Project Proposal

Database and BI solution development for Acquisitions business

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December 1, 2018

Prof. Cullinane
Dept. of Industrial Engineering
330 Snell Engineering Center
Boston

SUBJECT: Proposal for development of Acquisitions database and BI solution

Dear Prof. Cullinane

I am pleased to submit a project proposal for development of database for Acquisitions business of the organization to meet the BI needs of the Acquisitions business.

The business plan proposes to address the most eminent need for the Business Development Team of the Acquisitions Business of the organization. The current system of record for the Acquisitions business is incapable of handling the expanding volume of data. This is resulting in loss of relevant analytics on key performance indicators. The Business Development Team of the Acquisitions business wants an advanced reporting system that can adequately ingest all the relevant data and report on the key business metrices. In the current state, the Acquisitions database is maintained in a system of Microsoft Access and Flat Files. Microsoft Access is limited in capabilities for handling the ever-expanding business needs. Flat files are considered as a standalone data source and lot of computation is needed to ingest information from them. Often, the information in flat files is lost or disregarded.

This project is to identify a plan to implement a system of record for capturing acquisitions. Organization needs to develop a formal system of record, and management strategy to leverage opportunities, solve deficiencies and achieve benefits.

Every effort has been made to keep this project precise and informative. As a result detail level of information has not been provided in this document but will on need basis.

If you have questions regarding any aspect of this proposal, please feel free to contact me. I will look forward to hearing from you.

Thank You

Regards

Himanshu Saxena

Contents

Version History

Version #	Date	Revised By	Reason for Change
1	12.06.2018	Himanshu Saxena	Final Draft

Project Overview

The following table includes the basic information associated with the Executive Dashboard project to support the Executive initiative.

Project Name	Executive Dashboard
Project Type	New Initiative
Project Sponsors	Prof. Cullinane, J. Wilson
Project Manager	Himanshu Saxena
Project Stakeholders	B. Keefer, G. Smith, O. Williams, M. Rivard, W. Steiner
Project Start Date	Dec 4, 2018

Project Description

Project Purpose

This project is to identify a plan to implement a system of record for capturing acquisitions. Organization needs to develop a formal system of record, and management strategy to leverage opportunities, solve deficiencies and achieve benefits in the following areas:

1. Decision Making
    - Consolidated view of progress towards goals across all business channels
    - Measure the impact of decisions
    - Measure progress towards goals
    - More easily identify areas of concern
2. Speed
    - Reduce lag between the inception and reporting of information
    - Remove the need for employees to prepare formatted reports
3. Transparency
    - Give stakeholders insight into adjacency opportunities
4. Risk
    - Reduce risk of sharing information with inappropriate parties

Background

To get a consolidated view of Acquisitions activity, information is collected from 8 reports monthly. The information reported on is collated from a variety of people, systems, and spreadsheets to produce formatted reports, i.e. the monthly “Flash Report”.

The reports are primarily used by executives to determine progress towards goals critical to the growth, profitability, and sustainability of the business.

The CEO has requested the ability to unify information from each stakeholder into a Dashboard, allowing information to be aggregated across all business channels. The ability to drill-through aggregated information and reveal the composite data, allows the CEO to get instant visual insights when asking questions of the data.

Due to the number of information sources, and lack of commonality between them; a common data model, and system of record needs to be established in order to automate the aggregation of Acquisitions and Dispositions information.

Project Scope

The scope of the Acquisitions & Dispositions SoR project includes:

- Develop a standard process for consolidating, maintaining and updating information from multiple sources, including systems, databases, and spreadsheets
- Develop a web-based dashboard to aggregate, and oversee progress towards goals for Acquisitions & Dispositions for each business channel
- Develop an information security policy with safeguards to:
    - Enforce role-based access to information
    - Reduce the risk of sharing information with inappropriate parties
- Executing a maintainable, scalable plan that is concentrated on achieving the specific benefits outlined in the Project Purpose of this document
- Evaluation and procurement of a single system of record to capture and store information for acquisition and disposition all business channels
- Ability to survey and collect end user feedback on their system usage
- Ability to passively collect user adoption and solution utilization metrics

Scope Exclusions

- Integration with downstream systems of record, such as Client Account Management's instance of Salesforce.com
- Operational tracking of milestones after acquisitions have been won
- Ability to create "pixel-perfect" reports that look identical to existing reports
- Electronic Content Management (document storage) within the system of record

Project Deliverables

1. Solution Proof-of-Concept (prototype)
2. Procurement of a system of record to capture Acquisitions and Dispositions information
3. Defined process for stakeholders to update information used in reports
4. Ability to disseminate reports electronically and physically
5. Method for ensuring governance around access to information displayed on a report
6. Defined process for incorporating information from additional stakeholders, and future systems and sources
7. Defined process for triaging and troubleshooting technical issues
8. Business continuity documentation to support the solution; including technical issue support, solution, and process documentation

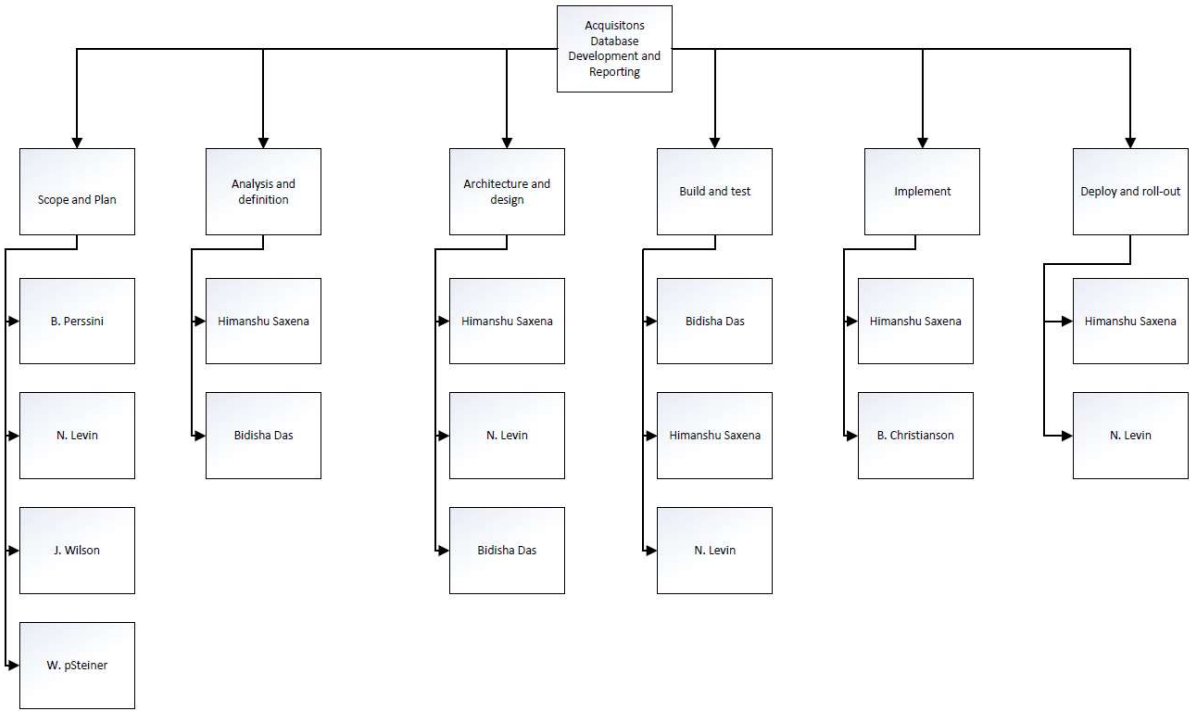
Project Resource Roles and Responsibilities

