

Singapore Management University

# Institutional Knowledge at Singapore Management University

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Research Collection Library

SMU Libraries

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2-2017

## Leveraging on Data Visualisation and Analytics for Assessment and Innovation

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# Leveraging on Data Visualisation & Analytics for Assessment & Innovation

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*ALIA Information Online 2017 Conference, February 14, 2017*

Salihin Mohammed Ali,  
*Digital Initiatives Manager,  
Library Technology & Innovation,  
SMU Libraries*

# SMU Libraries' Vision & Mission

To be a leading research library providing **ubiquitous access** to information using innovative strategies to **drive intellectual exchange** and the **creation of knowledge**.

- The SMU Libraries mission is to enable a culture of **life-long learning** through **collaboration, engagement and outreach**.
- It aims to provide **seamless access** to information using innovative and leading edge technology.
- The Library is committed to delivering **exceptional services** and building **dynamic relationships** within the SMU community and beyond.

Our Passion, Our Commitment, Your Advantage



# Background

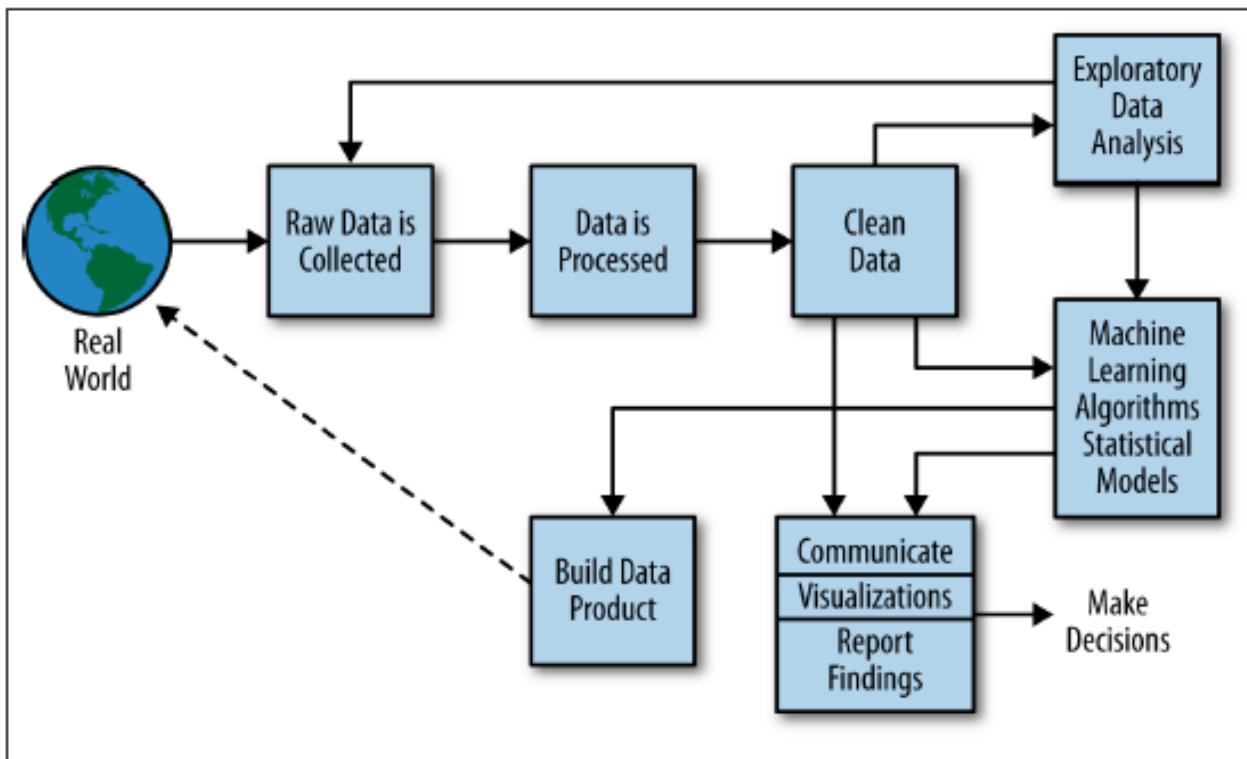
## Culture of Assessment

... an organizational strategy requiring decision-making based on "facts, research, and analysis, and where services are planned and delivered in ways that maximize positive outcomes and impacts for customers and stakeholders (Lakos & Phipps, 2004)."

