Case Study Task (CST)

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Scenario

Order Management at the Great Search Company

The Great Search Company (GSC) sells information about companies, individuals and properties to lawyers, solicitors and conveyancers in Australia. GSC clients are the lawyers, solicitors and conveyancers who use this information when dealing with commercial matters, litigation, or sale/ purchase of property.

Examples of information that the GSC provide includes;

- Company information including current ownership and history of ownership
- Property title certificates to ascertain current ownership and history of ownership
- Rates certificate to determine the portion of rates payable by the purchaser and by the vendor when a property is sold
- Transport interest certificate to establish if new roads might affect a property
- Contaminated land certificate to establish if a property has land which is contaminated
- Property descriptions including any utility company easement or right of access

GSC is planning to implement a new information system to provide a one-stop-shop for the types of information listed above. The one-stop-shop will allow clients to place orders, monitor the status of orders, retrieve search results, monthly invoicing and payments. The GSC will need to source information from information providers such as national, state or local authorities. GSC acts as a broker between the information providers and GSC clients.

Clients place orders for information searches. Each order may include one or more information searches. Once the order is submitted a status is shown for each information search including an estimated time of completion. If the information requested does not exist in the information system then a connection is made to the appropriate information provider. The requested information is accessed from the information provider and stored in the information system.

Search results in the form of pdf documents are stored in the client document store within the information system. Each client has a document store which allows the client's staff shared access to the documents.

The order is considered fulfilled when each search item returns a result. The clients' monthly invoice is then updated. The new information system includes a third party payment module. Monthly invoices are automatically sent to clients. Payment is strictly 14 days. In the case of no payment, the client account is suspended, existing searches are halted, and new orders are held as pending. When payment is received, the client account is un-suspended, existing searches continued, and pending orders submitted.

catalogue

Revision history

Version number	Date revised	Revision comments
1	2/5/2018	Added the concept of "one-stop-shop" in part 1 business driver
2	12/5/2018	Built WBS in part 4 defining the scope
3	15/5/2018	Added the control phase criteria in part 9 project control

1. Business driver

Problem

GSC main focus on selling information, their success factors may rely on the ability to stand out among similar firms, such as technical support, data warehouse and customer service. However, GSC cannot combine these functions together and integrate them to be a whole part before using the one-stop-shop. Thus, it is time-consuming and money-consuming to manage GSC.

Need and improvement

GSC need to increase the efficiency and reduce cost. Using one-stop-shop information system in order management can simplify the procedure of operation in GSC. Lots of functions can be integrated in one parts, such as order management, search management, invoice management and payment. It is easy to manage and maintain. In addition, the efficiency can be increased in GSC. The cost of company may be reduced, since GSC doesn't spend more funds on maintaining various parts.

Opportunity

GSC may attract more customers and become popular by using new information system, as clients can place orders, track orders, search information and payment effectively.

Possible impact of not doing the project

The process of operation may be complicated and GSC has to spend more time and money on maintaining the system. Thus, GSC cannot gain more benefits and they may lose competitiveness in the market.

2. Project objectives

a. Reducing labor cost and maintenance cost in order management

b. Improving business processes and reduce the time in searching information

c. Developing the quality of services and data

d. Connecting order system and payment system, and getting them work together

e. Improving the turnaround time for customer orders

3. Business benefits

Specific	Combining order system and payment in new information system by using one-stop-shop module
Measurable	The work efficiency of order management increases at least 25% by using new information

	system in one month
Assignable	Project manager is main in charge of realizing the business benefits
Realistic	Increasing the revenue of GSC by 20% by using new information system by the end of the year
Time-related-specify	This result must be achieved by the end of 2018

4. Defining the scope

Scope statement

In GSC project, we use prince2 method on project management. The project involves building a new information system by using one-stop-shop module, which can combine order system and payment system together. One-stop-shop will enable clients to place orders, track orders, get invoice and complete the payment in high-efficiency way, so that the work efficiency of order management and can largely improve. Thus, GSC can increase benefits and expand their market share. This project will be delivered in 2.5 months under the condition of enough funds and staff.

