1. PROJECT CHARTER

Background study

Just Storage Company is the largest data storing business in Hong Kong since 2006. Within a span of six years JSC has over 500 clients and penetrated in all the industries from commercial, industrial, marketing, hotel, vacation industry, holiday, show biz, IT, import-export to logistics. They have a dedicated network for storage of record databases and diverse types of applications. The storage is co-ordinated in the central document management system (DMS) every 24 hours. JSC have the largest online warehouse information storage capability which none of his competitors have.

PEST ANALYSIS

Political – these factors control the level to which the government may sway the economy, or some industries with favourable tax policies, economic policies, yearly budget, and trade tariffs which has an effect on the professional atmosphere to a great degree. Hong Kong has a low taxation policy, an almost free harbour trade, and a well recognised intercontinental economic market (Jiang Guorong, 2003).

Economic – the performance of an economy affects the long term performance of a company. Factors include economic growth, rate of interest, exchange rates, inflation rate etc.

Social – it measures the social environment in the market like culture, demography, population etc. higher trends in social influences affect claim for a company’s merchandise.

Technological - this factor pertains to innovation of new technology and which affect the operations. It also includes new and improved R&D, automation of activities etc.

SWOT Analysis

Strength

1. Knowledge – competitors have knowledge but they lack knowledge in systems, network, programming and data management.
2. Relationship marketing – knowing and maintaining good relations with customers.
3. History – good background history of loyalty with customers and maintaining good quality product

Weaknesses

1. Price and volume – prices are less for more volume
2. Brand power – they do not have huge front page advertisement in newspaper, but have good word of mouth in the market.

Opportunities

1. Training – major companies do not provide training on new technologies. But as the system becomes complex training is essential.
2. Service – their target market needs more service than competitors.

Threats

1. Price oriented store – when the advertisement is about low price, customers are doubtful that they are not getting good products
2. Computers – volume buying of computers, customers are less likely to buy their services

*Porter’s Five Forces*

Risk of new access:

- Not very much expensive to enter this market
- Understanding needed but there are ample number of resourceful person like Jack Wong, training is also available at the same time.
- Economies of scale
- Cost benefit since Jack Wong is in this business for a long time.
- No tech defence
- Low obstacles to admission
- New entrance quite stress-free

Supplier Power:

- Moderate number of supplier
- Dealers are large
- Similar products

Threat of replacement

- Some cross merchandise switch
- Capability to import

Buyer power:

- Huge market of buyers – banks and insurance companies
- Very large order from buyers
- Homogeneous product
- High customer ability

Competitive Rivalry

- Many opponents
- Small switching cost
- Low customer allegiance
- High expenditures of exiting the market

*Stakeholder involvement*

Stakeholders are entities and establishments participating in the project, or their concern positively or negatively affect project implementation or fruitful project conclusion. The project administration group identifies the patrons, determines their wishes and hopes and manages their expectation for positive project completion.

Key stakeholders in projects are:

- Project manager – accountable for supervision of the scheme
- Customer – any entity or company that uses the produce.
- Performing association – an association whose staff completes the project
- Sponsor – any group, company or person who funds the project.
Goals and Deliverables

Deliverables are quantifiable results, consequences, or precise products that are created to complete the assignment. Deliverables like goals should be measurable. JSC’s goals is to improve IT on a specific day, so to start documenting some of the important deliverables are as follows:

- Contract with a local network provider
- Contact with IT specialist to check all printer, switches, Pcs, network, server and coordinate
- Assist the account representative to with formulating a budget
- Assist with formulating a project hour
- Assist with proposal development
- Conduct internal research
- Implement high speed network in all the offices of JSC
- All unnecessary soft wares must be removed from Desktops computer
- All logins and password must be changed with unique login ids and passwords
- Data protection soft wares must be installed
- All applications and soft wares must be updated and keep check records regularly so that there is no discrepancy in data storage
- Provide training to staff about the nature and confidentiality of maintaining and securing data
- On-going training must be provided to keep the staff updated
- Checking of access and log in every day
- DBS must be centrally operated by IT managers and all the staff won’t have access to master copy

Critical success factor

Communication is the right info to the right individual at the right time and is a critical success factor. Project managers must possess good communication skills – good verbal and writing skills (Heldman, 2011). CSF is the strategy employed to achieve success. They include the following:

- The project’s objectives, deliverables and benefits are defined.
- A sponsor sustains support and commitment to the project
- The stakeholders are regularly consulted and keep them updated of the project status
- A supportive team is created and right skills are utilized
- A carefully crafted and scheduled plan is framed and updated
- Everyone must understand the control process for monitoring and tracking
- The WBS is maintained as per the plan
- Project sign off and approval procedures are followed
- Project hazards are reread and supervised
- Project matters are resolved at the suitable level of administration
- Reportage and communication processes are recognized and functioning well.