## Lean Six Sigma Foundation

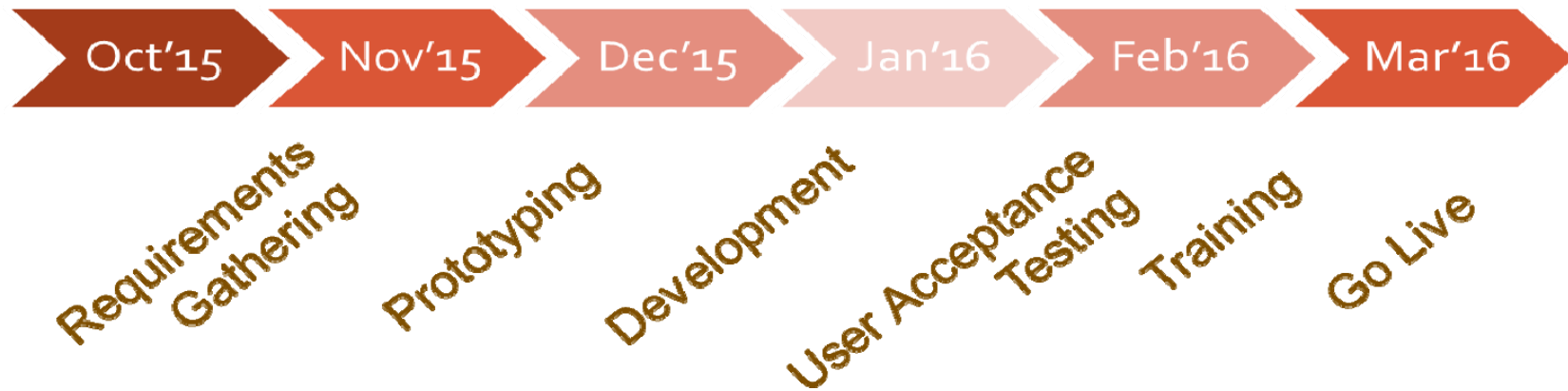
- Initiated in 2013, to date more than 90% of library staff have received the Green Belt certification
- The Lean Six Sigma training provided an introduction to the methods and techniques necessary to implement and sustain a lean culture (a culture of assessment)

# Data Science Process



- The Data Science Process is a framework for approaching data science tasks – collecting, cleaning, exploring, modelling, communicating (O’Neil & Schutt, 2013).

