



INTEGRATION OF SUPPLY CHAIN AND DIGITIZATION IN ASSAM

BY ADITYA SAIKIA

UNDER THE GUIDANCE OF
MR. HEMANT KUMAR MISHRA

OBJECTIVE

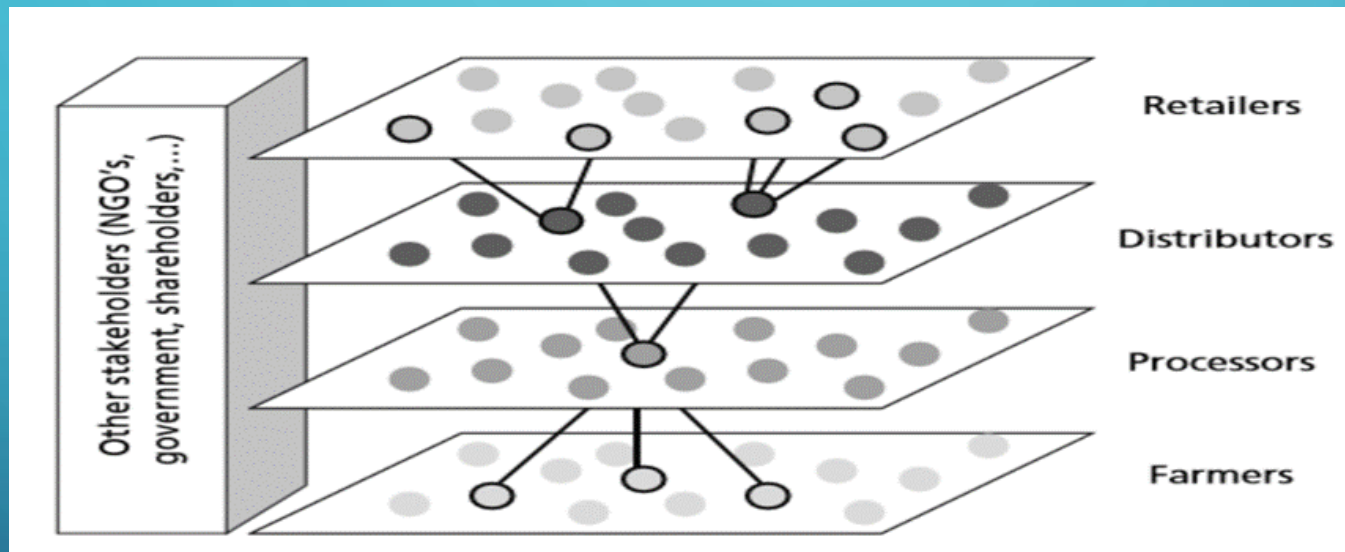
Why integration of supply chain and digitalisation is required in Assam?

- Lockdown has cause disrupted crop harvesting.
- Migrant workers.
- Low productivity in agriculture , crops been destroyed by flood.

INTRODUCTION

- Supply chain management is the management of activities done to maximize customer value to achieve a sustainable advantage in competition.
- The integrated supply chains include coordinated linkages between manufacturers, traders, processors and purchasers provided detailed information on what and how many varieties to be manufactures at the time of delivery with the quality and safety condition in that price.