These include the implements, methods, procedures and actions to outline, strategize, implement and conclude the project on time and on allotted expense outlay (Young, 2007).

Resources
Human resource management - these include salaries and cost of benefits such as vacation and health insurance. Salaries or the contracting fees are the largest portion of project expenses. Information technology projects require specialized folks with skills which requires very high price (Heldman, 2011). Top management has given some authority to project managers. There are varieties of human resource management tools some of which include tracking resources, resource levelling, over allocated resources and so on (Schwalbe, 2013).

Cost supervision – Project cost supervision comprises of procedures that the assignment crew completes a project within an sanctioned budget. Project executives must ensure that their schemes are well planned, have exact time and cost estimations and a genuine budget plan to approve. Project manager’s job is to satisfy the stakeholders with a continuous effort to reduce and control cost (Schwalbe, 2013).

2. SCOPE PLANNING AND MANAGEMENT

Scope Management Plan

Scope forecasting is the method of writing scope report for forthcoming venture decision making and to establish if the project has been finished fruitfully. The scope testimonial becomes the basis of an arrangement amongst the mission crew and mission consumer and detects mission goals and project targeted delivery of the same.

Contributions to Scope Planning

1. Product narrative – the product narrative highlights the product features or facilities offered by the project. The yield report has fewer details in the early phase and more details in a later phase. The product account should also note the association between product and services being fashioned and the commercial requirement or other incentive that provided the necessary impetus to the project.

2. Project charter – it officially identifies the presence of the project. It shall have to comprise of the following:
   a. The business objective the project was undertaken to fulfil
   b. Product depiction

The external project manager issues the project charter according to the requirement of the project. It authorizes the project manager to apply for resources required for the functioning of the project.

3. Constraints – it limits the project team’s choices. When a project is done under agreement, contractual provision is constraints.

4. Assumptions – it plans objectives which are considered true, real and certain. Assumptions involve risk.

Tools and techniques

1. Product study - Product study helps in better understanding of the products of the project. It involves systems such as systems engineering, value engineering, value analysis, function analysis, and quality function deployment.

2. Benefit / cost analysis – It includes estimation of tangible and intangible costs (outlays) and benefits (returns) of various project options, and then using monetary actions such as return on investment or payback period to evaluate the comparative attraction of the known substitutes.
3. Substitutes identification - various management techniques used, the most used ones are brainstorming and lateral thinking.

4. Expert judgement - Expert judgment evaluate the contributions to the system. Such proficiency are delivered by group or individual with specific knowledge or training and is available from:
   - Other divisions within the business.
   - Specialists.
   - Expert and technical relations.
   - Business groups.

**Outputs**

1. Scope statement – It provides base for forthcoming project decisions and for approving common project scope understanding among the stakeholders.
2. Supporting details - Supporting detail are documented for other project management procedures.
3. Scope management plan - This document defines management of project scope and its integration into the project. It also includes stability of the project scope, possible changes, frequency of change, and its quantity. It also includes recognition of scope changes which is difficult yet essential, especially when the product features are expanded. They are formal or informal, highly comprehensive or broadly structured depending on project requirement.

**Scope Authentication**

Scope verification is formally of approval of the project scope by the stakeholders – sponsors, clients and customers. It reviews work product and outcomes to confirm that all are completed correctly.

**Contributions to scope verification**

1. Job outcomes – fully or partially completion of deliverables, expenses or commitments etc. are productivity of project plan implementation.
2. Product records – documentation of project’s product are accessible for evaluation. The term describes the plans, details, technical documents, drawing etc.

**Devices for Scope Verification**

Assessment – it includes gauging, scrutinising, testing, to decide whether outcomes follow the requirements. Assessments are called evaluations, product reviews, audits, walk through.

