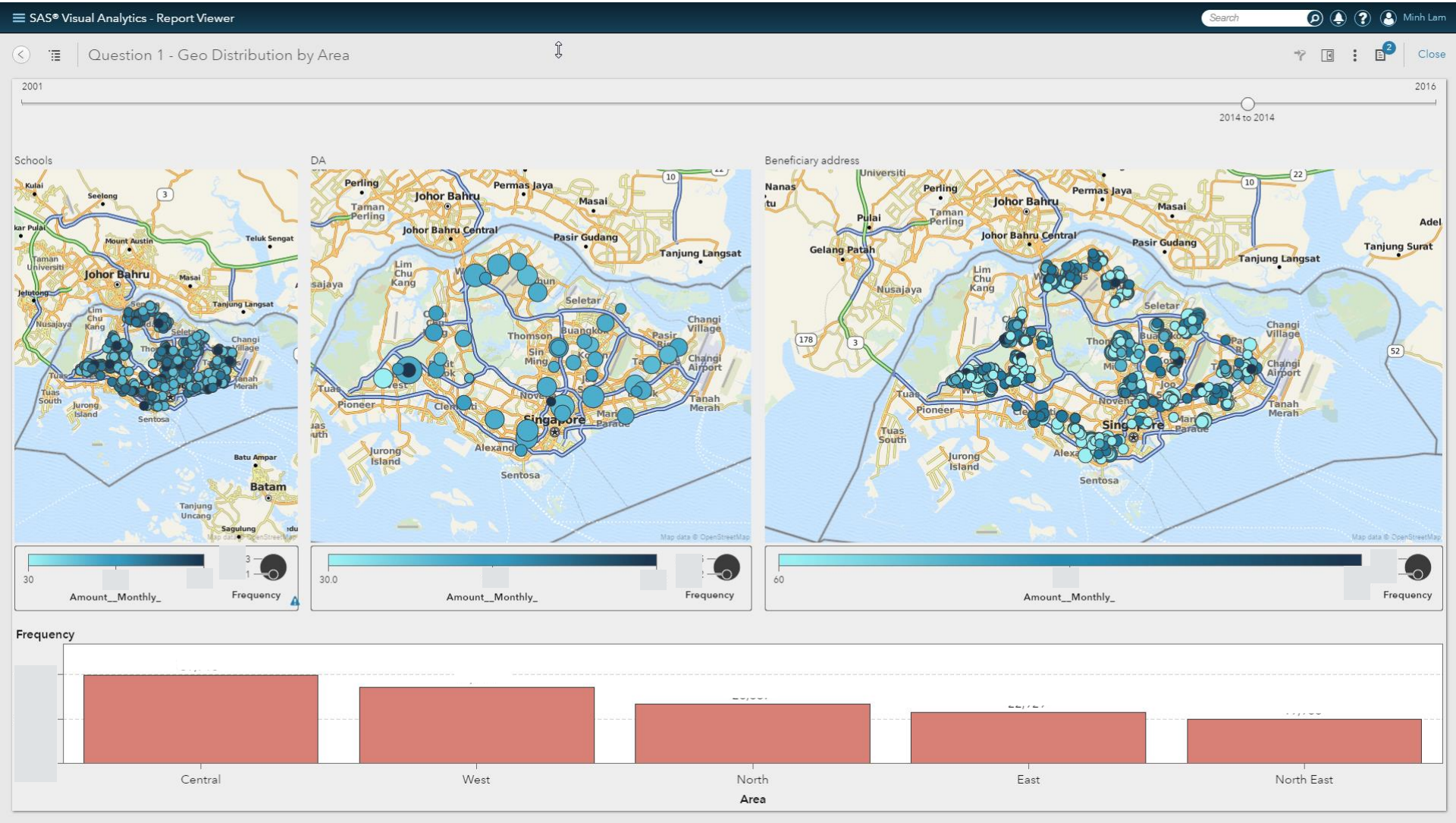
   We can explore factors contributing to the time taken to complete assistance, with possible implications on policy

sas THE POWER TO KNOW.

Copyright © 2012, SAS Institute Inc. All rights reserved.