Product breakdown structure (PBS)
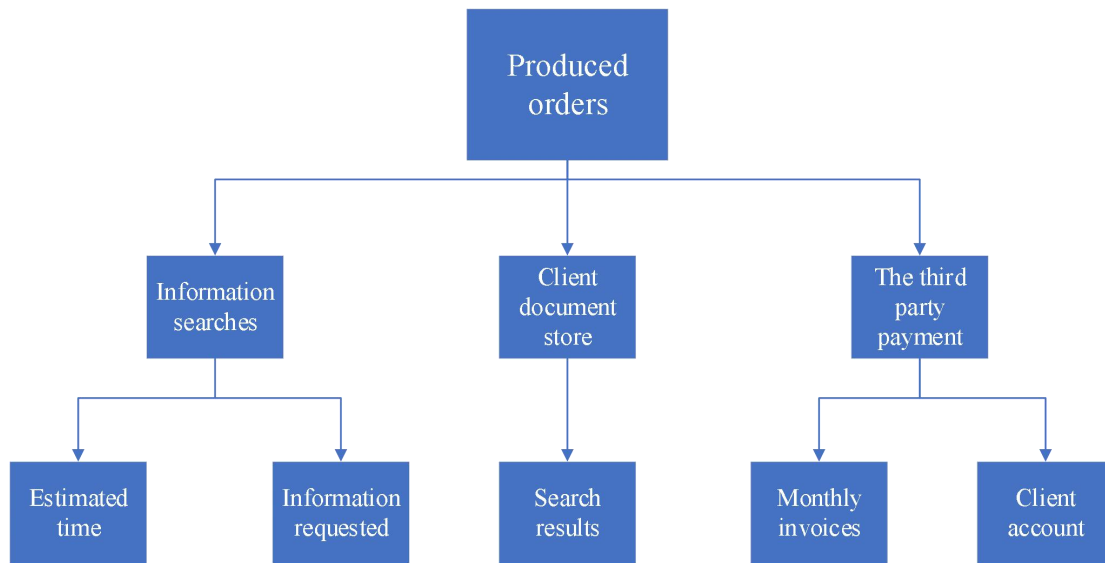
Product flow diagram (PFD)
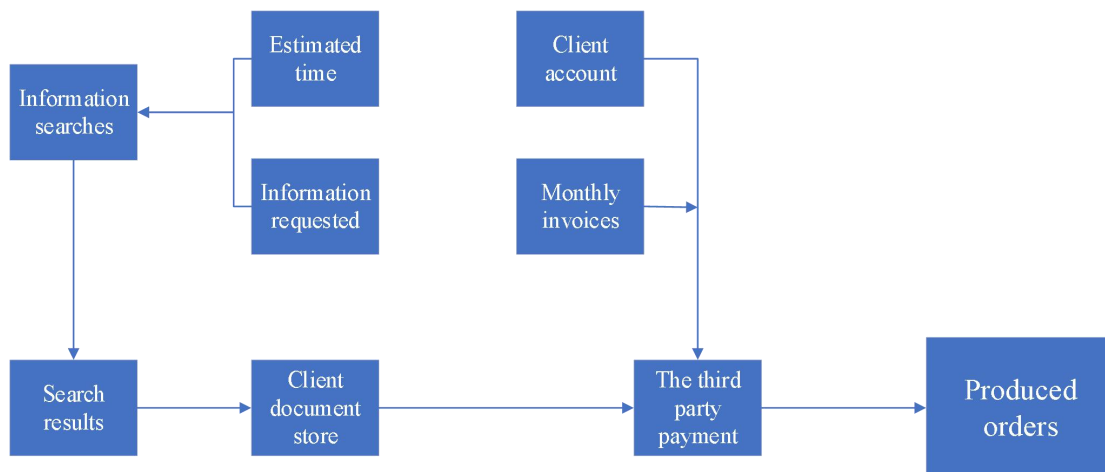
Work breakdown structure (WBS)

Order management system

1.1 Launch the project
1.1.1 Initial implementation plan
1.1.2 Project evaluation and review

1.2 requirements
1.2.1 gather stakeholders requirements
1.2.2 gather system requirements
1.2.3 project planning
1.2.4 review project management documentation

1.3 design
1.3.1 outline design
1.3.2 database design
1.3.3 review design module

1.4 implementation
1.4.1 setup database
1.4.2 program coding

1.5 testing
1.5.1 integrated testing
1.5.2 environmental testing
1.5.3 system testing
1.5.4 defect tracking
1.5.5 testing report

1.6 project closure
1.6.1 acceptance testing
1.6.2 product submission
1.6.3 user training