**Output for Scope Authentication**

Formal approval – documentation of the client approval are prepared and distributed. Such approval are provisional at the finish of phase.

3. PROJECT PLAN AND TIME MANAGEMENT
As soon as the project manager receives instruction, he/she has to produce a precise, instructive and organized document that is circulated among all project team members and the stakeholders. This plan is called the Project Management Plan (PMP).

PMP is used by the project manager and the team. It enlists all the stages and the main factors, standards, requirements, especially duration, budget, and quality of the project. The content of the PMP varies depending on the project. A brief project plan is given below:

**General**

1. Foreword
2. Subjects, circulation and change record
3. Summary
   - Project chronicle
   - Project past records
4. Project goals and purposes – Business case studies
5. Overall explanation
   - Scope
   - Project prerequisite
   - Project safety and confidentiality
   - Project management viewpoint
   - Management reporting system
6. Agenda management
   - Programme technique
   - Agenda software
   - Project life cycle
   - Main dates
   - Milestones and milestone slip chart
   - Histogram and network diagram
7. Project Organization
8. Project Resource Management
9. Project Team Organization
   - Project staff directory
   - Organizational chart
   - Terms of reference (TOR)
     - For workforce
     - For project manager
     - For committees and working group
10. Delivery requirement
    - Location requirement and condition
    - Freight requirement
    - Main limitations
11. Project approval mandatory and permission bounds
12. Project Synchronisation
13. Project application plan
14. Approval process
15. Obtaining strategy
   A. Cultural and environmental restraints
   B. Governmental limitations
16. Agreement management
17. Communications management
18. Structure management
   A. Structure control requirements
   B. Structure management system
19. Financial Management
20. Risk Management
21. Technical management
22. Tests and evaluation - Warranties and guarantees
23. Consistency management
   A. Availability, reliability and maintainability (ARM)
   B. Quality management
24. Health and safety management
25. Ecological concerns
26. Combined logistics support management
27. Finish process (Lester, 2013)

GANTT chart

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# CRM and CKM

- **Recognise means client interaction following and knowledge collecting**: 37 14 37 10 (95%)
- **Review appropriate IT structure**: 48 14 48 10 (95%)
- **Review existing software**: 17 14 17 10 (95%)
- **Review existing IT companies**: 22 14 20 12 (95%)
- **Prepare a budget and submit to stakeholder consent**: 25 7 23 5 (90%)
- **Accepted budget - examine stage completion**: 28 0 28 0 (100%)
- **Resolve purchase, form or contract out alternate**: 33 7 35 5 (95%)
- **Decide and document the planned "To be process" for CRM and CKM**: 40 28 38 30 (100%)
- **Accepted the "To be process"**: 44 7 36 5 (100%)
- **Analyse, assess, and select required IT structure**: 36 7 38 7 (98%)
- **Complete infrastructure diagram**: 29 7 28 7 (95%)
- **Full workflow diagram and structure and controls for presentation to management**: 52 28 55 20 (98%)
- **Project team analyse the design stage conclusion**: 48 7 50 5 (100%)
- **Stakeholder authorisation of conclusion of design stage**: 54 5 52 7 (100%)
Critical Path

Start Date
15-06-2015

Finish Date
09-03-2016

Days to Completion
192.67

Times (in Days)

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**Activity network diagram**

- **Project start**
- **Project aims and objectives**
- **General description**
- **Analysis phase**
- **System integration**
- **Environmental issues**
- **Close out procedure**
- **Design phase**
- **Shipping requirements**
- **Major risk perceived**
- **Project team organization**
4. QUALITY PLANNING AND MANAGEMENT

Quality management endorses that the project meets the necessities set forward to be met at the beginning. Quality planning determines the relevant quality criterions and identify their ways to satisfy them. Project quality management addresses both the execution of the project and the final product. Quality is the total characteristics of an article that has aptitude to fulfil specified or implicit goals. The project management team must be aware of modern quality management techniques. Following are the examples of quality management:

- **Customer satisfaction** – understanding, managing and meeting expectation of customers. This requires conformance to specification and fit for use.
- **Prevent over inspection** – price of circumventing errors is cheaper then amending them.
- **Management responsibility** – involvement of all crew & affiliates leads to success, but the organisation must arrange for the assets for success.
- **Phased processes** – As described by Deming the plan-do-check-act cycle is similar to phases and processes of Project Management Process.