The project team will consist of the following members who's roles, and responsibilities for the project are defined as follow:

Stakeholder	Role	Project Responsibilities
Himanshu Saxena	Project Manager	• Define and evaluate strategy • Research and configure proof of concept • Evaluate and select solution • Communicate with other team members and stakeholders • Obtain metrics and compile reports on the project status
N. Levin	Project Manager	• Conduct meetings • Provide level 3 technical support
B. Peressini	Business Project Sponsor	• Project approval • Project vision • Prioritize project goals • Review project documentation • Review project status reports
J. Wilson	IT Project Sponsor	• Ensure adequate IT resources are available for the duration of the project • Evaluate and select solution • 10. Attending meetings
B. Keefer	Stakeholder	• Provide resources • Ensure buy-in
G. Smith	Stakeholder	• Provide resources • Ensure buy-in
O. Williams	Stakeholder	• Provide resources • Ensure buy-in
M. Rivard	Acquisitions Stakeholder	• Provide resources • Ensure buy-in
W. Steiner	Goals Stakeholder	• Provide resources • Ensure buy-in
B. Christianson	IT Support	• User & service account provisioning • Create profiles/policy groups to ensure information security • Software licensing • Software installation • Provide technical support by triaging and resolving level 1 technical issues though the HelpDesk
Bidisha Das	Data Engineer	• Develop POC on a test database • Error rectification • Database development • Database Administration • Initial loading of database • Provide level 3 support

Work Breakdown structure

The WBS chart shows the high-level activities and the person responsible.



Project timeline:

To get an idea of the project timeline I have presented Gantt Chart and PERT Analysis.

PERT Analysis:

A PERT chart has been presented in Appendix 1.

The total duration of the project is 64 business days.

The critical activities are:

1. Scope and plan
2. Analysis and definition
3. Business and data requests
4. Data design
5. Data load
6. BI solution
7. Systems testing
8. Deploy

There are two critical paths:

1. A-B-C-G-K-L
2. A-B-D-H-K-L

Gantt Chart

Gantt chart shows the project schedule. Lag in activities can be identified using this chart and measures can be taken to maintain the project within project timeline.

Gantt chart can be found in Appendix 4.

IDEF Model

The IDEF model has been presented in Appendix 2. It describes the operations and activities. It lays out the controls, inputs, mechanism and output of each activity.

Critical Success Factors

What factors are a necessary condition for success of the project?

- Committed team members

- Buy-in from Stakeholders
- Adequate resource allocation
- Adequate project time allowance
- Procurement of software tools for IT to leverage

How will success be measured?

- Ability to meet project milestones within the established timeframe
- Delivery of an operational tool for teams managing the acquisition and disposition process
- Ability to automatically aggregate information across business channels, and measure progress towards goals
- Reduction in time needed to prepare reports
- End user adoption
- Governance Committee able to support the change management process
- Adherence to acceptable use policy while attaining objectives
- Ability to identify and promote a business team member who can act as the system owner, minimizing the burden on IT having to support the system of record, and ancillary processes

Dependencies, Constraints, Assumptions, & Risks

Dependencies

1) For information to be included in the system of record, it must be structured, normalized, and delivered in a consistent, machine-readable format
2) For information to be aggregated across business channels, a common data model must be established
3) Once the data model has been established, a defined change management process must be followed if the model needs to be altered
    a) Changes to the data model must be reviewed by the Governance Committee to avoid inter-dependency issues

Constraints

- Information is currently unstructured, de-normalized, and not produced in a consistent format
    - Context around information is typically provided in a Word document, i.e. Acquisition project updates
- Changes to information sources and systems of record requires IT involvement
    - Some information sources are in the process of being transferred to new systems of record
- Access rights to information needs to be managed

Assumptions

- Acquisition and Disposition teams will discontinue using current systems, including Excel to track and report on information

Financial Plan

The Appendix 3 presents the estimated expenses for the project.

While preparing the financial plan, the following assumptions have been made:

i) Overhead cost will not increase $1000 in a month
ii) The salary of employees has been computed according to a rough estimate for the purpose of the proposal
iii) The number of hours worked by an employee has been considered to be 8 hours a day, from the usual working hours 9 AM – 5 PM
iv) The project requires only one database server; however, an additional server has been added for backup
v) The number of BI tool licenses has been calculated by the number of identified persons who have demanded access for the tool. More licenses could be required as additional requests are received.

Monitoring and Control

Project Manager is responsible for keeping track of all project-related metrics including team performance and task duration, identifying potential problems and taking corrective actions necessary to ensure that the project is within the scope, on budget and meets the specified deadlines.

Since this is IT project, the data governance and policies will be handled by the IT Manager. Data Governance is imperative to ensure formal management of data assets within the organization. A framework would be put forth by the IT Manager to ensure organization has a better control over its data assets, including methods of data acquisition, technological changes and access. IT Manager will ensure security, privacy, integrity, usability, integration, compliance, availability, roles and responsibilities, and overall management of internal and external data flows within organization.

To monitor the tasks, Gantt Chart will be used. This will help to monitor and control that right people are assigned to each task and the duration of their tasks. It will also highlight any lag in critical activities. A solution could be provided to ensure that the project stays on track and within the timeline. Finally, Gantt chart will be published on company portal and anyone and everyone related to this project will be able to monitor the progress.

Budget tracking is important to ensure that the project completes within the allocated budget. The Resource Manager is responsible for continuous review of the project and the use of resources.

Risks

A risk is defined as anything that could potentially affect the success of the project. The risks categorized below may be encountered during the project.

Key

Scale	**Probability**		**Impact**
Very High	>70%	Has occurred in past projects, conditions exist to reoccur	Significant failure to meet primary purpose
High	50 – 70%	Has occurred in past projects	Minor shortfall in area of critical importance
Medium	30 – 50%	Possible to occur	Shortfall in area of secondary importance
Low	10 – 30%	Infrequent occurrence in past projects	Shortfall in area of minor importance
Very Low	<10%	May occur in exceptional situations	Minimal or no impact

Matrix

Risk	**Probability**	**Impact**	**Implication**	**Mitigation Strategy**
Additional effort and learning curve to manage content in a system	High	Medium	Users fail to realize the cost/benefit tradeoff	Re-analyze current processes to identify pain-points
Information is shared with an inappropriate party	Very Low	Very High	Inappropriate party leverages information to their advantage, or HNRG's detriment	Adhere to Manulife's policy for cloud applications and data storage, i.e. enforce role based access to information within the system
Users fail to adopt new system	Medium	Very High	Information in the system will be inaccurate	IT will publish user adoption metrics, allowing project stakeholders to incentivize adoption of the system, and disincentivize failure to adopt the system
The business does not take ownership of the system	High	High	Additional IT resources will be required to support the system	The business will incentivize employees willing to take ownership of the system, or will allocate additional resources to IT to support the system
Evolving medium could mean rapid changes to requirements, and need for on-the-fly adaptation	Medium	Medium	System may not cater to all operational requirements	Inform project stakeholders of expectations, ensuring adjustments to requirements follow a formal process, and are

				adequately assessed to mitigate additional risks
Competing resources when implementing a multi-department project can jeopardize success	Medium	Very High	Project team loses focus ensuring critical success factors are met	Ensure project stakeholders have clear directives and are fully committed to the project scope before sign-off