Estimated duration 1

WBS code	Task name	Duration time(day)
1.0	Order management system	60
1.1	Launch the project	5
1.1.1	Initial implementation plan	3
1.1.2	Project evaluation and review	2
1.2	requirements	10
1.2.1	Gather stakeholder requirements	2

1.2.2	Gather system requirements	2
1.2.3	Project planning	4
1.2.4	Review project management documentation	2
1.3	Design	18
1.3.1	Outline design	8
1.3.2	Database design	8
1.3.3	Review design module	2
1.4	Implementation	10
1.4.1	Setup database	5
1.4.2	Program coding	5
1.5	Testing	10
1.5.1	Integrated testing	2
1.5.2	Environmental testing	2
1.5.3	System testing	2
1.5.4	Defect tracking	2
1.5.5	Testing report	2
1.6	Project closure	7
1.6.1	Acceptance testing	2
1.6.2	Product submission	2

1.6.3	User training	3

Estimated duration 2

ID	Task	Pred.	Estimated time(ET) days	ES	EF	LS	LF	SLACK
1	Z		3	0	3	0	3	0
2	Y	Z	2	3	5	3	5	0
3	X	Y	2	5	7	7	9	2
4	W	Y	2	5	7	7	9	2
5	V	Y	4	5	9	5	9	0
6	U	X,W, V	2	9	11	9	11	0
7	T	U	8	11	19	11	19	0
8	S	U	8	11	19	11	19	0
9	R	T,S	2	19	21	19	21	0
10	Q	R	5	21	26	21	26	0
11	P	Q	5	26	31	26	31	0
12	O	P	2	31	33	31	33	0
13	N	P	2	31	33	31	33	0
14	M	P	2	31	33	31	33	0
15	L	P	2	31	33	31	33	0

16	K	O,N, M,L	2		33	35	33	35	0
17	J	K	2		35	37	35	37	0
18	I	J	2		37	39	37	39	0
19	H	I	3		39	42	39	42	0

Network diagram
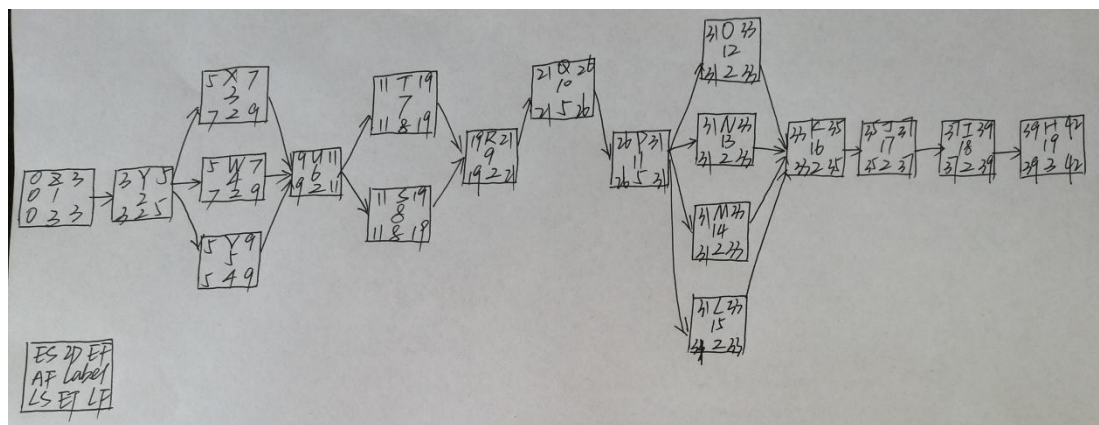
Critical path
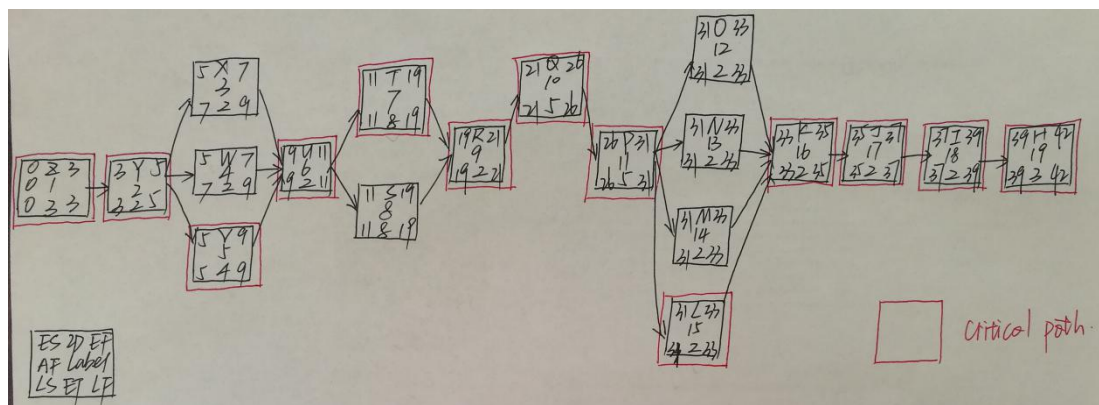
5. Key stakeholders

