



مركز الإحصاء
STATISTICS CENTRE

eSCAD: Data Collection and Dashboard in Abu Dhabi

Presenter: Huda Al-Awar Al-Bastaki

Introduction

- Statistics Centre – Abu Dhabi (SCAD) was established in accordance with Law #7 (2008). SCAD is responsible for the collection, classification, storage, analysis and dissemination of official statistics covering social, demographic, economic, environmental and cultural indicators.
- In this presentation, SCAD will present its case study with eSCAD project.
- eSCAD project seeks to apply innovative techniques to administrative data collection process and the dissemination of statistics.
- This presentation will benefit any NSO considering implementing the same innovation used in SCAD.

Overview

- eSCAD Objective
- eSCAD Project Scope
- Needs Analysis and Project Goals
- Data Collection Component
- Dashboard Dissemination Component
- eSCAD Project Key Results

Innovation

Innovation

Other
organizations
database

Innovation

Other
organizations
database



Technologies

Innovation

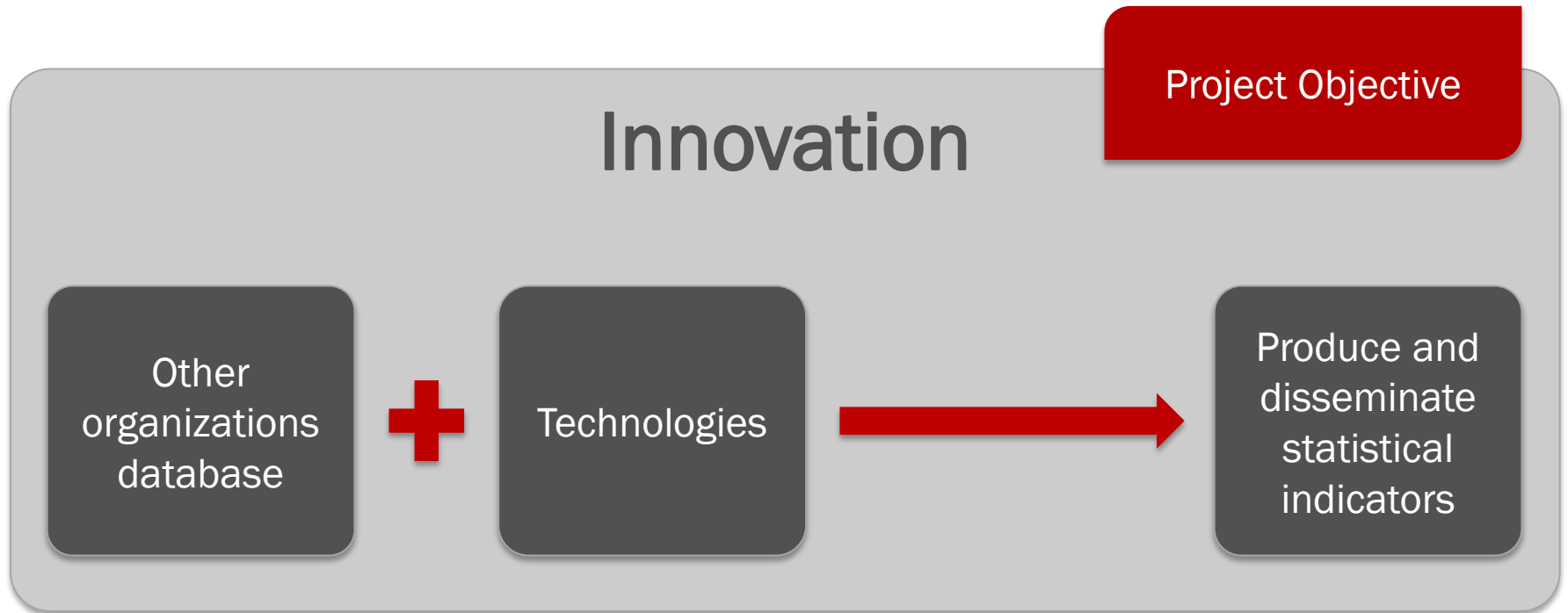
Other
organizations
database



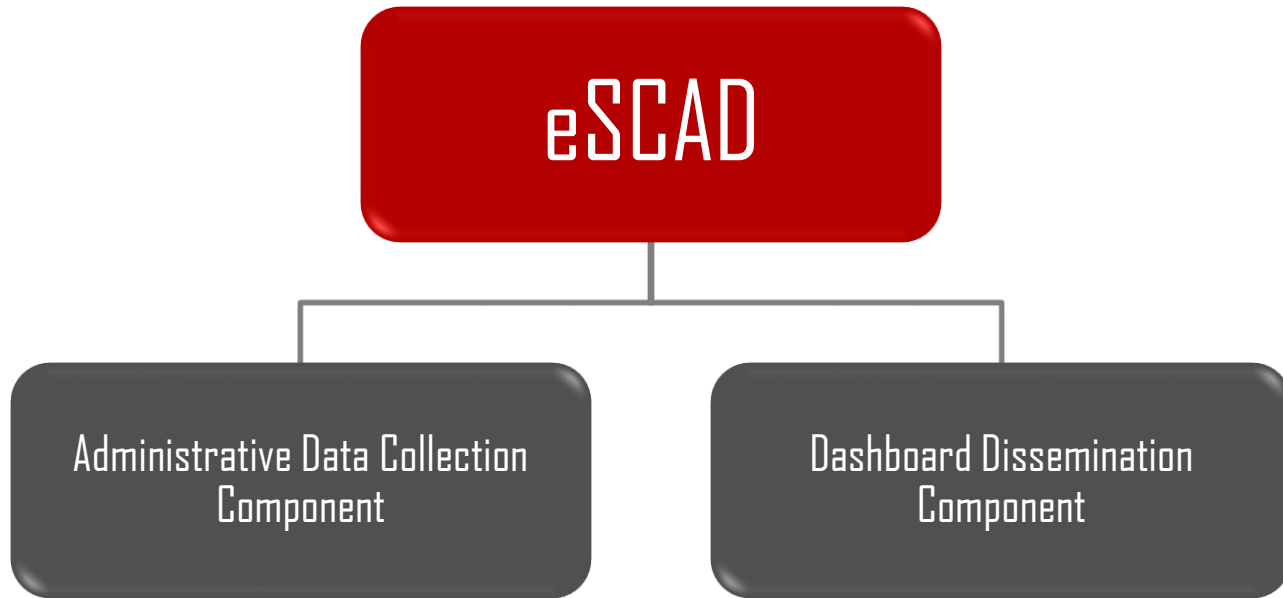
Technologies



Produce and
disseminate
statistical
indicators



eSCAD Project Scope