Communication Plan

Stakeholder	Frequency	Method	Purpose
Project Manager	Bi-Monthly	Email	• Discuss project progress, issues, etc. • Communicate project tasks • Establish milestones
Project Manager and Sponsors	Milestone	Email or Meeting	• Provide complete project update • Get feedback from stakeholders • Adjust strategy as needed
Project Manager, Sponsors, and Stakeholders, and Governance Committee	Quarterly	Meeting	• Outline wins and statistics from previous quarter • Review roadblocks and workarounds • Evaluate resource allocation • Plan for continuity of the initiative

Decision Rights

To support the timeline of the project and respect stakeholder time, the project manager has decided on the following decision rights procedure:

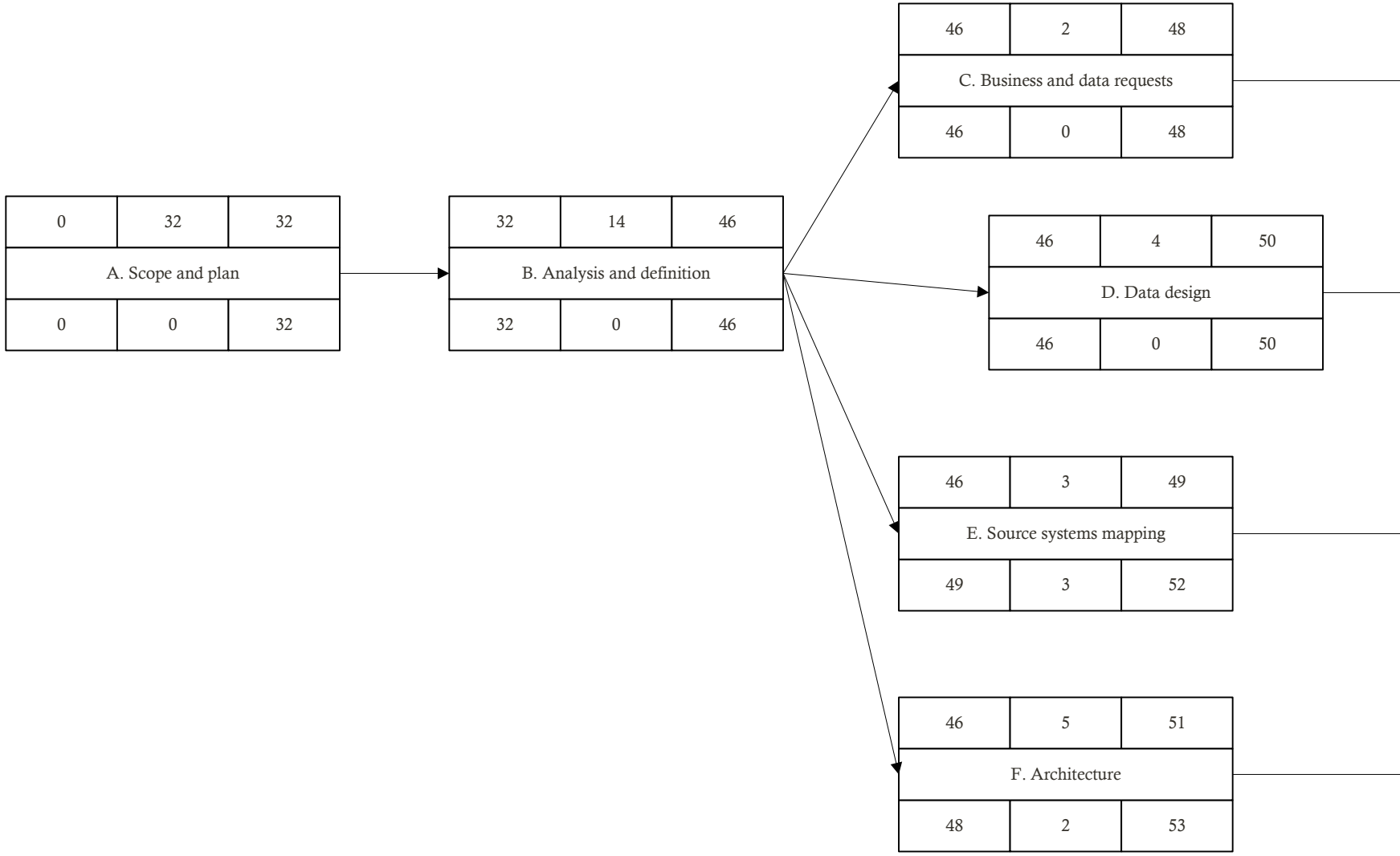
1. Any email sent between project participants that requires a go or no-go decision will specify a decision date or time within reasonable limits (3 business days)
2. A non-answer from the project sponsor or project stakeholder by the specified date or time will imply approval and the project may continue
3. If the project sponsors does not agree or require further clarification, they must contact the project manager within the specified timeline

Document Approval

Approver Name	Project Role	Signature	Date
Prof Cullinane	Project Sponsor		
J. Wilson	IT Project Sponsor		
B. Peressini	Business Project Sponsor		
B. Keefer	Stakeholder		
O. Williams	Stakeholder		
G. Smith	Stakeholder		
M. Rivard	Stakeholder		