	Stakeholders	Responsibilities
Internal stakeholders	Senior Responsible Owner	Senior Responsible Owner (SRO) is the key leader in driving GSC project. SRO should control the change in GSC company and deliver GSC project successfully.
	Business Change Manager	As a primarily benefits-focused role, Business Change Manager should be in charge of defining the company benefits, evaluating the process of GSC project and realizing the measured improvement.
	Program Manager/ Executive	Program Manager and Executive can be a combined role, which represents SRO to deliver changes, supervises risks and realizes benefits in GSC project.
	Design Authority/ Change Authority	Design Authority and Change Authority can be a combined role, which should provide suggestions from experts and consider requested changes.
	Project	Project Manager is in charge of Project

	Manager	Support and Team Manager. The role focuses on GSC project every day and runs it under the constraint of Project Board.
	Project Assurance	Project Assurance ensures the success of the whole GSC project. Any member of Project Board can be this role.
	Project Support	Project Support can provide the administrative role and manage the assets of GSC project.
	Team Manager	Team Manager is in charge of products in Work Packages and delivers status project reports to Project Manager regularly.
External stakeholders	Clients	Clients are the lawyers, solicitors and conveyancers who purchase information and use order management system in GSC.
	Suppliers	Suppliers are Information providers who offer source information to GSC.

Project organization diagram
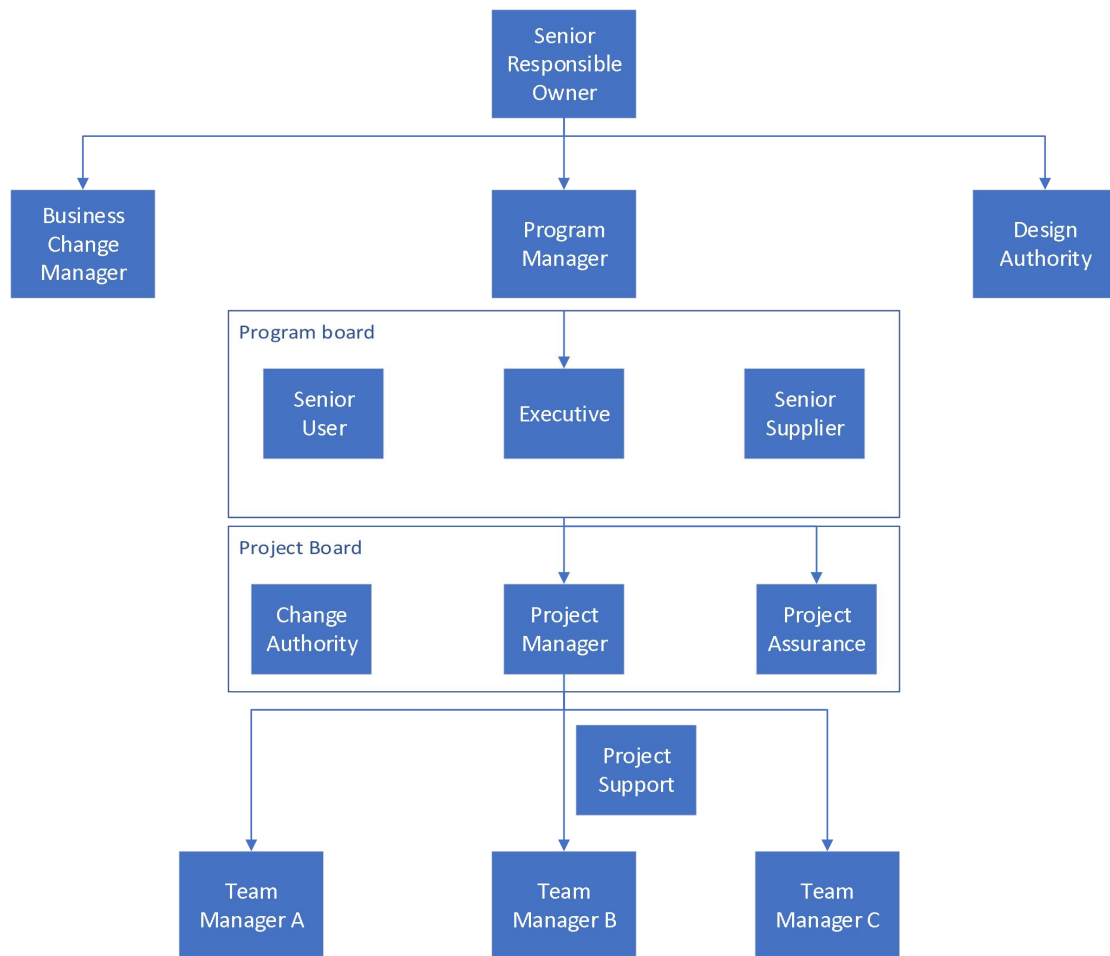
6. Outline solution