4 NCSS – SPMF

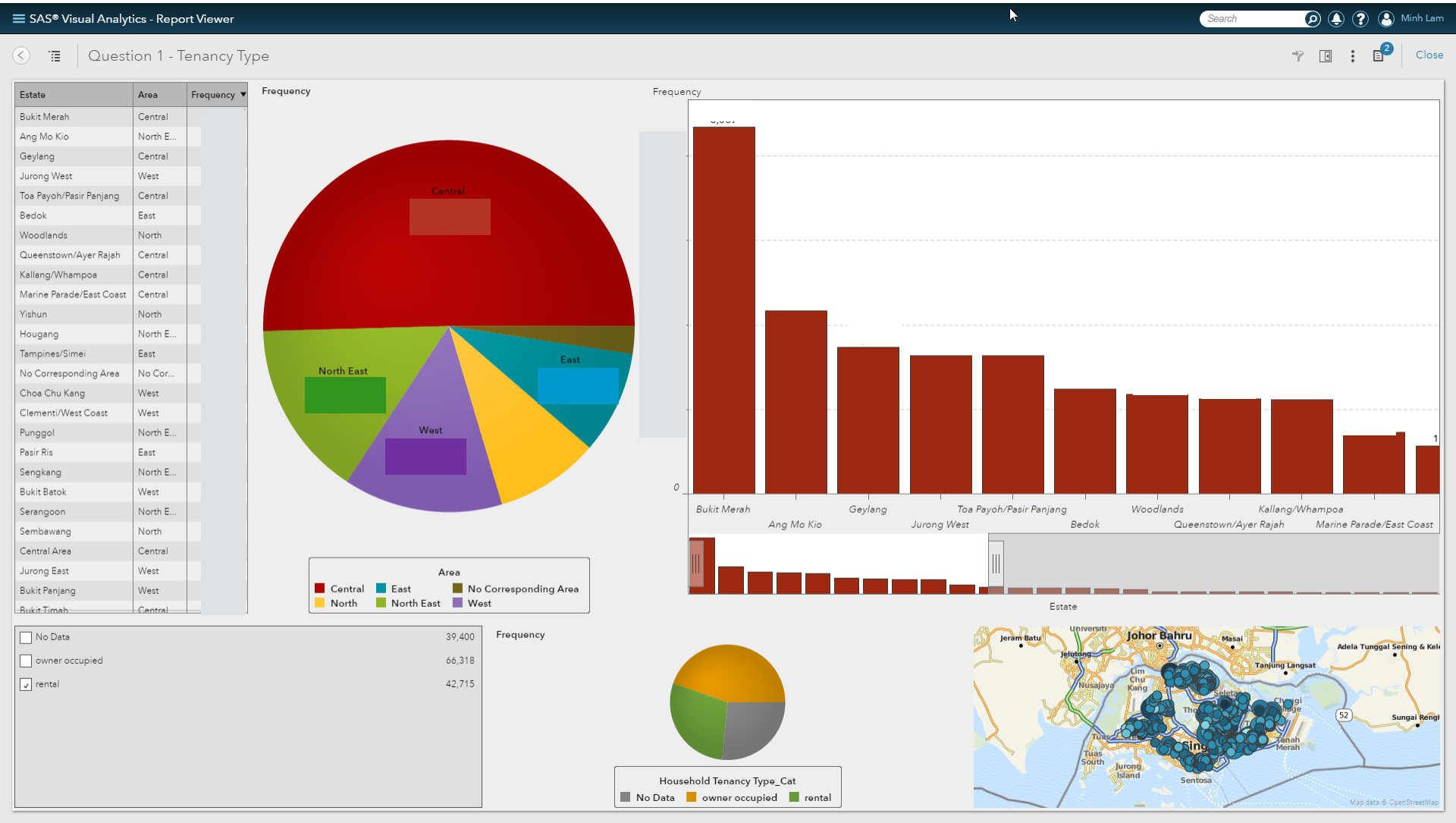
- Geographical distribution of cases
- Income grouping breakdown