Quality planning

Quality planning categorises pertinent quality principles relevant as well as determine their satisfaction process. It is the main easing process during project planning.

**Contributions to quality planning**

Quality policy – is the intention and course of the top management regarding quality. The policy if often accepted “as is” to use in venture. If the organization does not have a quality policy or if the venture encompasses several establishments, then the assignment team must establish an indigenous quality policy. The project stakeholders must be made aware of the new quality guidelines.
Scope statement – it is the prime contribution to quality preparation. It enumerates major project goals and project targets which are important to investor requirement.

Product description – it contain facts regarding technical and additional issues that impact quality planning.

Standards and regulations – the project team must undertake area particular standards or rules.

Other procedure outcomes – knowledge in other processes is a part of project quality planning.

**Devices of Quality Planning**

Benefit/cost analysis – the quality benefit process considers benefits/ cost exchanges. The principal advantage of achieving the stipulated quality is less amendment, which increases output, lower costs, and higher investor contentment. The cost of meeting quality requirements is the expenditure related with quality management actions.

Benchmarking – it involves comparing definite or scheduled project practices with other projects to create concepts for enhancement and deliver standards to measure performance. The other projects are in same or other organization or same or other application.

Flow chart – it is a diagram which shows relation of various systems. Flow chart method used in quality management includes following:

- Cause and effect diagram – it is also called Ishikawa or fish bone diagram that shows numerous reasons and sub causes and their problems and effects.
- System of process flow chart – which shows interrelation of systems.

Flowchart helps the project team to anticipate their quality problems and helps develop measures to resolve them.

Design experiment – experiment design identify variables which influence the result. The method is used on project issue such as cost and planned swaps. An appropriate experiment design allows determining solutions from a restricted number of cases.

**Yields from Quality Planning**

Quality management plan – it describes the implementation of excellence policy. In ISO 9000 terminology, it is an organized, structured, responsible, procedural, processed and resourced need for implementation of quality management. QMP offers contribution to mission plan, attend to quality control, quality guarantee, and quality development for the project. QMP is official or unofficial, described, based on the needs of the project.

Operational definition – it describes quality control process. It is also defined as metrics in a few applications. The project management team must decides the start and finish time of the project and how the deliverables will be measured.

Checklist – it is a organised device, industry or action specific, used to prove the required steps performed or not. Checklists are simple or complex. They are phrased or interrogatives. Some organizations follow standardized checklist to ensure consistent performed activities.

Inputs to other process – the quality preparation procedure recognises goings-on in other parts.
5. CHANGE CONTROL AND PROJECT RISK MANAGEMENT

Change Control

A Scope change control is about (a.) inducing the features to confirm that variations are helpful, (b) determine that scope change has happened, (c) dealing with the occurrence of real change. Scope change control are combined with time, cost, quality control and control processes.

Inputs

1. Work breakdown structure – work break down assembly is a deliverable oriented alliance of mission element that systematises and outlines total opportunity of the project. Work not in WBS is outside the scope of project. WBS is used to ensure mutual appreciation of project scope.
2. Performance reports – it involves gathering and distribution of performance information to stakeholders with data that assets are being used effectively to accomplish mission purposes. This process involves:
   - Status report – to designate present situation of the project
   - Progress report – to define the accomplishments of the project team
   - Forecasting – expecting upcoming development status

Performance report delivers data on scope, agenda, budget, and quality. Many projects require data on risk and procurement.

3. Change requests – may be available in different formats – verbal or printed, direct or indirect, external or internal, lawfully authorised or non-compulsory. Changes require increasing the scope or decreasing it. Majority of the change requests are the outcome of:
   - An outside event i.e. modification in administration rule
   - A fault in explaining the scope of the product
   - A fault in explaining the scope of the project
   - A change in value addition

4. Scope management plan - This defines supervision of project scope and incorporation of scope deviations into the project. It also includes a valuation of the steadiness of the project possibility - likely changes, frequency of change, and its quantity.

Tools and Techniques

1. Scope change control system – describes the processes to change the project scope. It contains book-keeping, tracing system and approval level for approving changes. When the project has been completed under agreement the scope change control system must conform to relevant contractual necessities.
2. Performance measurement – it assess the magnitude of any variation which occurs. It determines the causes of variance and decide the corrective actions required for the variance.
3. Additional planning – few ventures run as per the plan. Prospective scope changes require modification to WBS or study of alternate approaches.