Appendix 1

PERT Chart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32
32
A. Scope and plan
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14
46
B. Analysis and definition
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2
48
C. Business and data requests
46
0
48
46
4
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D. Data design
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E. Source systems mapping
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F. Architecture
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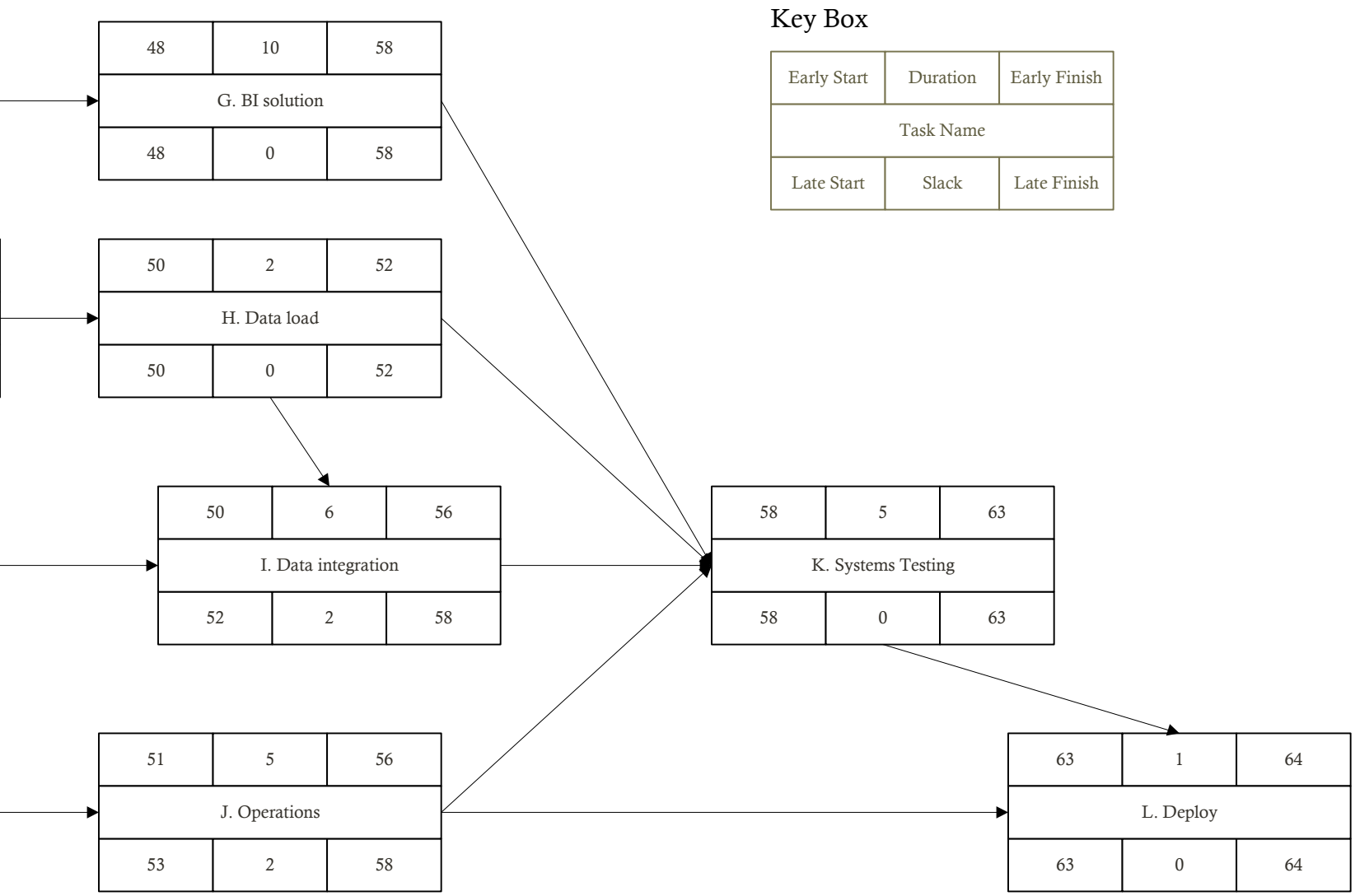
Key Box
Early Start
Duration
Early Finish
Task Name
Late Start
Slack
Late Finish
48
10
58
G. BI solution
48
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58
50
2
52
H. Data load
50
0
52
50
6
56
I. Data integration
52
2
58
58
5
63
K. Systems Testing
58
0
63
51
5
56
J. Operations
53
2
58
63
1
64
L. Deploy
63
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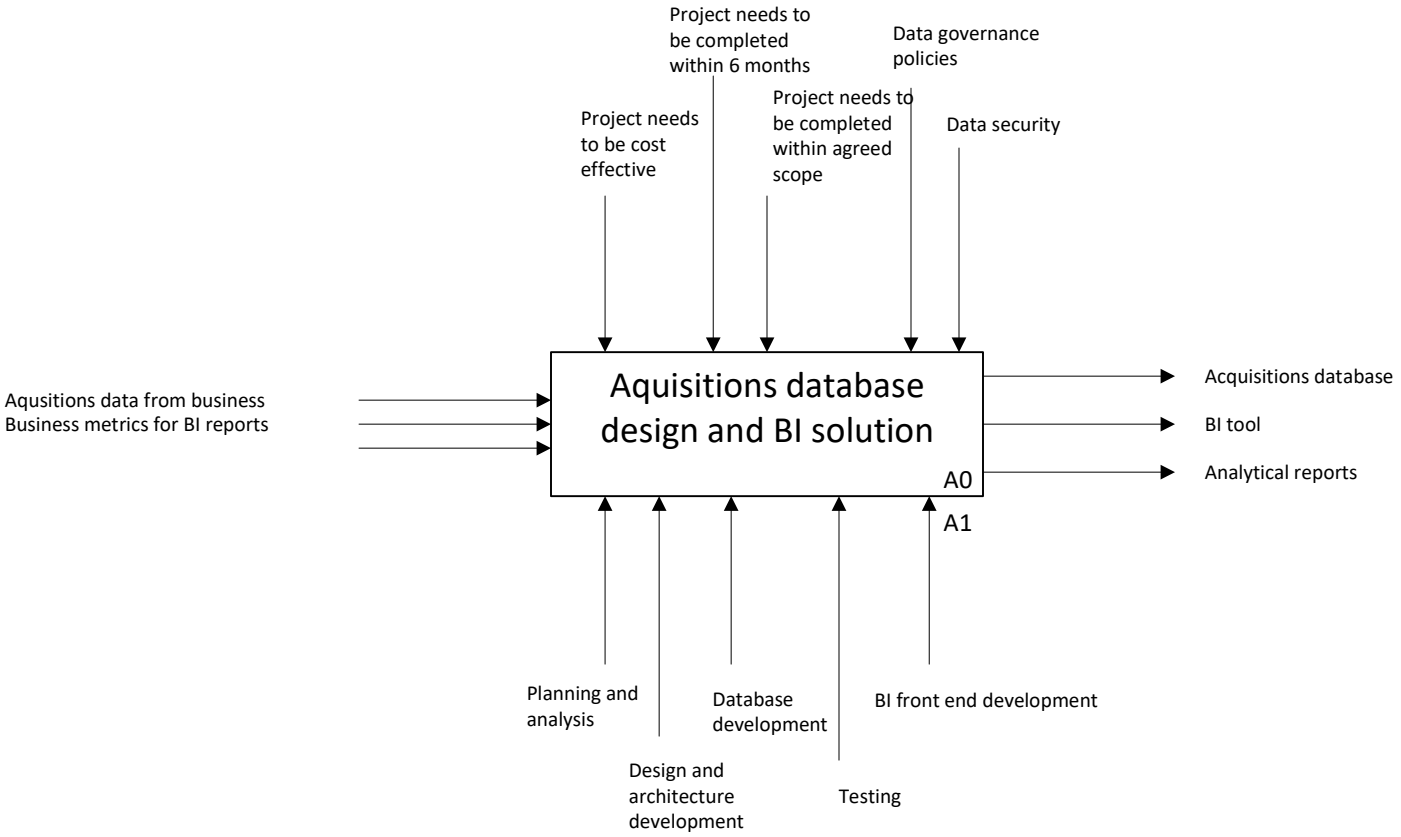
64