Needs Analysis and Project Goals

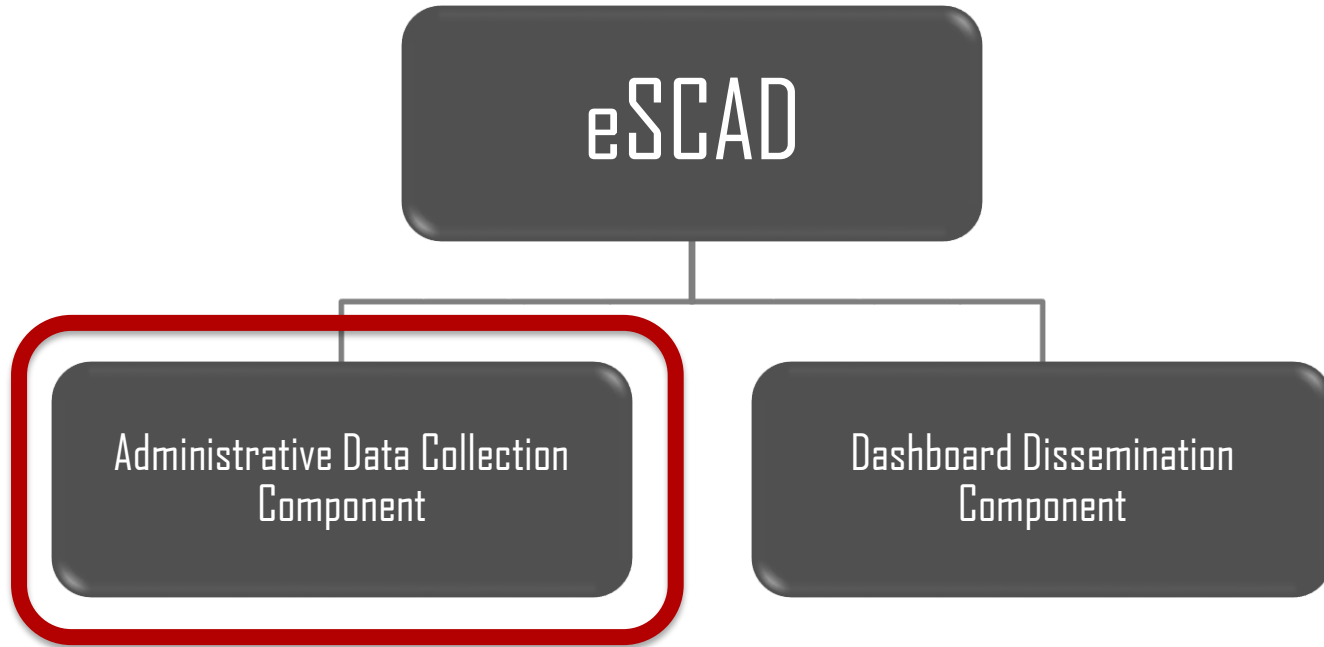
Internal Stakeholders:

- Create a single, comprehensive, easily accessible statistical database
- Automate the downloading of data as well as all the related procedures and processes, in order to produce a broader range of indicators at a faster frequency and lower cost
- Provide regular time series for all statistics

External Stakeholders:

- Eliminate inconsistencies in the figures issued by government agencies
- Adopt international best practices in the compilation of statistical indicators
- Apply best computing methods in the integration editing, processing, analysis, dissemination and protection of data
- Enable other government entities to load data directly into SCAD's database
- Facilitate access to information provided by SCAD

Data Collection Component



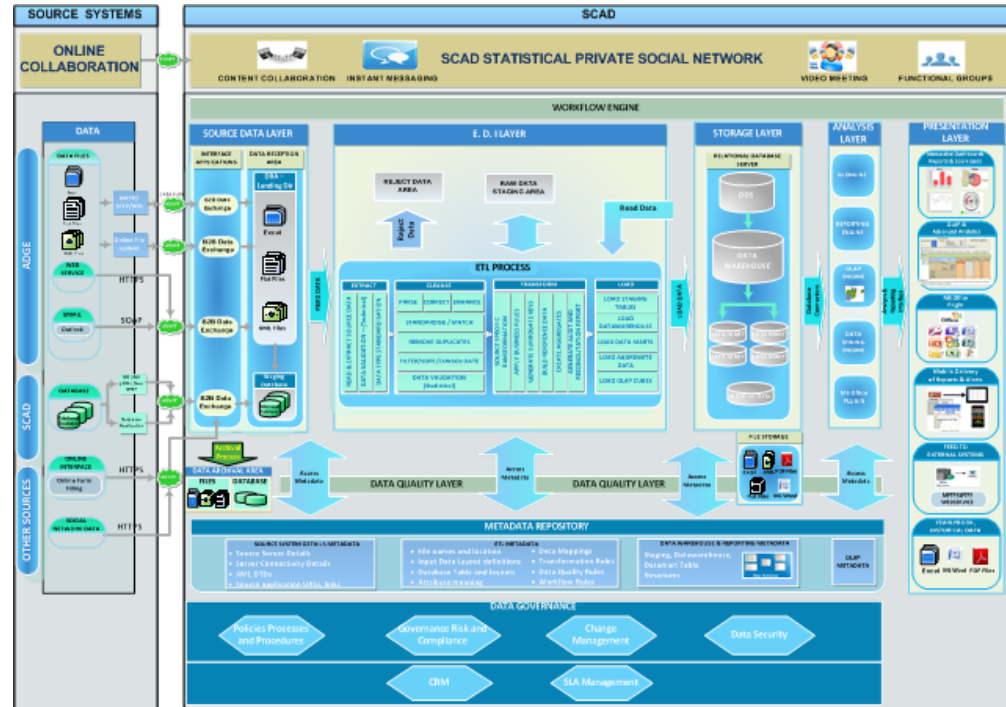
Data Collection Component

Conceptual Design

- Oracle as the database
- automated methods in the extraction, transfer and loading of administrative records
- service-oriented engineering to control the life-cycle management
- data quality engines
- analytical engines to extract and store indicators in the main data warehouse