Context diagram
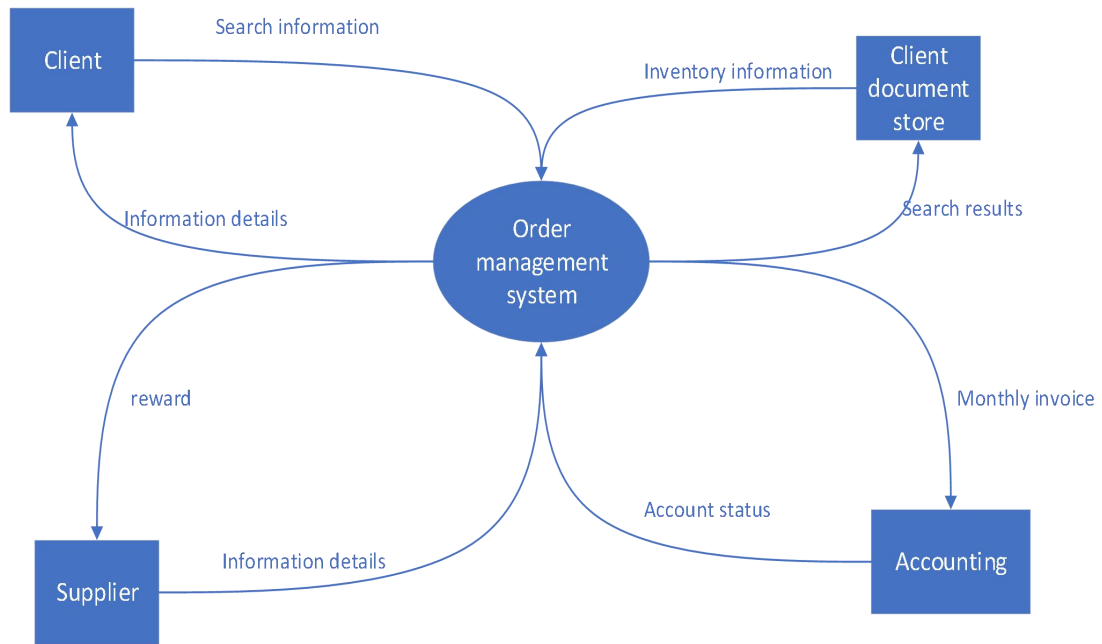
High-level architecture diagram