Appendix 2

IDEF Model



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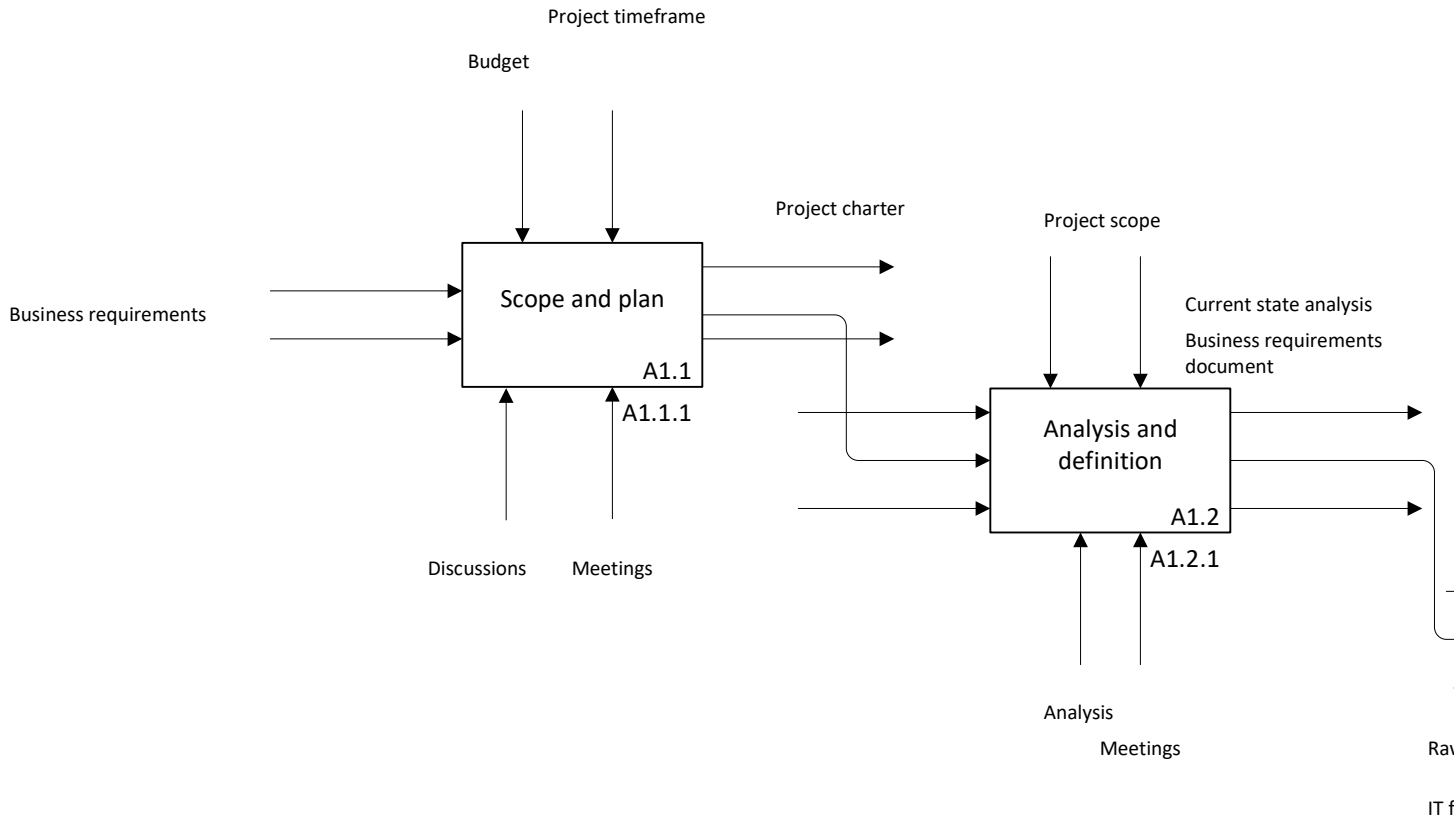

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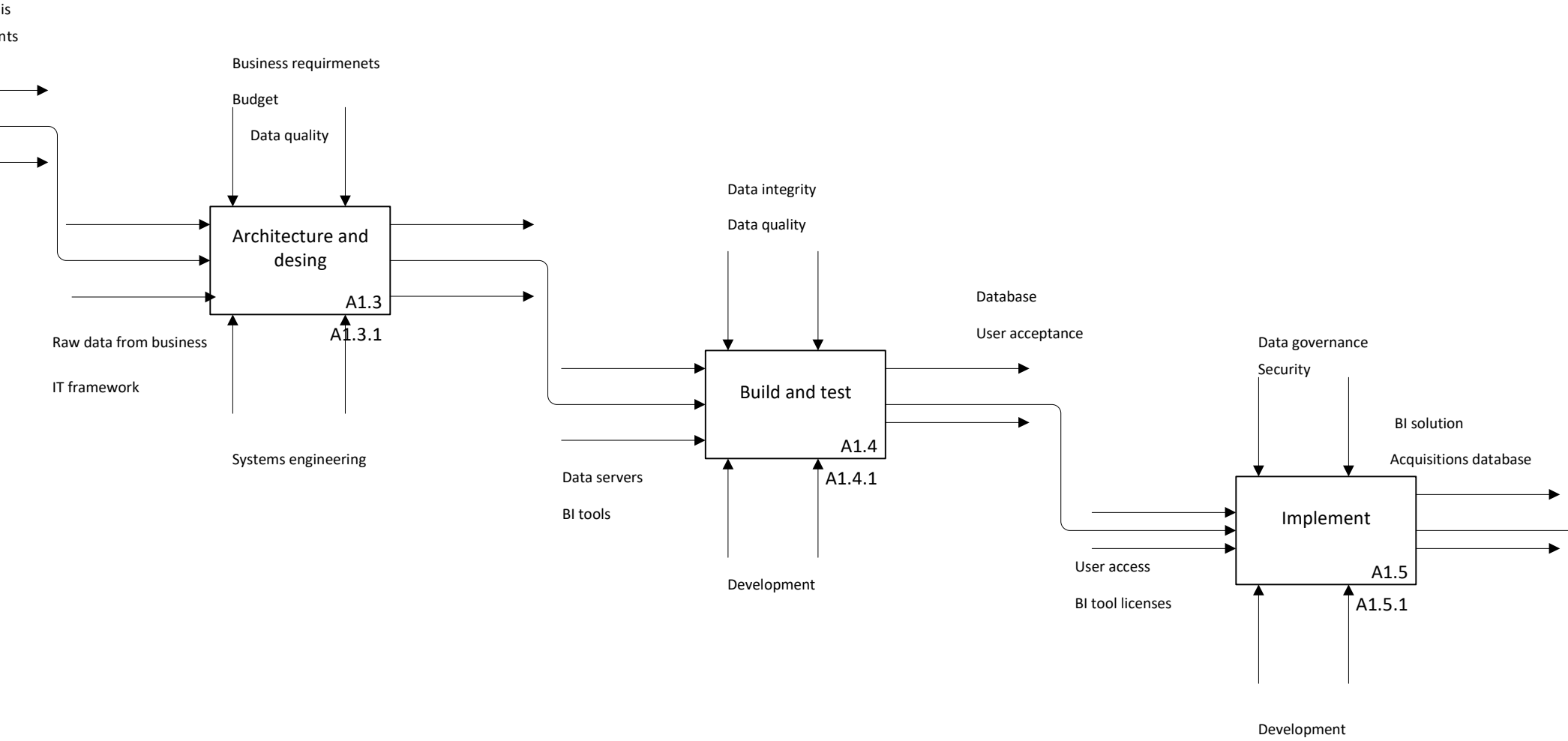
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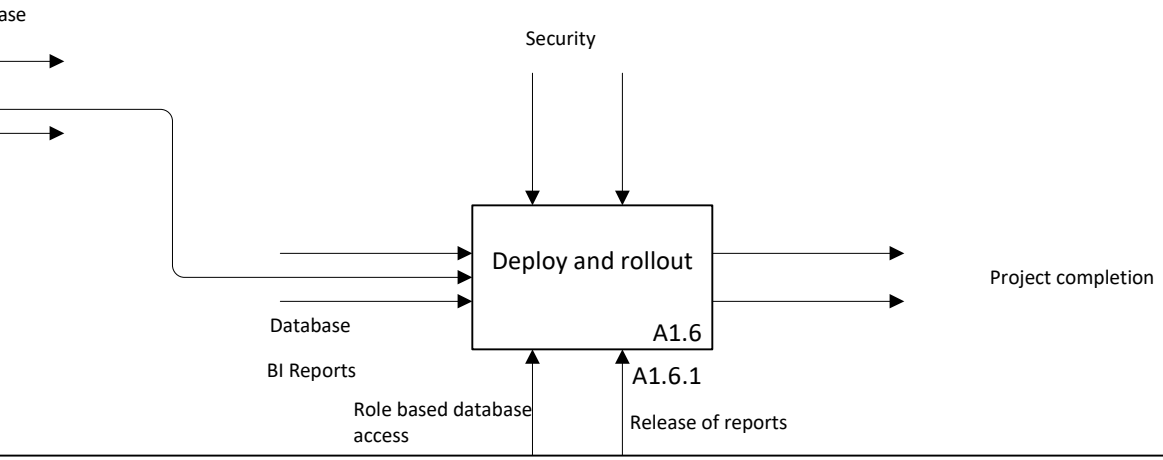
Budget
Data quality
Architecture and desing
A1.3
A1.3.1
Raw data from business
IT framework
Systems engineering
Data integrity