Data Collection Component

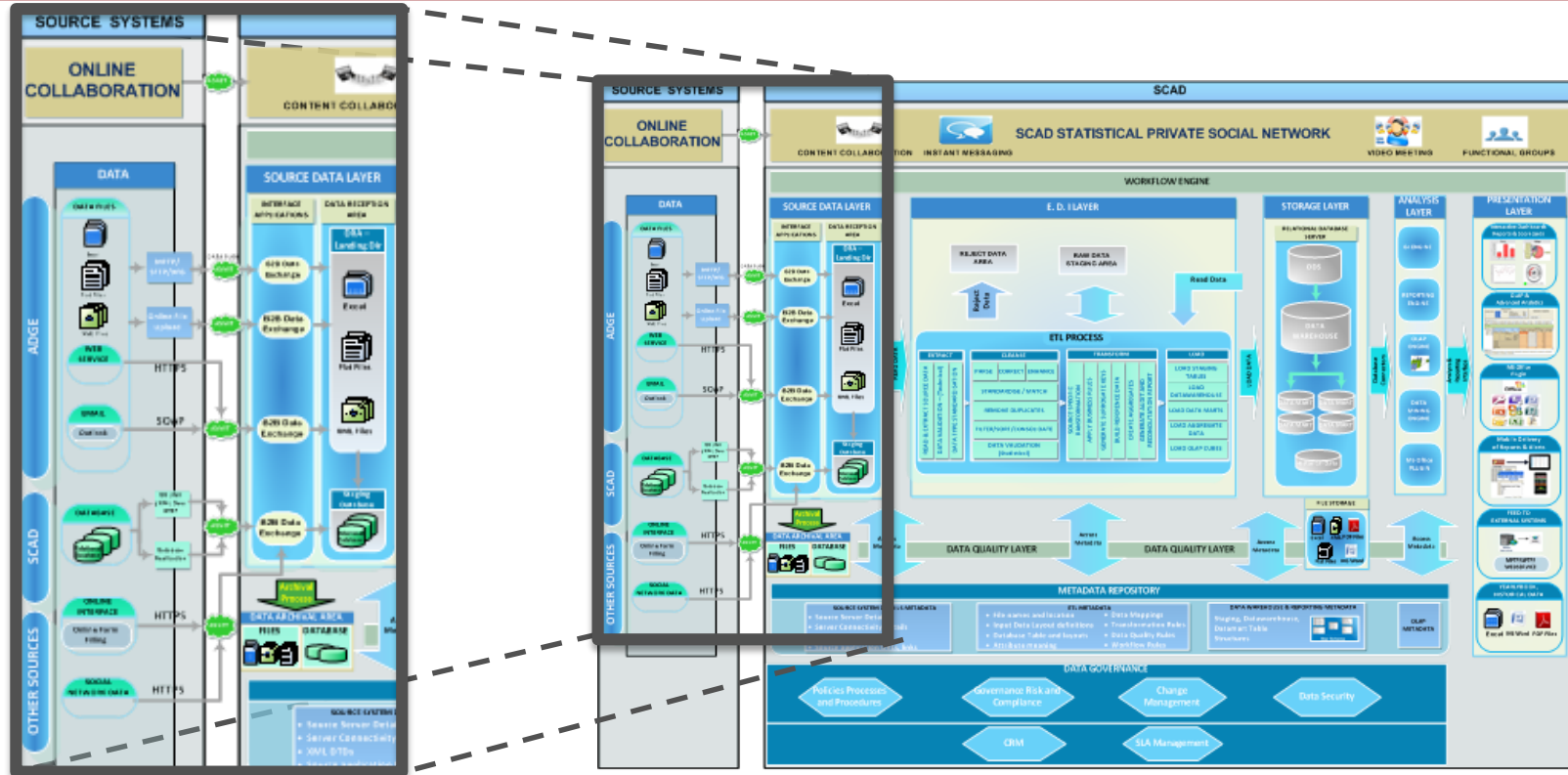
Conceptual Design Schema



Data Collection Component

Conceptual Design Schema

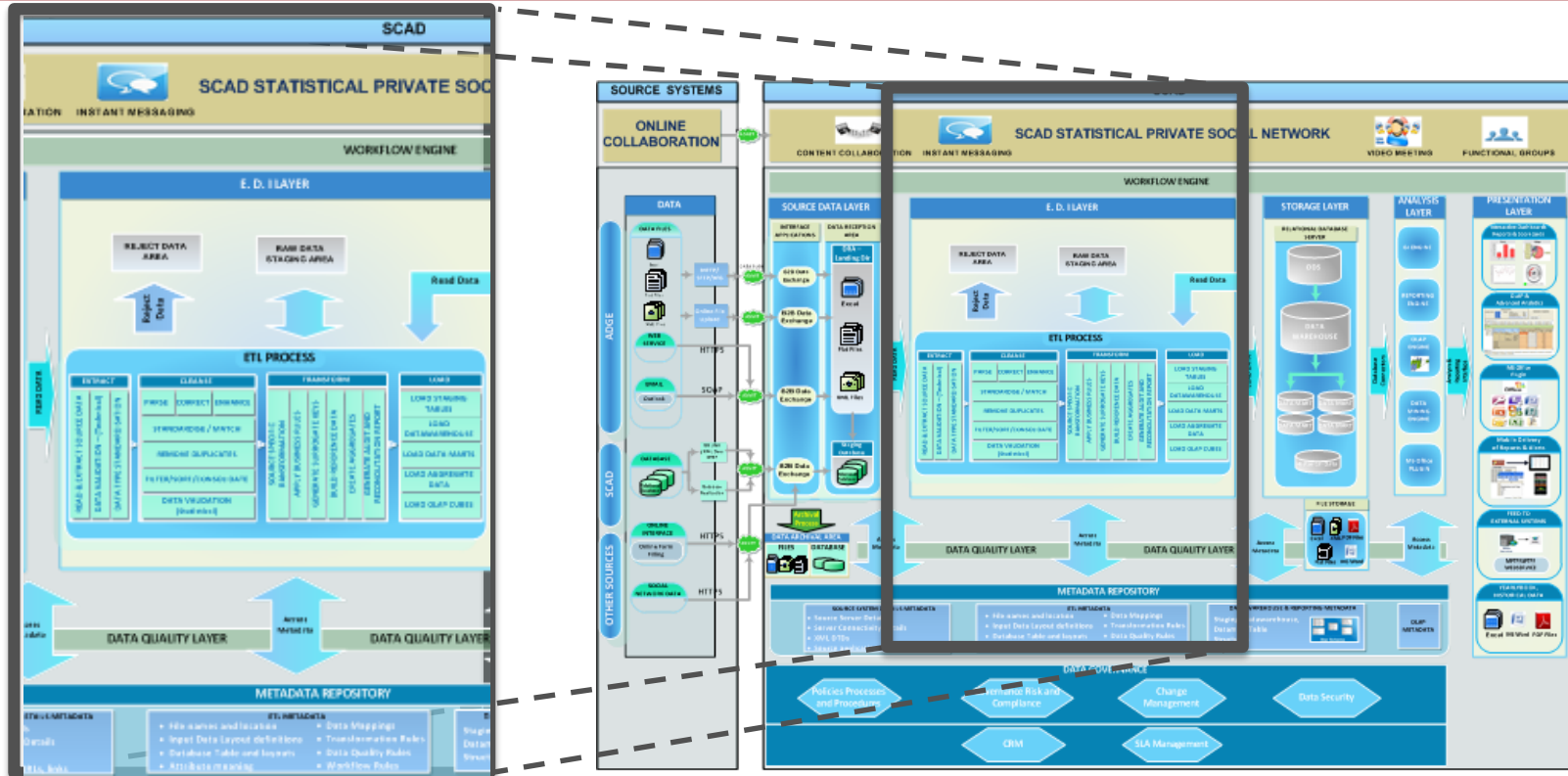
Administrative Data Collection



Data Collection Component

Conceptual Design Schema

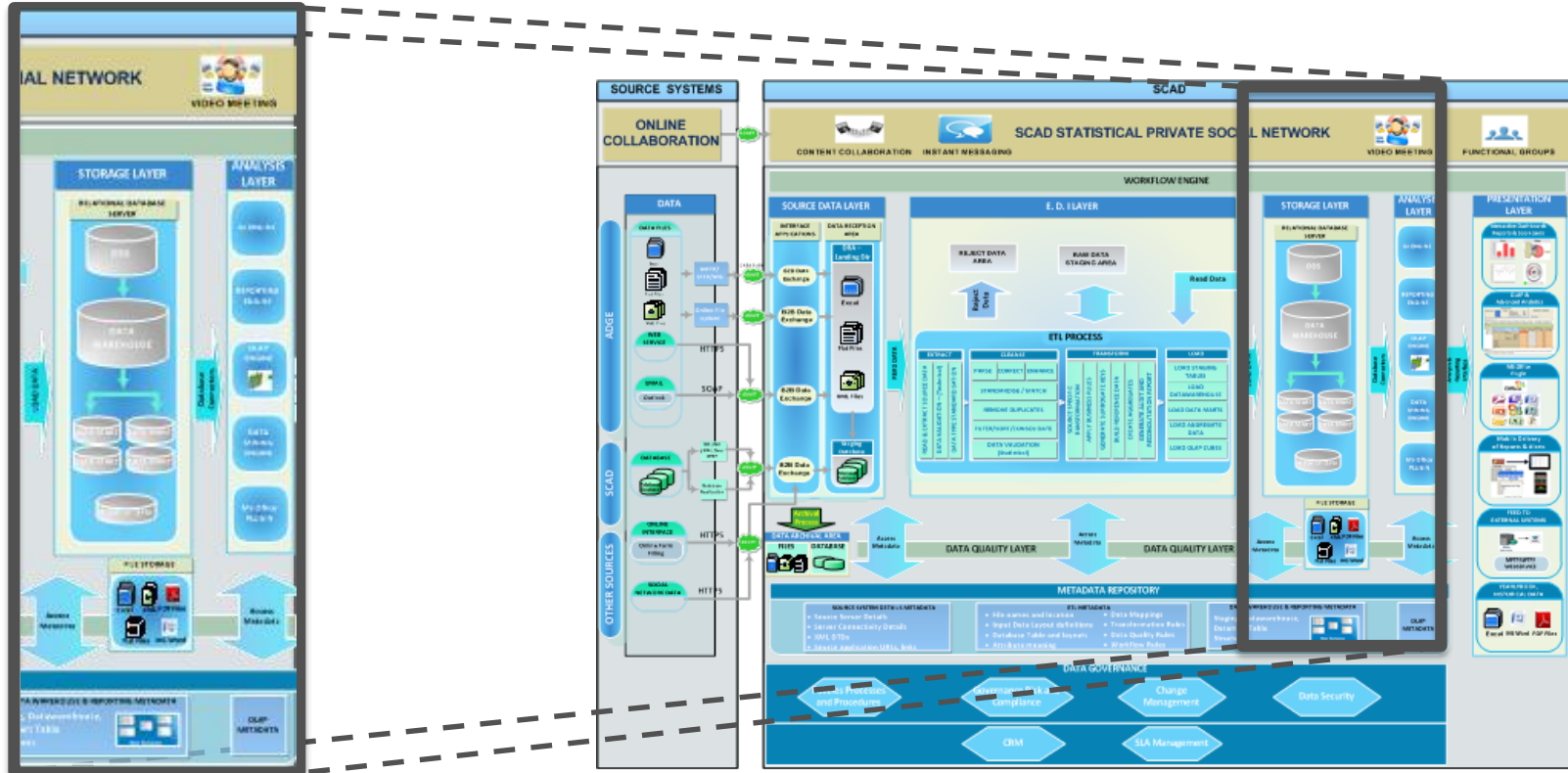