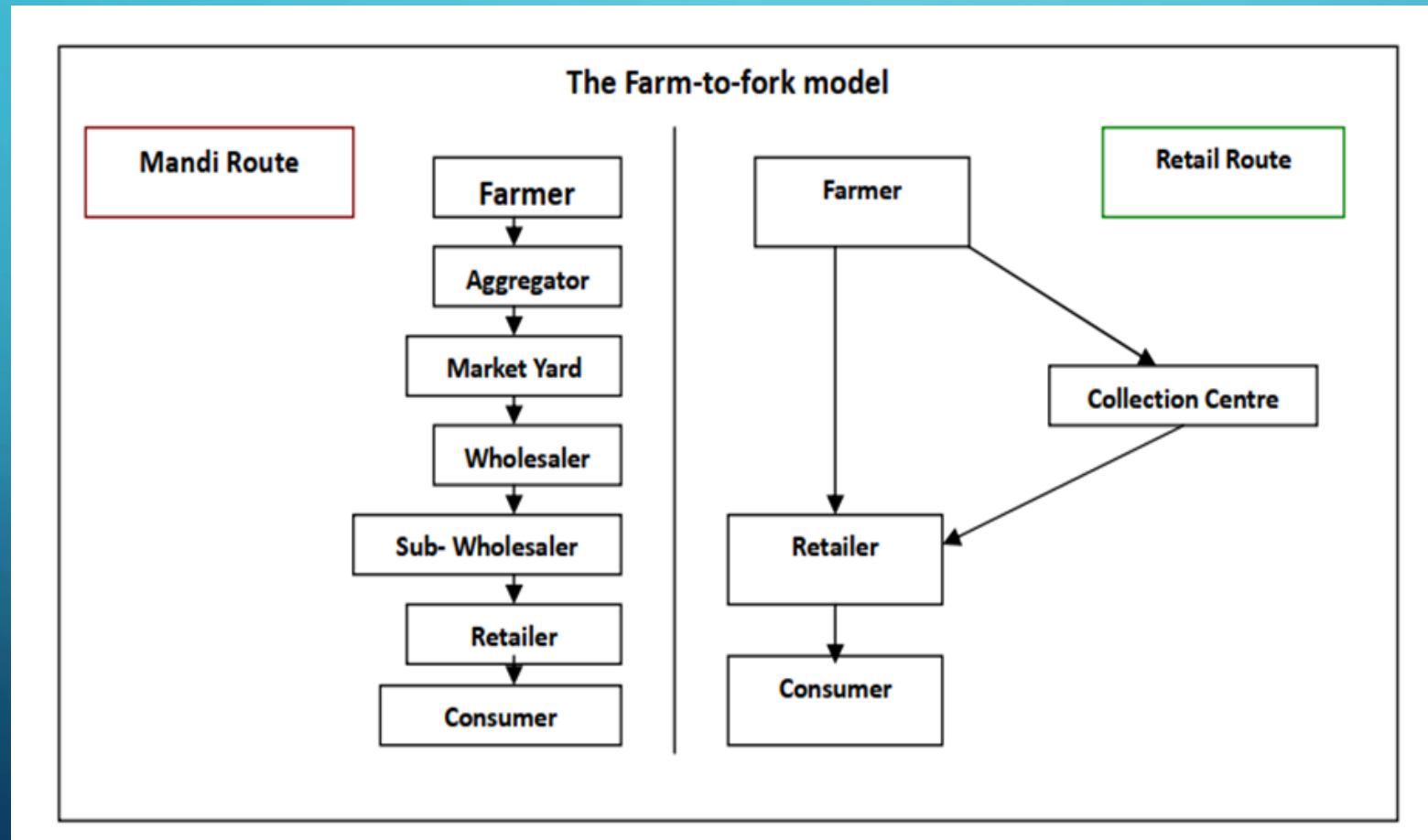
AGRICULTURE SUPPLY CHAIN NETWORKS



CONTROL OF SUPPLY CHAIN RELATED PROBLEMS

- Poor information on the price signal pass down to farmers leading to an increase or decrease in the quality supplied or needed
- Failure to control the supply chain in India limits farmers to achieving mandis
- Most intermediaries contributing to price changes allowing price disparities to be paid by the farmer and the final customer
- Knowledge of available prices, supplies and stocks is more to middleman than to farmer and customer alike
- Lack of resources for utilities and storage
- No protection on the move top cover the products
- Under developed supply chain for right demand indications

SUPPLY CHAIN IN ORGANIZED RETAIL ENTRY



ORGANISED RETAIL ENTRY

- Increasing organized retail size in Asian countries such as Metro cash & carry, Tata chemicals and Field Fresh Foods, Bharti Enterprises, Reliance fresh in India now plays a crucial part in coordinating farmers stock bases and their incorporation into the supply chain for fresh produce retailers
- Procurement systems are evolving to customer demand and competition .

POST HARVEST IMMEDIATE SALES

- Most farmers tend to sell their product immediately after the harvest. Around the moment low prices prevail. Indian markets are swamped because of large supplies in season post-harvest. Traders also use this situation to their benefits. About 60-80% in the first quarter of the harvest season, food grains are already on the market.

The country's agrarian supply chain management system its drawbacks are as follows

- Insufficiency of the institutional marketing system and producer organization
- Array of Business charges
- Nature of marketing malpractices
- Lack of Industry accurate and updated details.
- Small marketable surplus with a large product range
- Lack of product grading and standardization
- Lacking fast transport
- Monopolistic business character due to excessive trade union power and to functionaries of the sector.