# Library Analytics Project

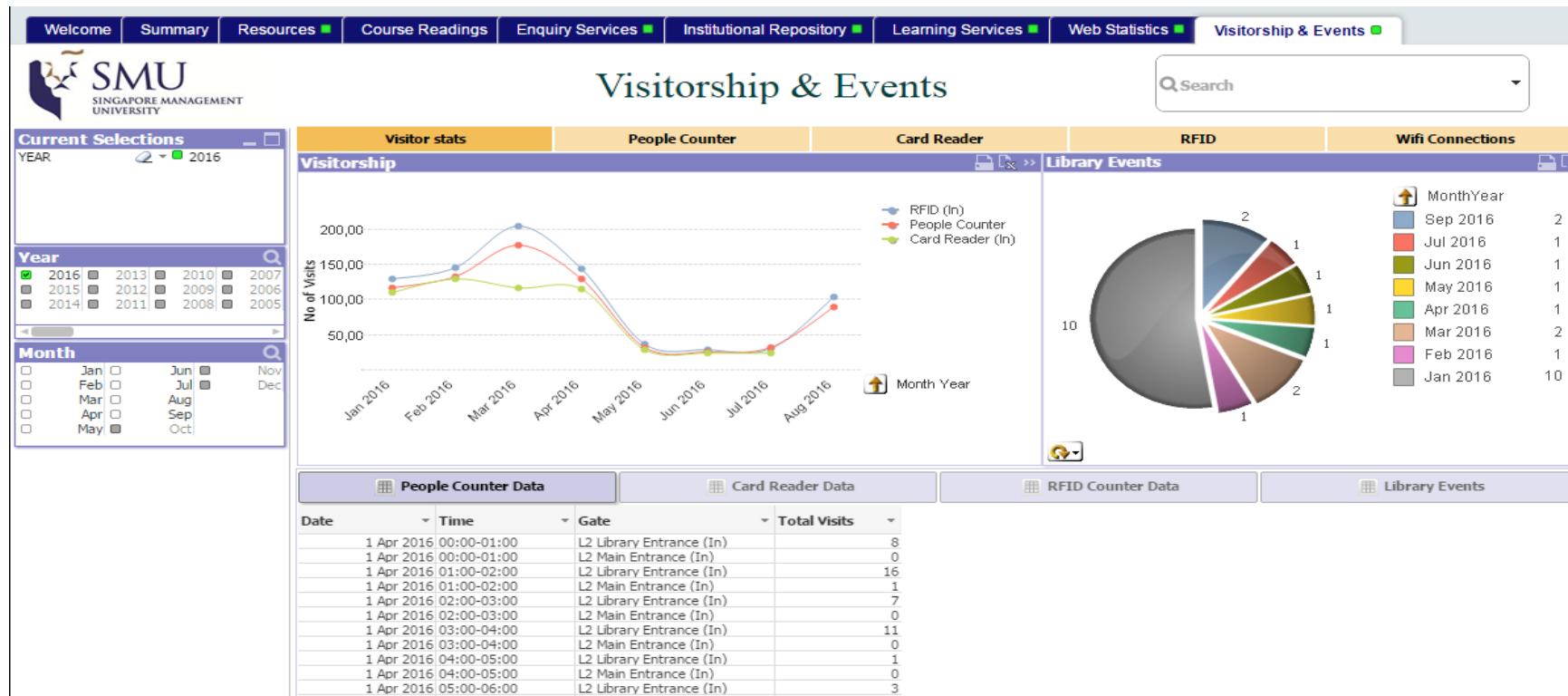


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Libraries

# QlikView Dashboards



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# Data Scope



Alma Analytics

3M  
Command Center



Gimlet



DIGITALCOMMONS™

Strategic Goals



Library Services



Systems



Data

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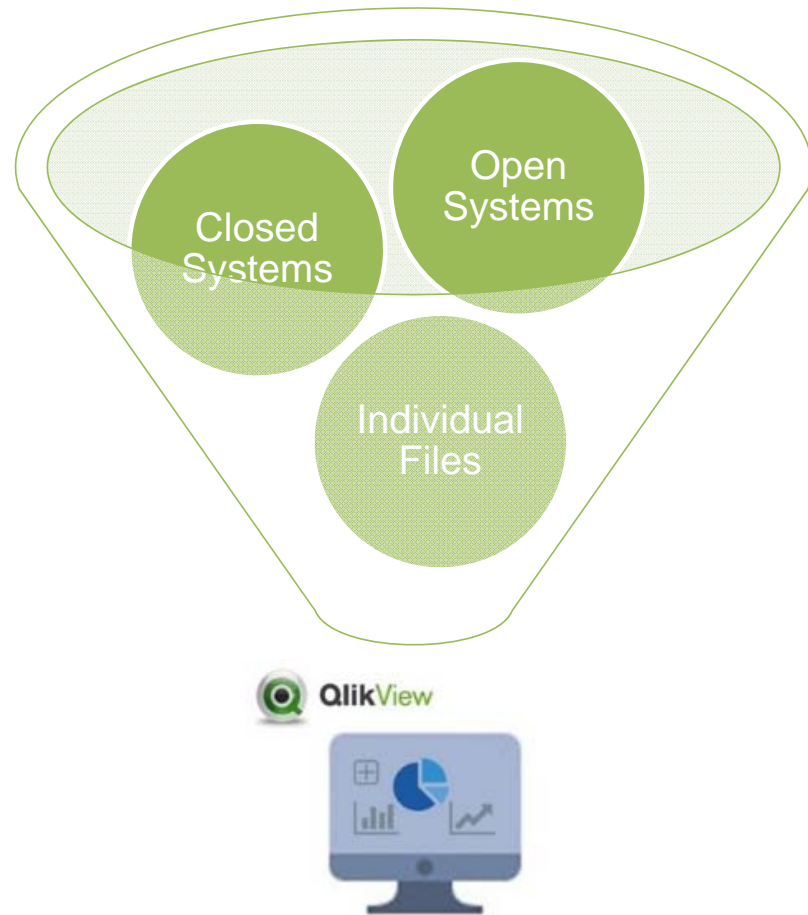