Data quality
Build and test
A1.4
A1.4.1
Data servers
BI tools
Development
Database
User acceptance
Data governance
Security
BI solution
Acquisitions database
Implement
A1.5
A1.5.1
User access
BI tool licenses
Development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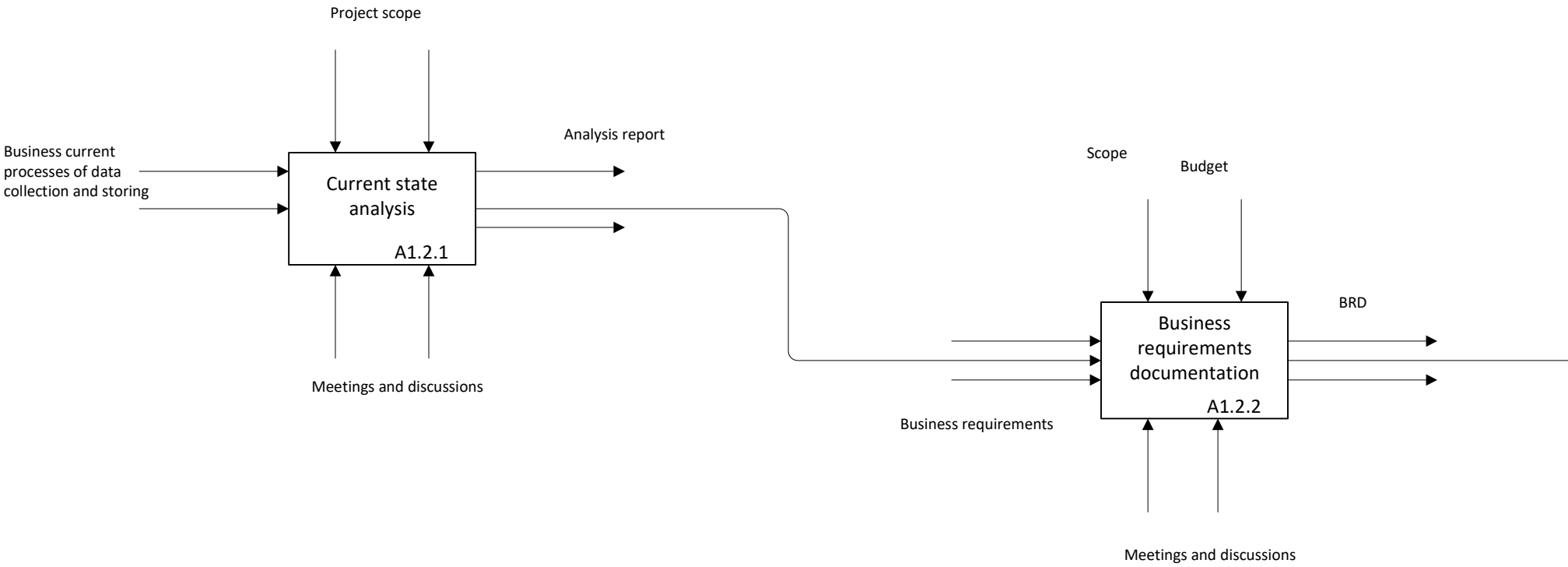
Security
Deploy and rollout
A1.6
Database
BI Reports
A1.6.1
Role based database access
Release of reports
Project completion