4 NCSS – SPMF

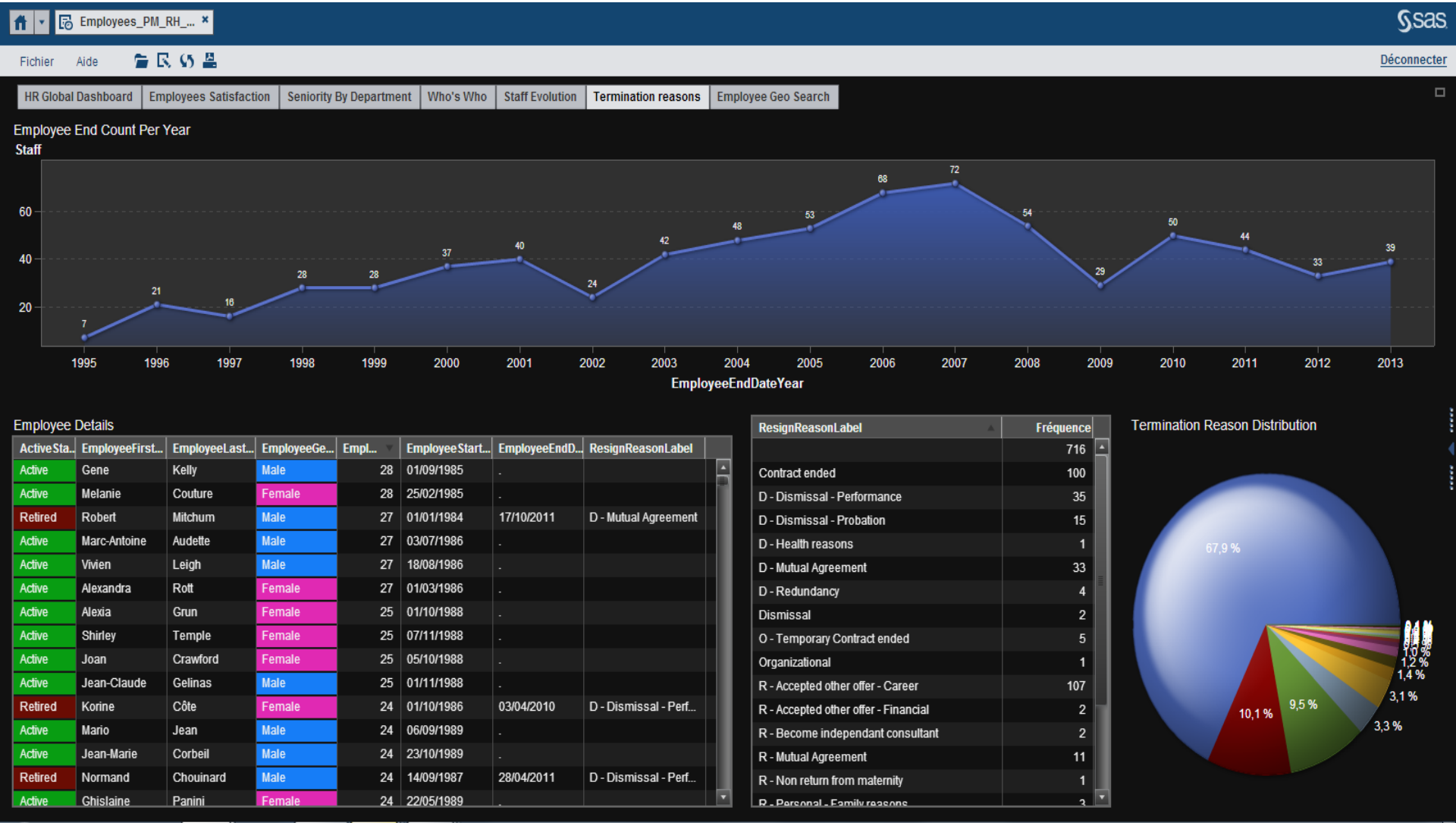
- Home ownership status
- Housing estates breakdown

SAS USER GROUP



4 Manpower/Staffing/Volunteer Analysis

- Demographic factors and retention
- Demographic factors and type of volunteer work



THANK YOU.

Copyright © 2012, SAS Institute Inc. All rights reserved.

Institute of Policy Studies

NCSS National Council of Social Service

3rd SOCIAL SERVICE RESEARCH NETWORK (SSRN)
"Transforming Research into Solutions"

Tuesday, 16 February 2016

Lecture Theatre, Level 2
Lifelong Learning Institute

Lee Kuan Yew School of Public Policy
National University of Singapore