7. Key risks

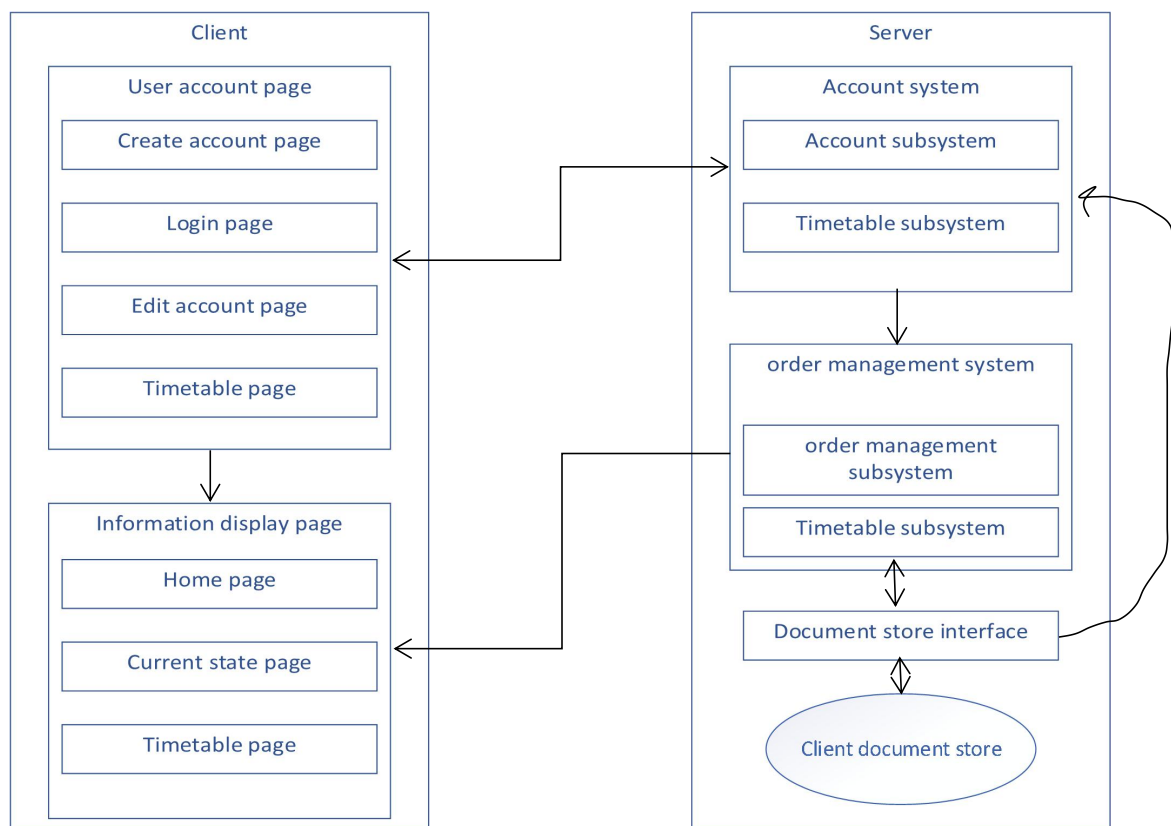|											
					GSC Risk Register						
Risk Identifier	**Risk author**	**Date registered**	**Risk category**	**Risk description**	**probability impact**	**Proximity**	**Risk response category**	**Risk response**	**Risk status**	**Risk owner**	**Risk actionee**
1	Julie	1-6-2018	estimation risks	start-up capital is not enough	high	immediate	avoid	make budget surplus	active	business change manager	Julie
2	Alex	1-6-2018	requirements risks	the design results cannot meet stakeholders' requirements	medium	during design phase	reduce	complete review design module	active	Design authority	Alex
3	Jay	1-6-2018	people risks	lack of expert to provide IT support	medium	immediate	reduce	recruit staff	active	program manager	Jay
4	Yang	1-6-2018	organisational risks	project manager is busy and may not attend the meeting every time	medium	immediate	reduce	give more rights to project support and team manager	active	project manager	Jay
5	Jay	1-6-2018	organisational risks	the change in GSC project cannot be delivered correctly	medium	during implementation phase	reduce	program manager should have sufficient working experience	active	program manager	Jay

6	Jay	2-6-2018	people risks	need more professional staff to maintain new information system	medium	future	reduce	train saff and make recruitm ent	closed	program manager	Jay
7	Eden	3-6-2018	technolo gy risks	require additional space in client information store	low	future	transfer	expand space to meet the demands of client informati on store	closed	project support	Yang
8	Eden	3-6-2018	technolo gy risks	hardware system is out-of-date and it cannot run the new information system	low	future	transfer	update hardware system under the budget	closed	project support	Yang
9	Jay	3-6-2018	people risks	lack of appropriate partner who supports the third party payment function	low	future	transfer	look for working partner in the market	closed	program manager	Jay
10	Jay	3-6-2018	people risks	supplier cannot provide accurate information	low	future	accept	accumul ate contacts and seek cooperati on opportun ities	closed	program manager	Jay