Libraries

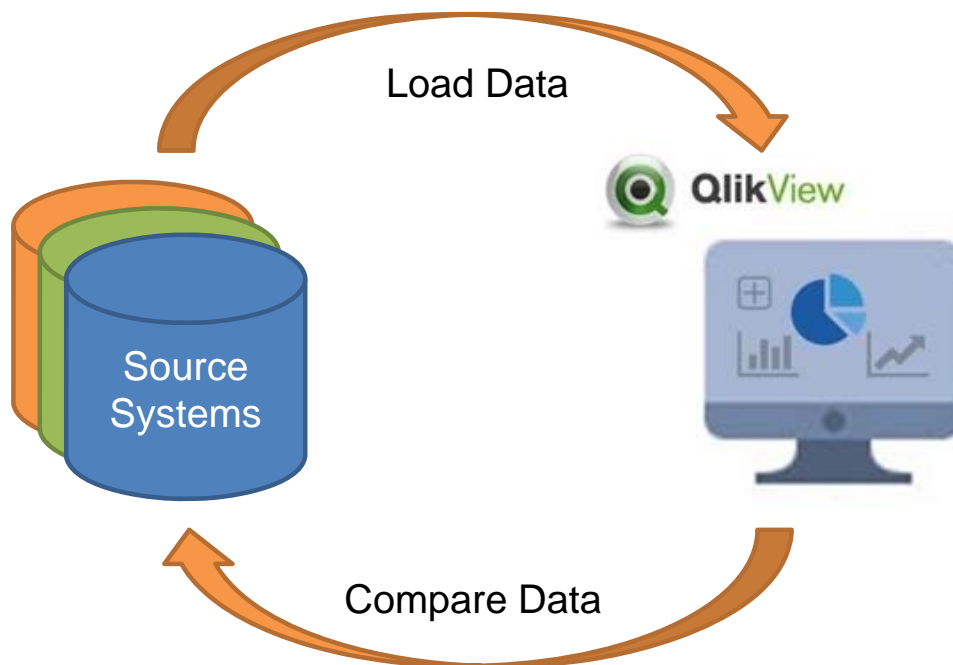


# Data Collection

- Review reporting process
- Leverage on same workflow (& manpower)
- Simplify process from reporting generation to uploading datasets



# Data Quality



- Iterative data cleaning cycles
- Comparing loaded data with source data

# Case Study – Space Management

## Visitorship & Events

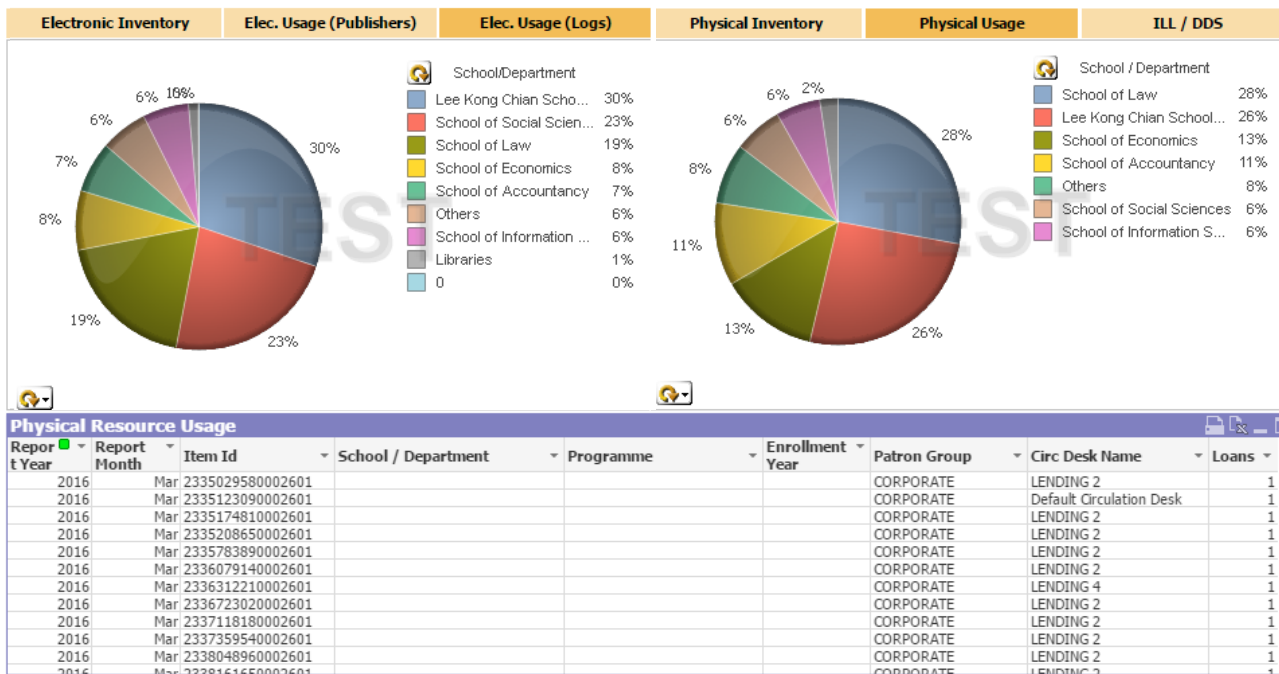


- Standard Opening Hours vs 24hrs Learning Commons
- Insights on students learning patterns
- More learning spaces in development on campus

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# Case Study – Collection Management





- Physical vs Electronic resources
- Usage patterns by different schools
- Useful information for Faculty engagement

# Benefits

- Staff have better understanding of the data generated
- Increased awareness of the datasets available
- Easy dashboards access to assess their work areas
- Evidence based approach for work improvements and innovation



Libraries

*Thank you!*

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