Validation and Cleansing



Data Collection Component

Conceptual Design Schema

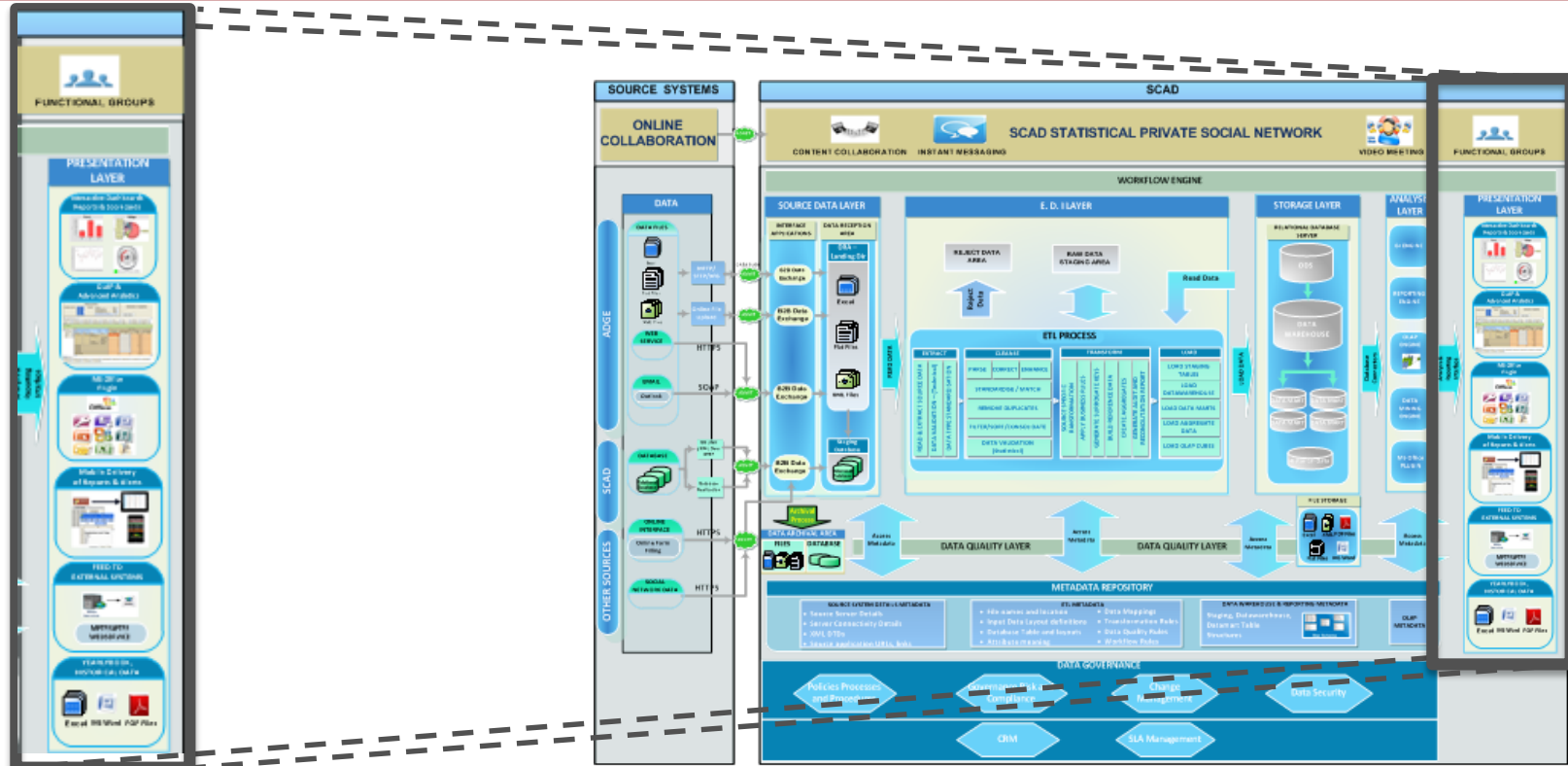
Storing



Data Collection Component

Conceptual Design Schema

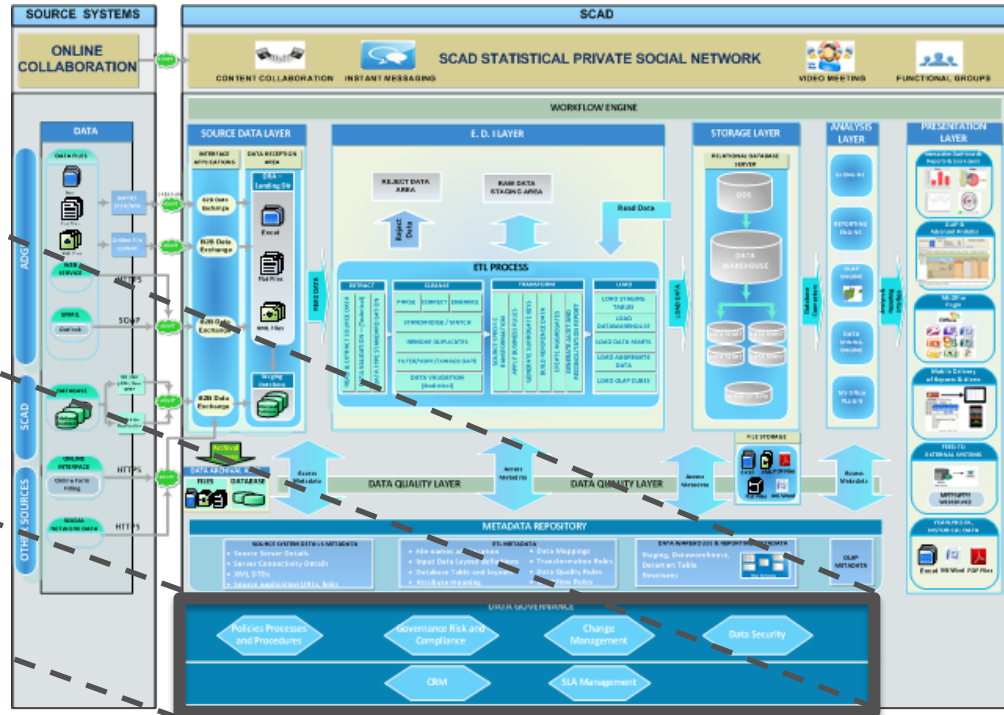
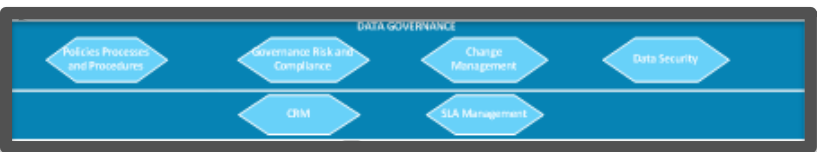
Dissemination