NO.: 2



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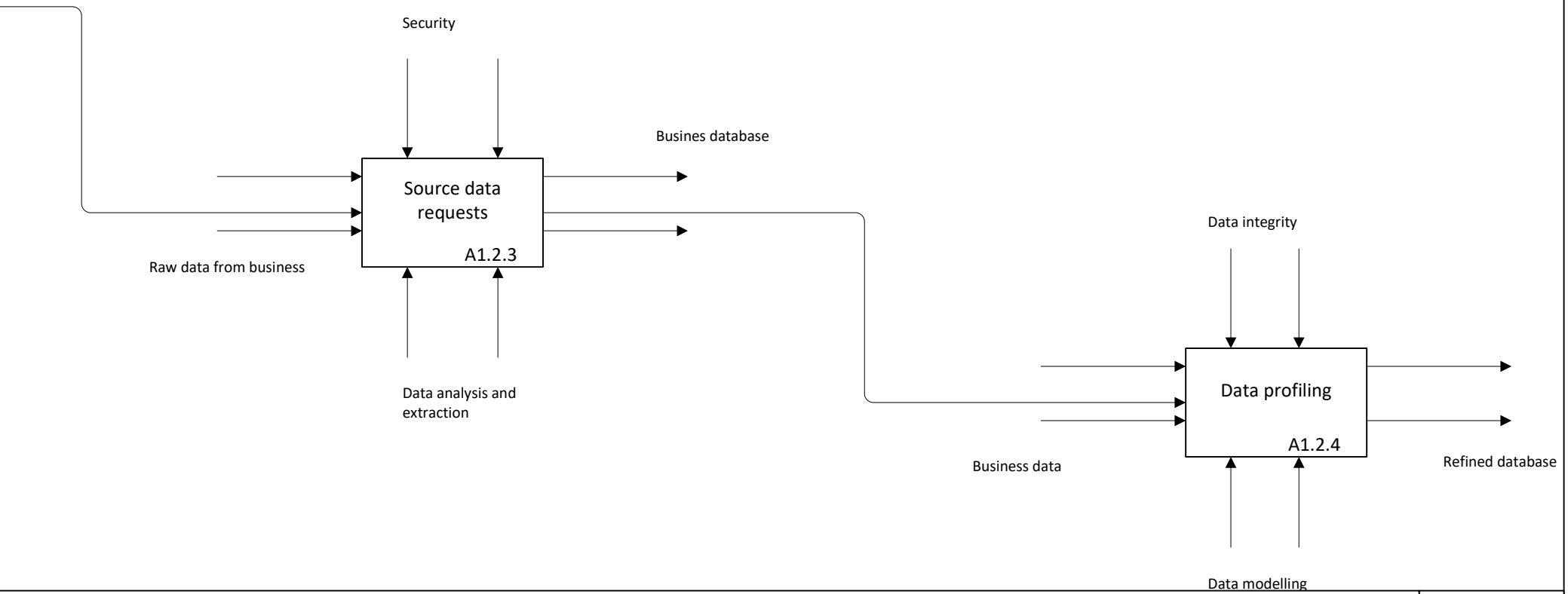
Security
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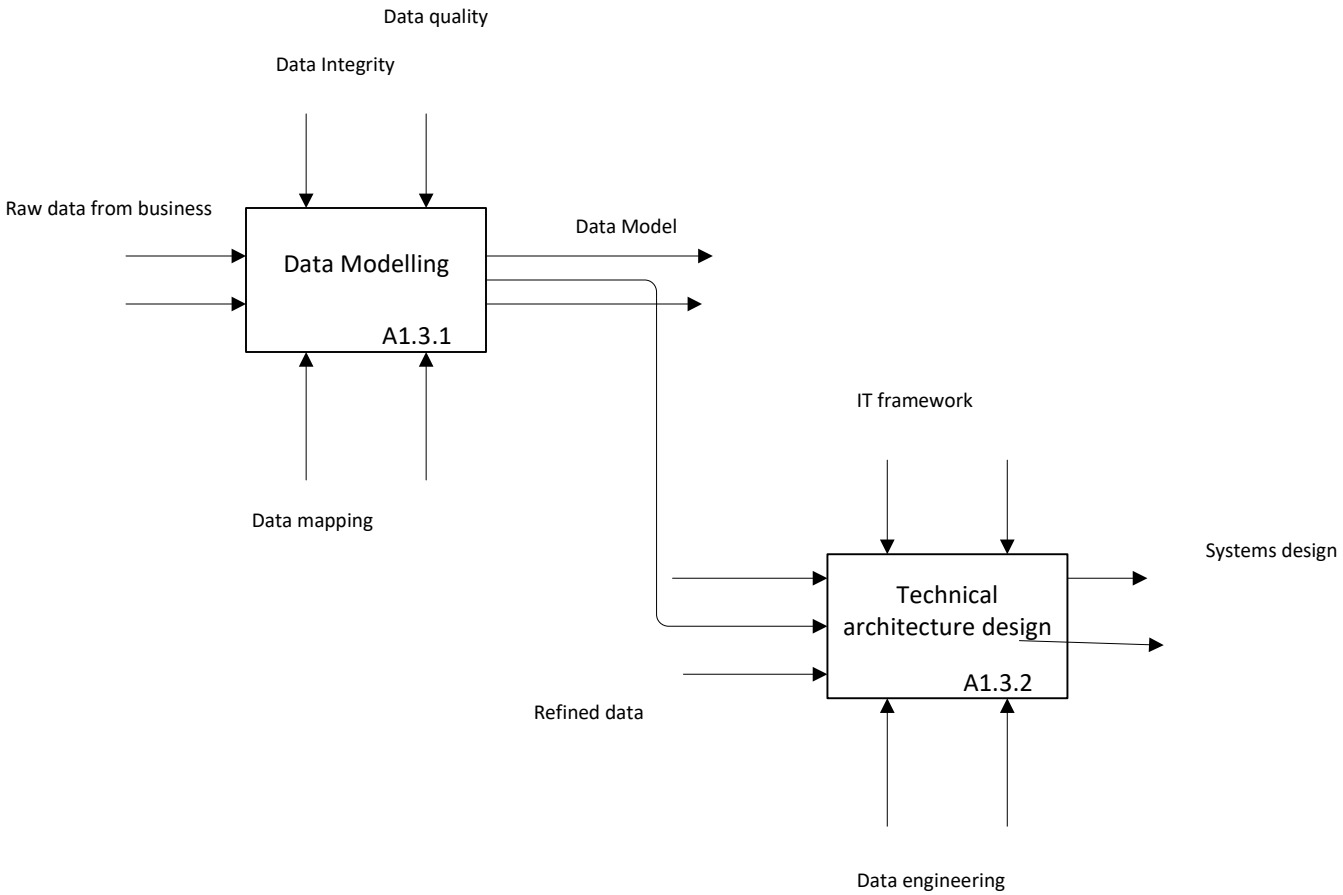
Raw data from business
Data analysis and extraction
Data integrity
Data profiling
A1.2.4
Business data
Refined database
Data modelling



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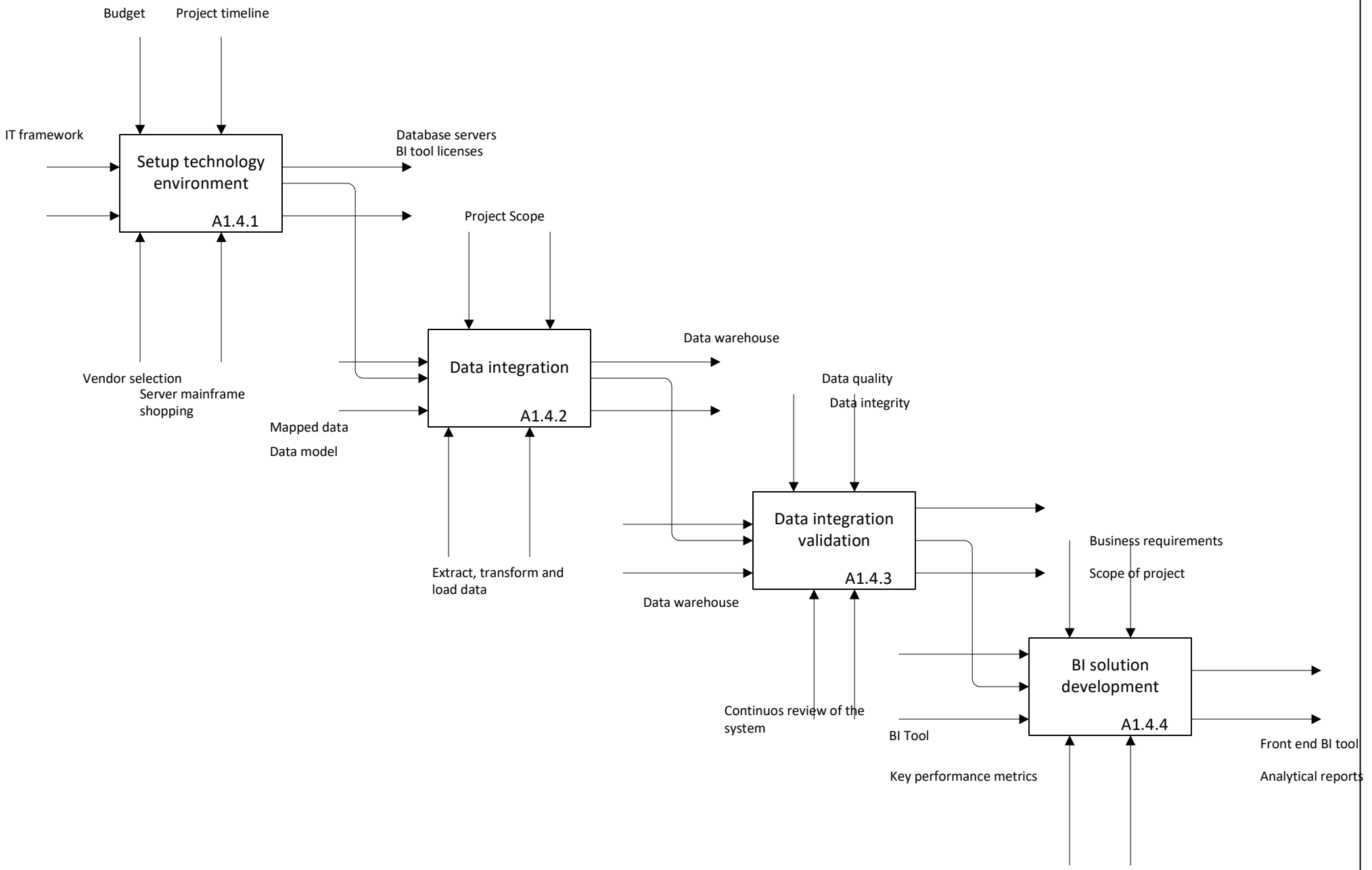