Outputs
1. Scope changes – scope modification is alteration to mutually agreed scope as defined by WBS. Scope change requires adjustment to price, time, value, or other mission purposes. Scope changes are the feedback through preparation procedures, technological and forecasting papers are up to dated and participants are informed.

2. Corrective action – corrective action is the activity with the objective of bringing project performance in congruence with the project strategy.

3. Lessons learned – the reasons of variance, reason for chosen remedial measures, and other categories of lesson learned from scope changes control need to be recognized so that the data becomes part of old databank for any future reference (Duncan, 1996)

Risk Management

Risk management identifies, analyses, and respond to project risks. It maximizes the positive actions and minimizes the effects of adverse actions.

Risk identification

Risk identification determine which risks could affect the project and document their features. It identifies both in-house and outside risks. In-house risks are controlled by the mission crew but outside menaces are beyond the control of team.

Inputs to Risk identification

Product report – the type of product has impact on identified risks. Products with proven technology has less risk than new or innovative products. Risks associated with project product involve cost and timetable influence.

Other planning outputs – the outputs in other knowledge areas identify the following risks:

- Work break down structure – non-standard methods to goals offer chances that are not obvious from high level deliverables documented in the scope declaration.
- Price and period approximations – competitive approximations with restricted quantity of info encompass more hazard.
- Staff planning – crew fellows have exclusive expertise that is difficult to switch and have other obligations
- Procurement management plan – sluggish local market offer opportunities to reduce contract cost

Historical information – the history of previous projects help identify prospective risks and measures to minimize them. Historical information are available from scheme records, market database and project crew familiarity.

Tools and techniques for risk identification

Checklist – they are prearranged from project context, process output, technology or product issues, and internal team members.

Flow chart as discussed above

Interviewing – risk oriented interviews with stakeholders, helps identify risk. Records of previous projects interviews are also helpful.

Yields from risk identification
Sources of risk – they are usually unpredictable stakeholder’s action, unreliable estimates, poor team performance record which mark the project for better or worse. Common sources of risks are: requirement changes, error in design, oversights and misinterpretations, poorly demarcated tasks and accountabilities, unclear estimation, insufficient skill of staffs.

Potential risk events – they are distinct incidences like flood, or natural disaster, or any team member who might affect the project. Some common risk could be development of new technology natural disaster etc.

Risk symptoms – they are sometimes called triggers are appearances of actual risk actions.

Inputs to other processes – risk documentation ascertain the necessity for additional activity in alternative areas.

Risk response control

Risk response control react to hazardous activities during the duration of the project. Changes identify, quantify and respond.

Contributions to risk response control

Risk management plan

Real hazard actions – the project organisation team identifies the sources of risks and develop responses to implement.

Added risk identification – after the measurement of project performance, potential risks and sources are identified which didn’t surface before.

Tools and techniques

Workarounds – they are unplanned responses to negative risks.

Added risk response evolvements – if the danger is not predicted the response could be wrong.

Outputs

Corrective action – consists of executing deliberate risk reactions

Updates to risk administration plan – if the predicted plan fails to happen, then the estimates of probabilities, values and other aspects of risk management must be updated.

6. Assumptions

Assumptions are the belief that the project is true in future. Assumptions are supposed to be true but not end up being true. Assumptions are important for risk management. Many project activities, events and conditions are considered based on current situation, general knowledge, repetitive response and rational anticipations. Assumptions are not fundamentally project risks. The validity of the hypothesis is monitored during planning activities, and a sound decision and direction for the entire project (Hill, 2009).

Assumptions are:

- The project must start on or before 15th June 2015.
• Most of the team members are expected to be full time
• Each action be based on finish to start restraint, except if mission crew advise it to be based on further restriction types
• Project schedule is expected as five days in a week and eight hours per day. Sometimes 7 days in a week in case of contingencies.
• The allotted assets are accessible and contingency capitals will be allotted to backfill the actual resources.
• The main goal is to finish the allotted job as prearranged.
• Daily cost per capitals is expected to be:
  a. JSC: HK$5,000 per day
  b. IT Solution: HK$10,000 per day
References