Data Collection Component

Conceptual Design Schema

Governance



Data Collection Component

Operation

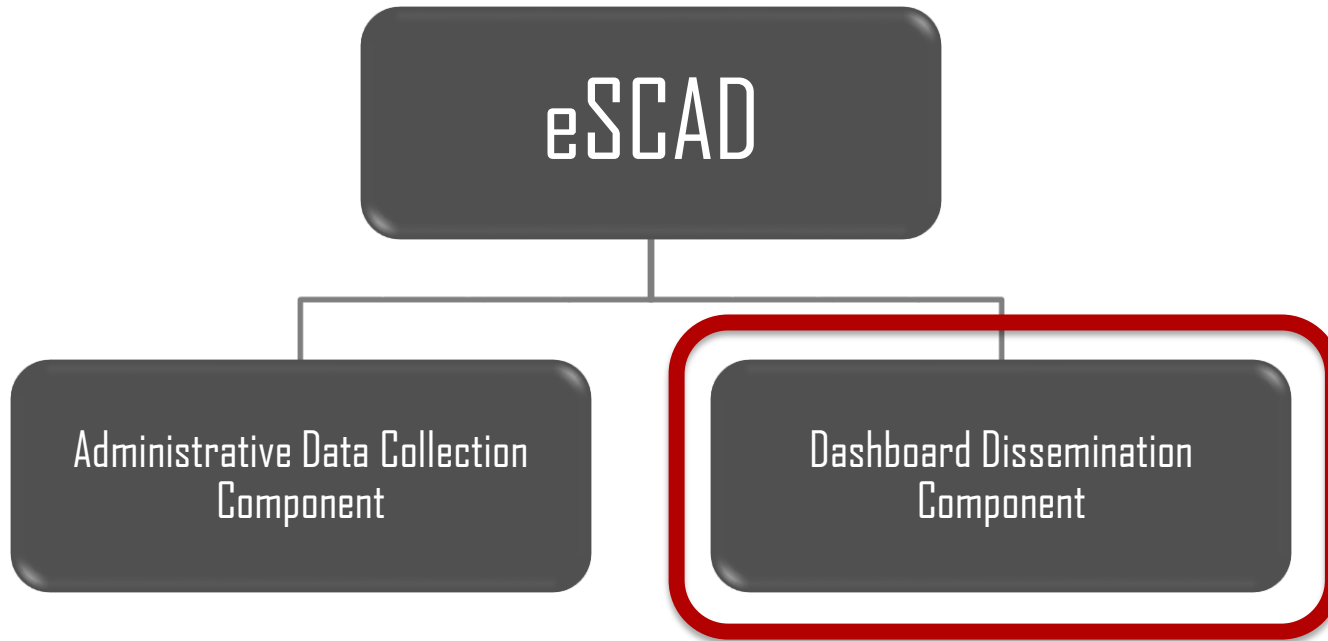
- Secure network (B2B)
- Provide data structure rules for government agencies prior the uploading process
- Automatic validation and quality checking of uploaded data
- Automatic statistical calculation process for some data
- Storage in the data warehouse

Data Collection Component

Outcomes

- Timeliness of data flow
- Coverage of the administrative data used in the compilation of statistics
- Consistency of statistical data with standard international definitions and classifications
- Regular updates of administrative data
- Measurement of data quality
- Ability to identify data gaps in administrative records

Dashboard Dissemination Component



Dashboard Dissemination Component

- Statistical dashboard is a data visualization tool
- provides an 'at-a-glance' view of many related statistical indicators
- The dashboard supports the presentation of complex data, but in an easily consumable way.

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Innovation

The use of standard dashboards for the
official statistics

Dashboard Dissemination Component

Users

Key Features

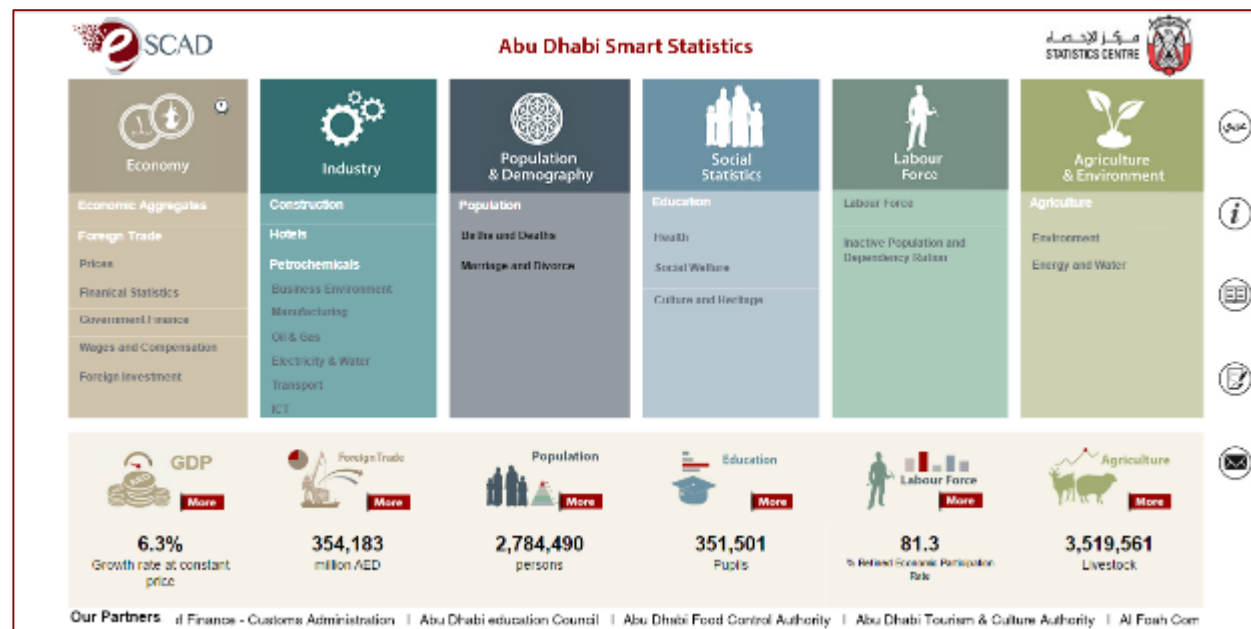
Developer

- Interactivity between indicators
- Customizing by Filtering
- Drill Downs
- Device independence
- Intuitive User Interface
- Metadata
- Exporting

- No Coding Required
- Source Connectivity
- User Management and Reporting
- Security