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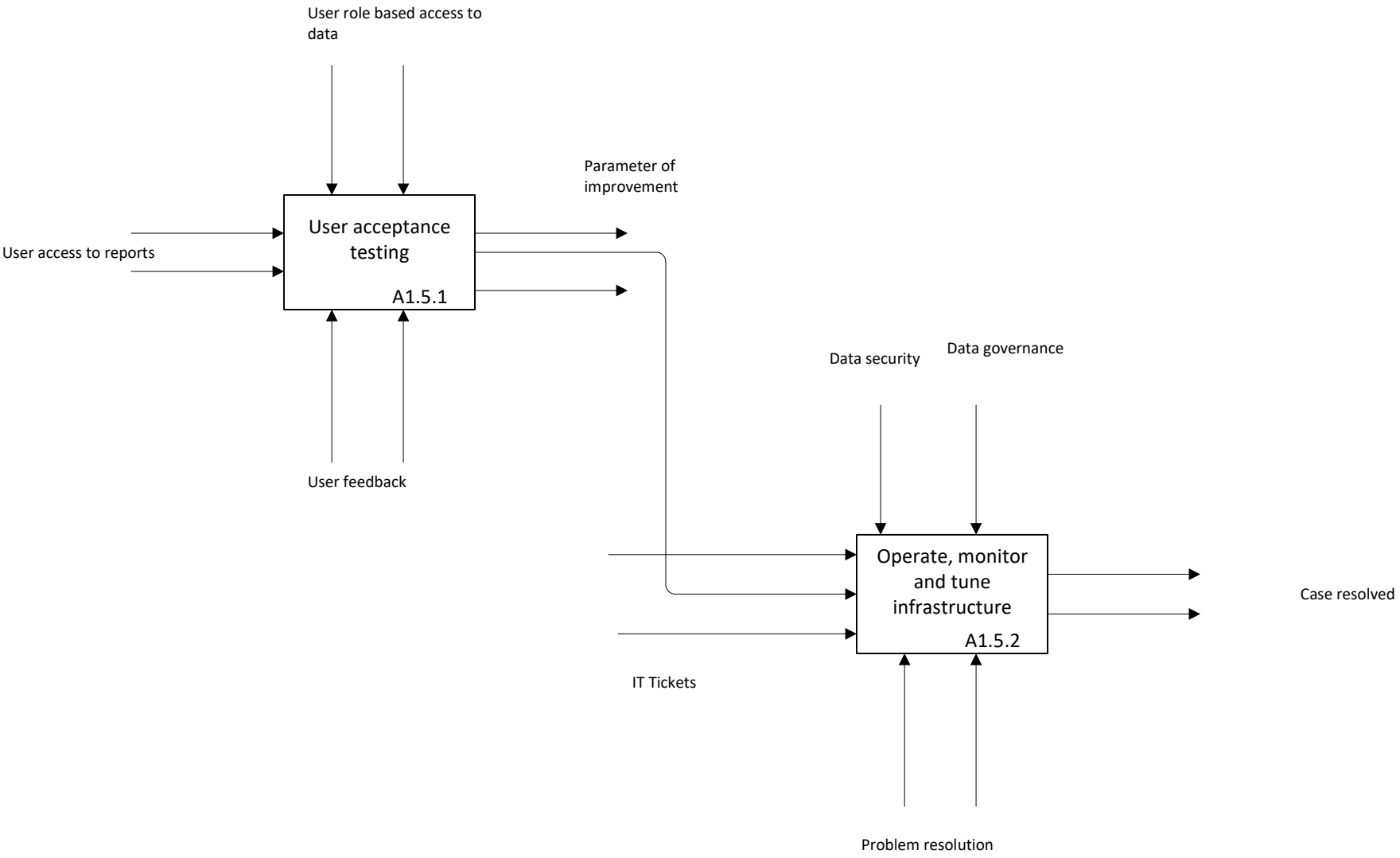

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Appendix 3

Financial Summary

Employee	Designation	Grade pay	Number of days worked	Hours per day	Pay per hour ($)	Total pay ($)
Bidisha Das	Data Engineer	A	15	8	$30.00	$3,600.00
Himanshu Saxena	Project Manager	B	37	8	$35.00	$10,360.00
Nathan Levin	Senior Project Manager	C	18	8	$40.00	$5,760.00
Bill Perisinni	CEO	E	4	8	$200.00	$6,400.00
Wilfried Steiner	Economic Research Group Manager	C	2	8	$100.00	$1,600.00
Brett Christianson	IT Manager	C	13	8	$60.00	$6,240.00
Joan Wilson	IT Director	D	10	8	$120.00	$9,600.00
				Total employee expenses ($)		**$43,560.00**
Resources	**Count**	**Price per resource per month**	**Annual expense**			
BI licenses	40	$18.00	$8,640.00			
Database servers	4	$2,000.00	$96,000.00			
Overhead expenses		$1,000	$12,000			
				Total resources expenses		**$116,640.00**
				Grand total expenses		**$160,200.00**
Assumptions:						
Stakeholders and employees cost are calculated only for the duration of project						
Cost of resources is calculated for 1 year. Budget needs to be renewed moving forward next year						
Overhead expenses include minor expenses like stationary, meeting lunch and snacks, and possible travel						

Appendix 4

Gantt Chart

GANTT CHART

Smartsheet Tip ➜ A Gantt chart's visual timeline allows you to see details about each task as well as project dependencies.

PROJECT TITLE	Acquisitions database and BI Solution	**COMPANY NAME**	Sahi Pvt. Ltd.
PROJECT MANAGER	Himanshu Saxena	**DATE**	3/12/18

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
1	**Scope and Plan**					
1.1	Scope and Goal Setting	Bill Perisinni	12/4/18	12/8/18	4	100%
1.2	Stakeholders Meeting	Welfried Steiner	12/4/18	12/6/18	2	100%
1.3	Project Charter	Himanshu Saxena	12/4/18	12/9/18	5	90%
1.4	Project Initiation	Nathan Levin	12/9/18	12/15/18	6	70%
1.5	Budget	Joan Wilson	12/8/18	12/18/18	10	20%
1.6	Risk Management	Himanshu Saxena	12/5/18	12/10/18	5	20%
2	**Analysis and definition**					
2.1	Current State Analysis	Himanshu Saxena			5	
2.2	Business Requirements Document	Himanshu Saxena			5	
2.3	Research	Bidisha Das			4	
3	**Architecture and design**					
3.1	Data Extraction from source systems	Bidisha Das			2	
3.2	Data profiling	Bidisha Das			3	
3.3	Data Model	Himanshu Saxena			4	
3.4	Technical architecture desing	Nathan Levin			5	
4	**Build and test**					
4.1	Data Integration	Bidisha Das			6	
4.2	BI solution	Himanshu Saxena			10	
4.3	Testing	Nathan Levin			2	
5	**Implement**					
5.1	User acceptance tests	Himanshu Saxena			2	
5.2	Data integration validation	Brett Christianson			2	
5.3	Monitor and tune infrastructure	Brett Christianson			5	
5.4	Data governance	Brett Christianson			6	
6	**Deploy and roll-out**					
6.1	Systems testing	Nathan Levin			5	
6.2	Deploy	Himanshu Saxena			1