Risk matrix

Risks 1 **Avoid**	possibility			risk3	risk1
	high	*mitigate tolerate*			*unacceptable mitigate*
	medium			risk2, risk4, risk5	
Risks 2,3,4,5,6,7,8,9, **Mitigate**	low		risk10	risk6, risk7, risk8, risk9	
			low	medium	high
Risks 10 **Accept**				impact	

Avoid risk:

The possibility and impact in risk 1 are high. As the estimation risk, it is essential to consider funds and resources before launching GSC project. We use avoid risk strategy and try to overcome it.

Mitigate risk:

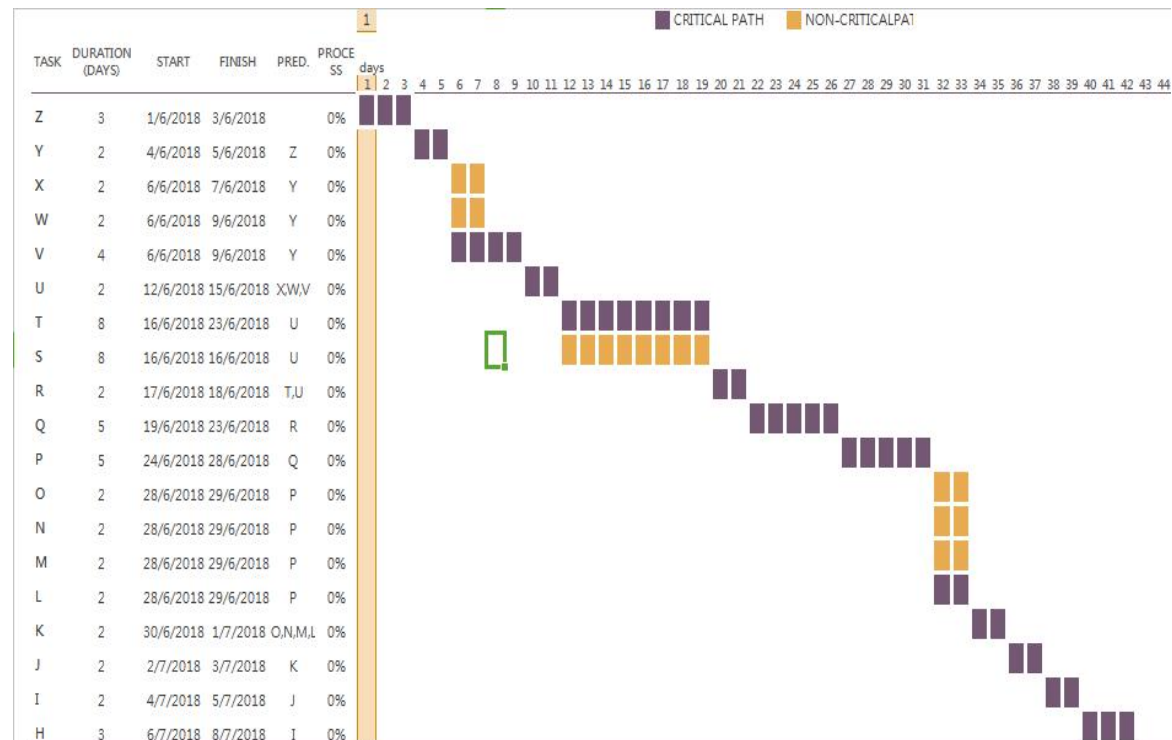The possibility and impact in risk 3 are high and medium respectively. For risk 2, 4, 5, the possibility and impact are medium. For 6,7,8,9, the possibility and impact low and medium. They can be reduced and transferred in GSC project.

Accept risk:

The possibility and impact in risk 10 are both low, we consider to accept this risk as it cannot affect the process of GSC project.