Dashboard Dissemination Component

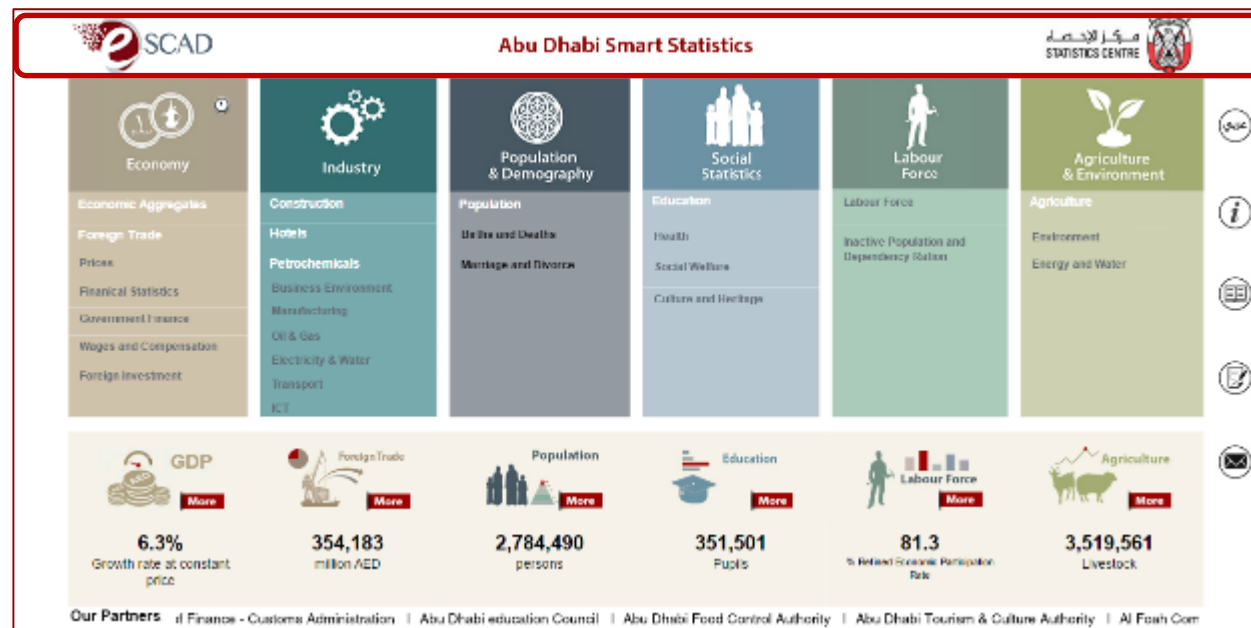
Dashboard Layout – Home Page



Dashboard Dissemination Component

Dashboard Layout – Home Page

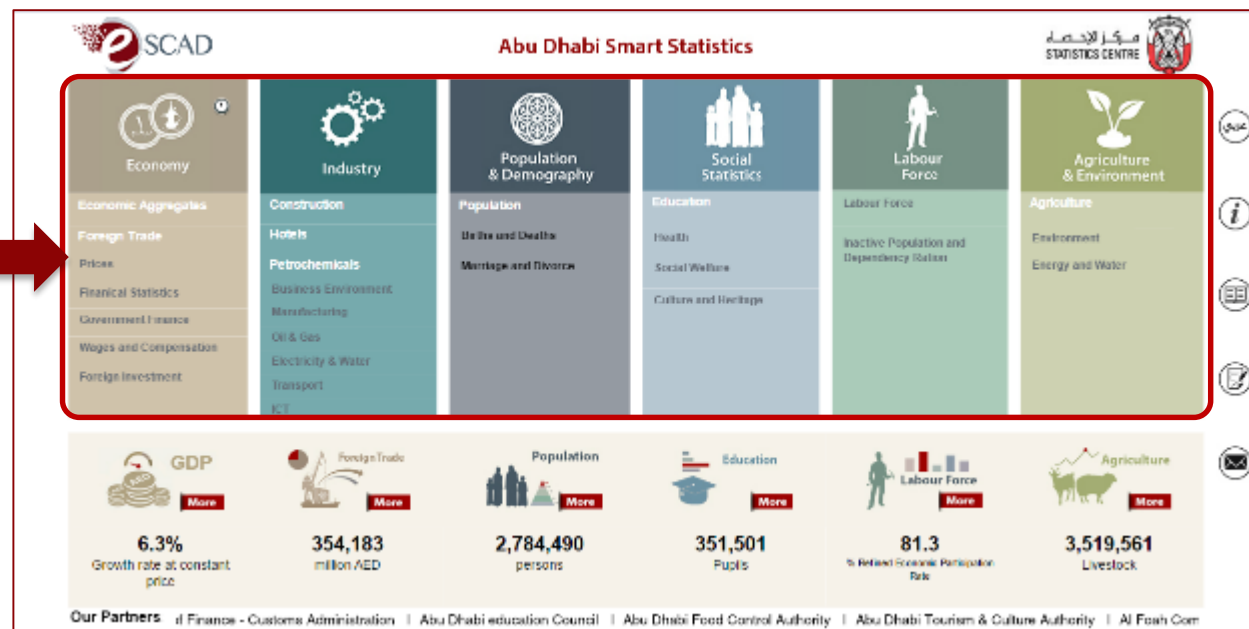
Header



Dashboard Dissemination Component

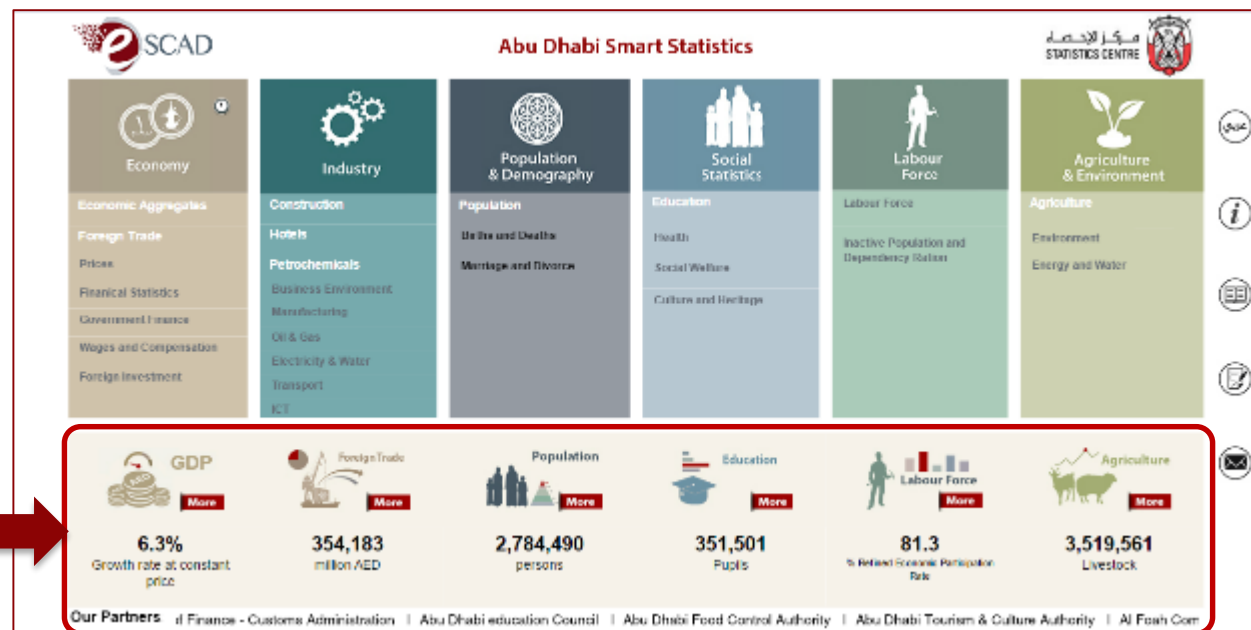
Dashboard Layout – Home Page

Body



Dashboard Dissemination Component

Dashboard Layout – Home Page

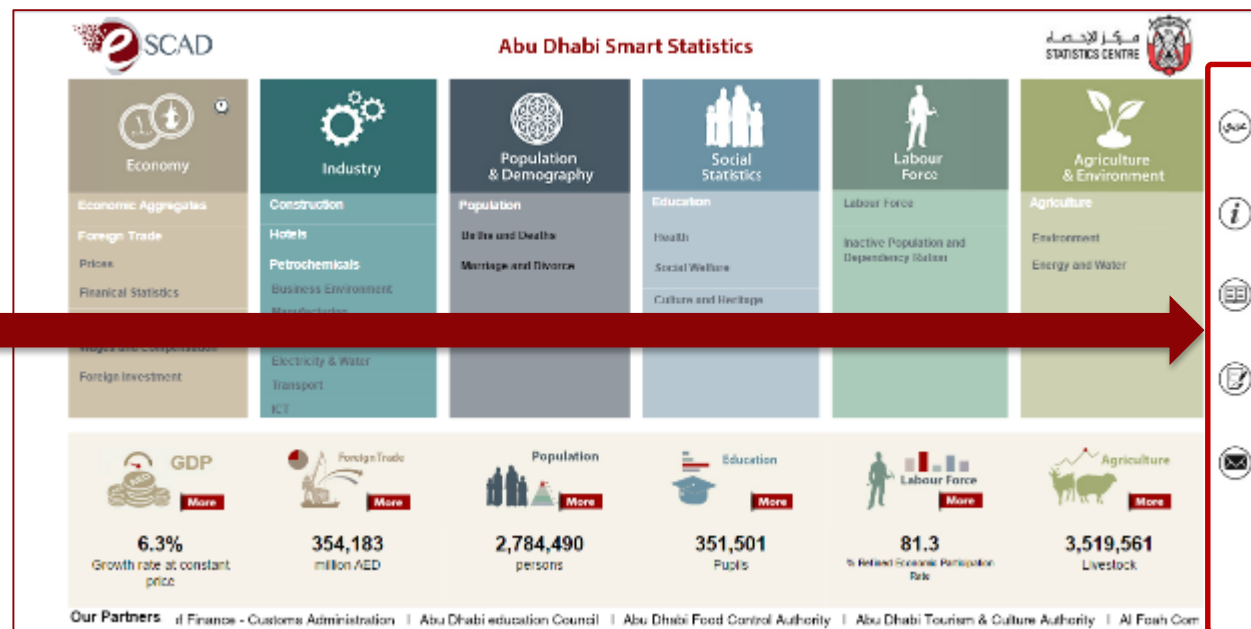


Footer

Dashboard Dissemination Component

Dashboard Layout – Home Page

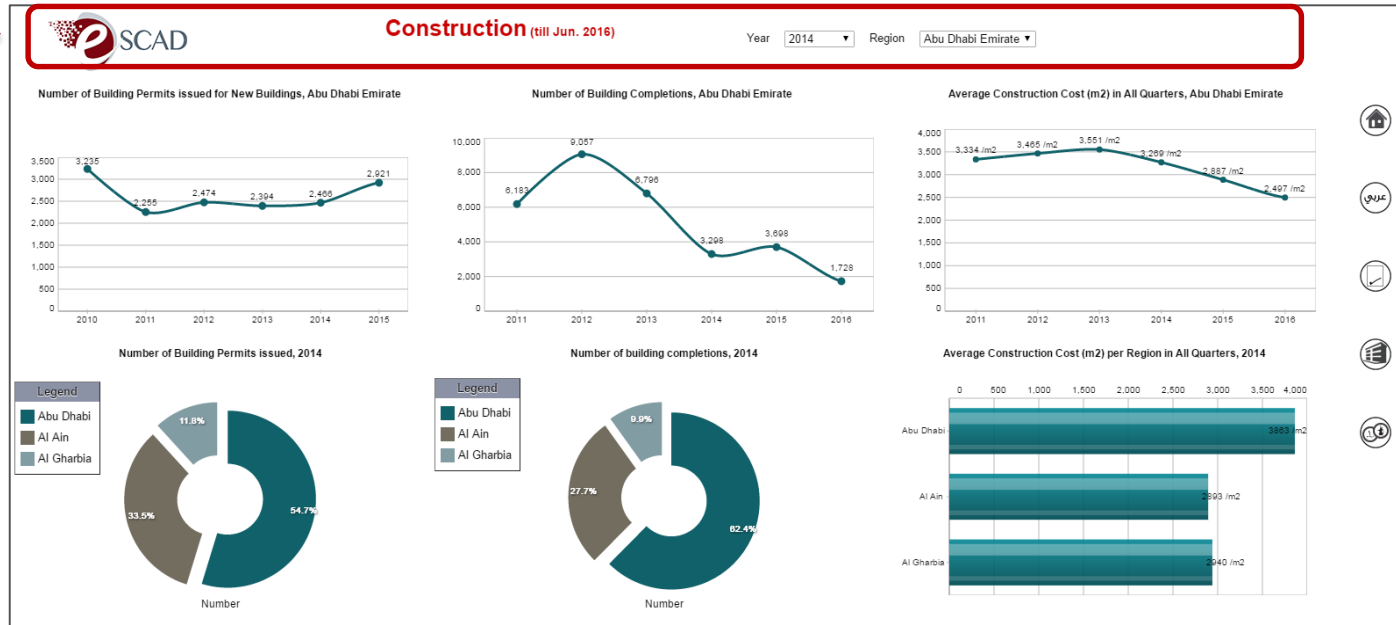
Navigation Pane



Dashboard Dissemination Component

Dashboard Layout – Dashboard Page

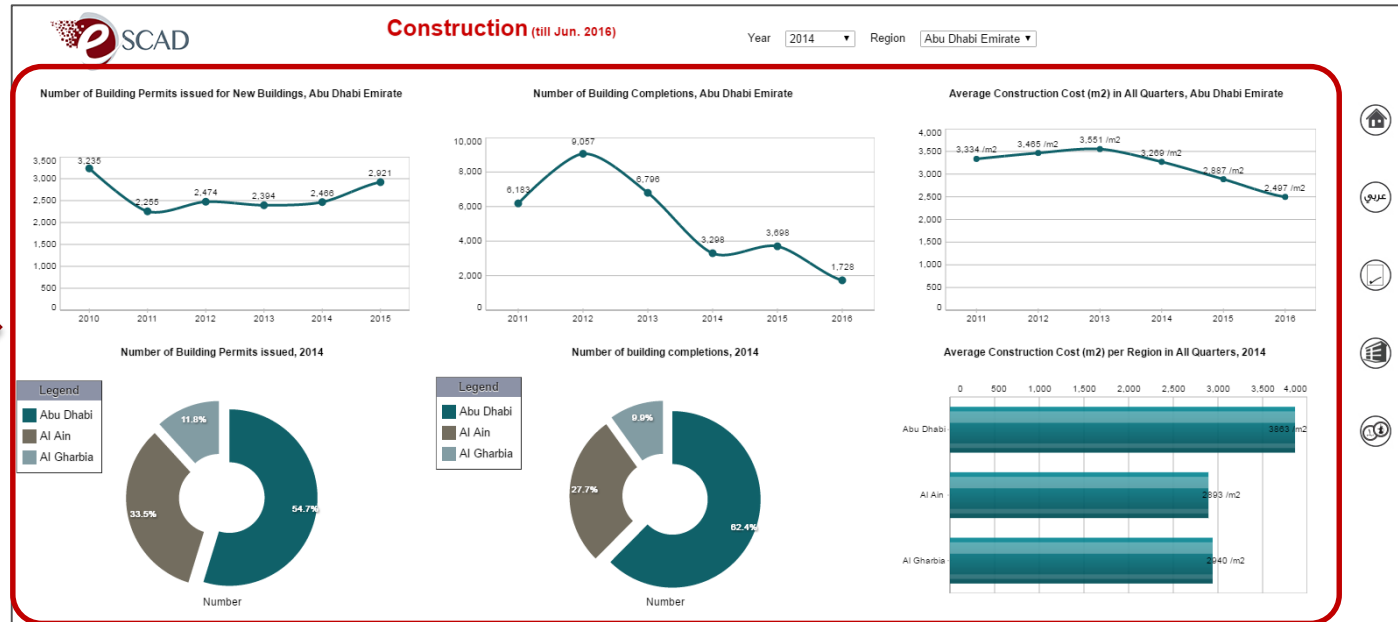
Header



Dashboard Dissemination Component

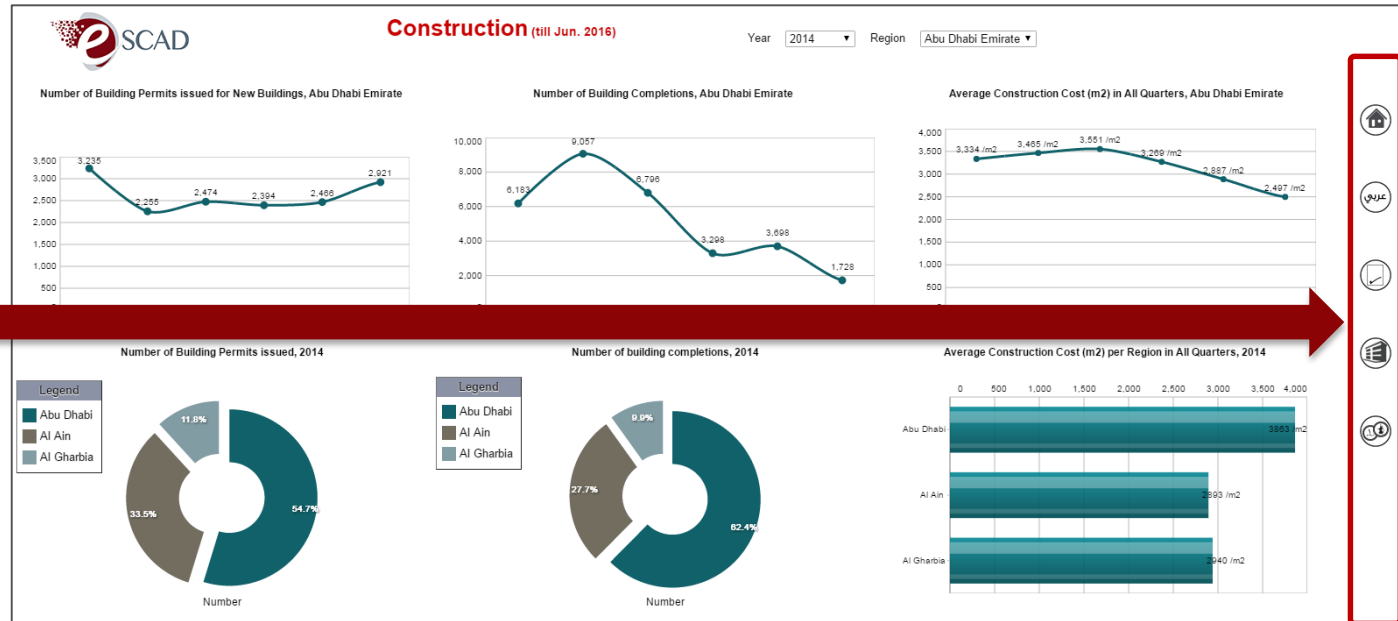
Dashboard Layout – Dashboard Page

Body



Dashboard Dissemination Component

Dashboard Layout – Dashboard Page

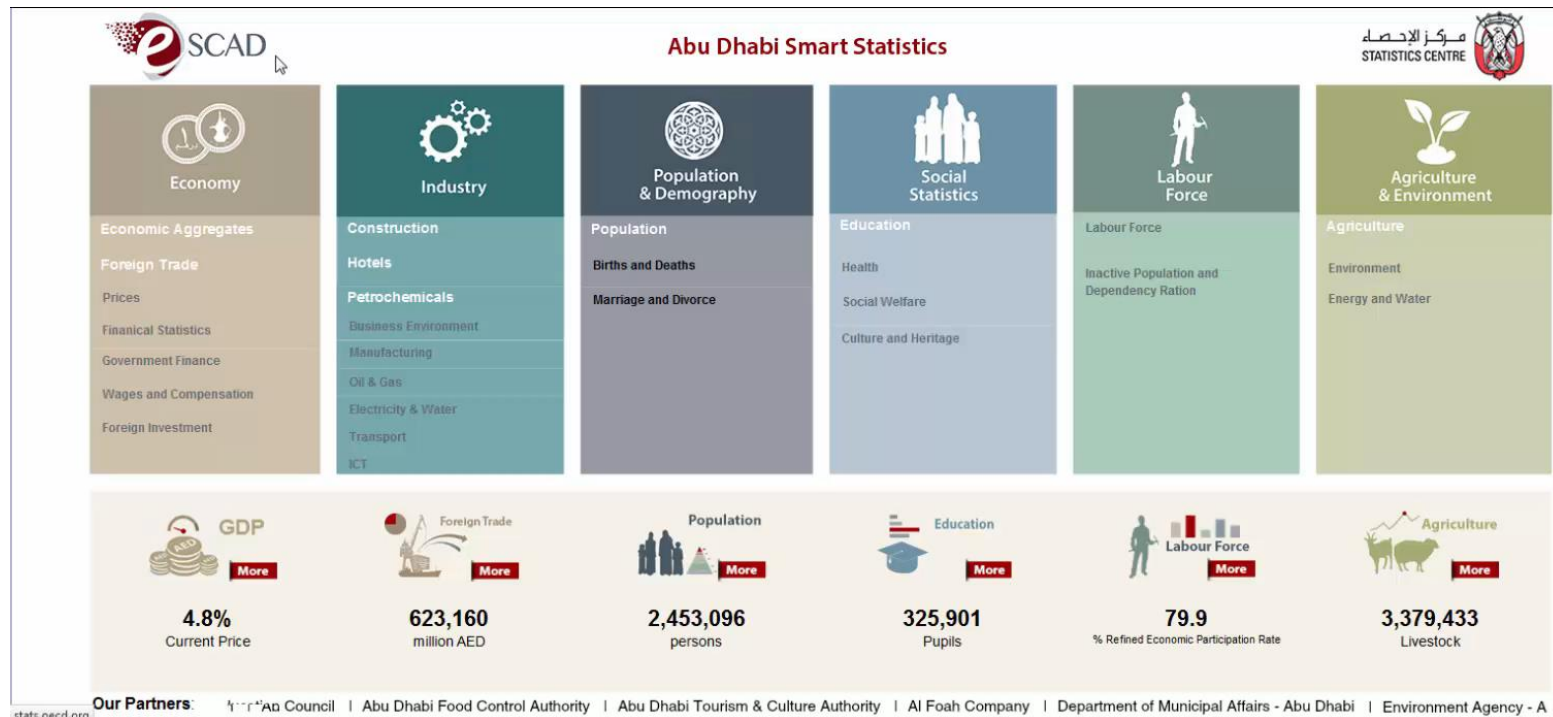


Navigation Pane



Dashboard Dissemination Component