8. Delivery and release planning

GSC Gantt chart

TASK	DURATION (DAYS)	START	FINISH	PRED.	PROCESS
Z	3	1/6/2018	3/6/2018		0%
Y	2	4/6/2018	5/6/2018	Z	0%
X	2	6/6/2018	7/6/2018	Y	0%
W	2	6/6/2018	9/6/2018	Y	0%
V	4	6/6/2018	9/6/2018	Y	0%
U	2	12/6/2018	15/6/2018	X,W,V	0%
T	8	16/6/2018	23/6/2018	U	0%
S	8	16/6/2018	16/6/2018	U	0%
R	2	17/6/2018	18/6/2018	T,U	0%
Q	5	19/6/2018	23/6/2018	R	0%
P	5	24/6/2018	28/6/2018	Q	0%
O	2	28/6/2018	29/6/2018	P	0%
N	2	28/6/2018	29/6/2018	P	0%
M	2	28/6/2018	29/6/2018	P	0%
L	2	28/6/2018	29/6/2018	P	0%
K	2	30/6/2018	1/7/2018	O,N,M,L	0%
J	2	2/7/2018	3/7/2018	K	0%
I	2	4/7/2018	5/7/2018	J	0%
H	3	6/7/2018	8/7/2018	I	0%

9. Project control

Project name	GSC project
Project manager	Yang
1.1 Control phase criteria	
Time	1/6/2018
Scope	Make interviews with stakeholders Complete project management documentation
Budget	Preliminary costs are available and ample

Stakeholders	Senior responsible owner agrees to launch this project Key stakeholders are defined
Resources	There are sufficient resources in 1.2 control phase
Quality	The project management documentation initially has been complete initially

1.2 Control phase criteria	
Time	6/6/2018
Scope	Get requirements and plan the project
Budget	Project budget is defined and reasonable
Progress	The launch and finish dates in 1.1 control phase are defined and agreed
Stakeholders	Project manager control the whole process
Resources	Technical resources meet the demands of stakeholders and system
Quality	The project management documentation has been completed entirely and signed-off

1.3 Control criteria	
Time	12/6/2018
Scope	Design the project
Budget	Update the project budget

Progress	The launch and finish dates in 1.2 control phase are defined and agreed
Stakeholders	Project manager controls the whole process, and works with key stakeholders
Resources	Technical resources meet the demands of design
Quality	Design module is completed

1.4 Control criteria

Time	17/6/2018
Scope	Implement the project
Budget	Estimate costs and update the project budget
Progress	The launch and finish dates in 1.3 control phase are defined and agreed
Stakeholders	Project manager controls the whole process, and works with key stakeholders
Resources	Technical resources meet the demands of implementation
Quality	Database is built and program is coded

1.5 Control criteria

Time	24/6/2018
Scope	Test the system and deliver report
Budget	Estimate costs and update the project budget

Progress	The launch and finish dates in 1.4 control phase are defined and agreed
Stakeholders	Project manager controls the whole process, and works with key stakeholders
Resources	Technical resources meet the demands of testing
Quality	Deliver the testing report and update the system
1.6 Control criteria	
Time	30/6/2018
Scope	Submit the project and train users
Budget	Update the project budget and make settlement
Progress	The launch and finish dates in 1.5 control phase are defined and agreed
Stakeholders	Project manager controls the whole process, and works with key stakeholders
Resources	Technical resources and project resources are available
Quality	Complete and sign-off the post-implementation report

10. Project costs

			GSC project costs					
ID	Phase	Hours	Labor cost	Material cost	Travel cost	Fixed cost	Other costs	Budget
1	phase 1.1	40	$1,000.00	$100.00	$50.00	$100.00	$50.00	$1,300.00
2	phase 1.2	80	$3,000.00	$300.00	$100.00	$200.00	$100.00	$3,700.00
3	phase 1.3	144	$8,000.00	$500.00	$180.00	$800.00	$200.00	$9,680.00
4	phase 1.4	80	$5,000.00	$300.00	$100.00	$500.00	$100.00	$6,000.00
5	phase 1.5	80	$4,000.00	$300.00	$100.00	$500.00	$100.00	$5,000.00
6	phase 1.6	56	$1,000.00	$200.00	$70.00	$300.00	$70.00	$1,640.00
7	total	480	$22,000.00	$1,700.00	$600.00	$2,400.00	$620.00	$27,320.00

	GSC risk costs	
ID	Risk category	Cost
1	Estimation risks	$500.00
2	Requirement risks	$200.00
3	People risks	$100.00
4	Organizational risks	$100.00

| 5 | Technology risks | $800.00 |
| 6 | total | $1,700.00 |

Total budget = project costs + risk costs = $27,320.00 + $1,700.00 =

$29,020.00

References

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