Demo

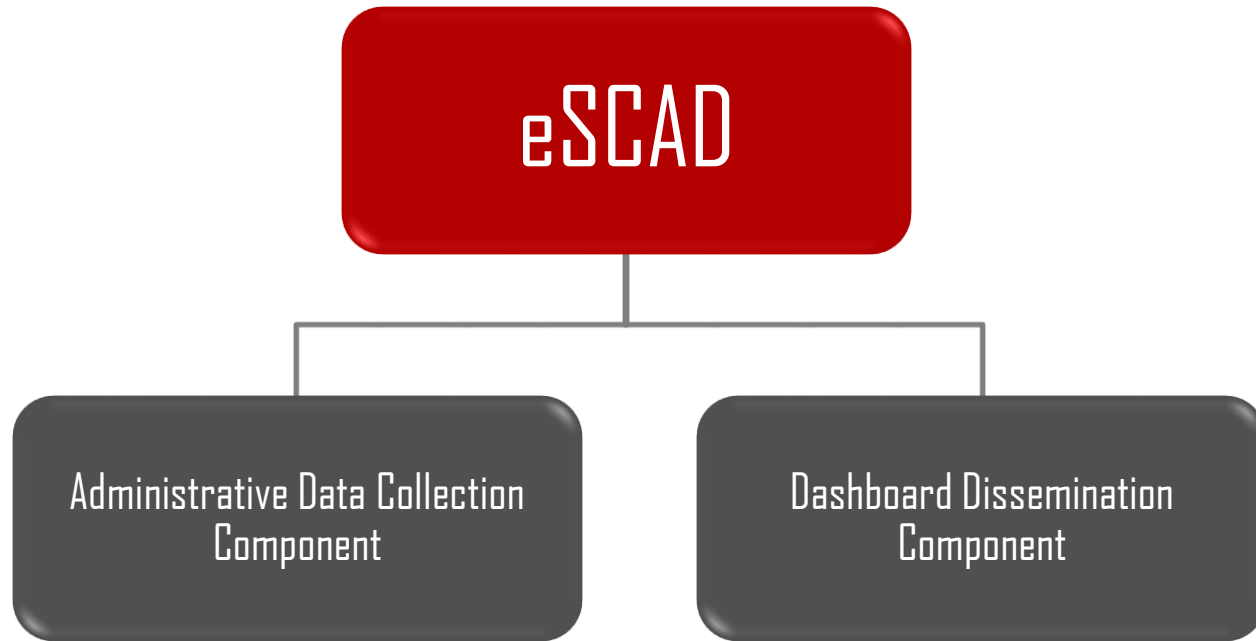


Dashboard Dissemination Component

Lessons Learned

- Consider Visual Perception
- The Importance of Analysis
- Best Chart for the Job
- The Importance of colours
- Stand Alone Charts

eSCAD Project Key Results



- Deployed to 56 agencies
- 3,980 Public users sessions
- 326 Government users

رؤيتنا: الريادة والابتكار في الإحصاء

Our Vision: Leadership and Innovation in Statistics

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