DIGITIZATION AND ITS IMPLICATION

- ICT is a powerful tool to integrate the production, post-harvest management, value adding and commercialization of agricultural goods.
- ICT domain also covers the efficiency, agronomic aspects, elements of traceability and descriptions of active ingredient quantities, nutritional values etc.
- The technology should be used to maintain a region-specific update and enriched database Agriculture information and timely distributed of seed, selection information, actions relating to monsoon arrival, climate management, etc for farmer.

E- CHOUPAL EXPERIENCE OF ITC

ITC's E-choupal insight ITC Ltd has launched a project for soybean farmers on the electronic market place in the state of Madhya Pradesh. The project owes its success to such factors as the use of local leadership in villages, a sustainable business model with state and corporate collaboration. The embarked technology was easy to reproduced and easy to scalp and customized to the needs of the local farmers. The initiative has helped the growers sustain income rates, removal of intermediaries, creation of easy market access and mutual project ownership.

E GOVERNANCE IN FISHERIES

- The fisher friendly mobile application is a single window solution that is specific for the holistic fishing community shore to shore need, giving vulnerable fishermen immediate access effective, near real time weather information and intelligence facilities, possible fishing areas, oceans state prediction, and information important to the sector. The application represents an accurate and efficient decision for fisheries group with resources helping while taking decision about own personal health and security of their boats and goods fishing and marketing options for their catches. The fisher friend mobile application is developed in collaboration with Wireless reach QUALCOMM and Tata Consultancy on an android Platform available in English Tamil and Telegu at present.

LITERATURE REVIEW

Shared value and responsibility in agriculture

- Short food supply chain as an ethical dimension in this model of value creation, turns into a competitive tool for multifunctional and diverse farms. Both entrepreneurs and consumers share the value created through a short food supply. Farmers have direct relationships and consumers generate a wellness effect linked to localized positive effects. This allows the citizen customer able to buy the range of goods and services provided by the farm and the region.

Agriculture Marketing and Agribusiness Supply chain Issues in Developing Economies

- Fresh produce marketing network in Papua New Guinea seems to be poorly performing. It was suggested that smallholder farmers earn an insufficient amount and share of the chains margin. The standard of the fresh produce and marketed is also assumed to be inferior. The distribution of business knowledge is slow and disadvantageous apart from it the Smallholder farmers and the weak infrastructure causing marketing issues.
- his Supply chain Framework envisages a chain as a process of value creation, whereby all companies link in a chain and align themselves to create value for the chain as a whole. The value of this is argued Creation takes place via firm operations, process integration, logistics and Quality control. It is further argued that all over value creation the information flow supports the chain, and is achieved through vertical integration and managing

Food traceability as an Internal part of logistics management in food and agricultural supply chain.

- This thesis reviews literature on Food traceability system. 62% of studies chosen at random concentrated on growing Europe's argument that Europe is ahead of leading in development and implementation of food traceable system. The key driving forces behind the development of the system were identified.
- More effective and healthier food traceability technology are being developed. System requires the incorporation of multiple supply chain components. Implementation of a traceability program entirely protecting the whole supply chain leads to greater benefits.
- The performance of the entire food traceability chain should be measured against its ultimate target. The ultimate target should include conformity to rules and legislation, health and quality, and happiness of stakeholder groups. The efficacy and success of the food trace

Scope of supply chain management in fruits and vegetables in India

- During post-harvest storage and handling there is a colossal waste due to inadequate bagging without crushing, lack of temperature-controlled vehicles. Establishing a proper fruit and vegetable supply chain network would connect growers, vegetable vendors, self- help groups of growers and women vegetable fruit vendors.

A study on the digitization of supply chains in agriculture

- Good stakeholder collaboration reduces risk, losses and greatly enhances productivity. Loss of food production is less costly than the corresponding rise. ICT is Apps by themselves would not be readily available, usable and acceptable under the condition of farmer. We have to develop farmers. Large-scale government populations should prepare campaigns to zoom in the farmers training familiarity in the use of ICTs.
- ICT is a powerful tool to integrate the production, post-harvest management, value adding and commercialization of agricultural goods. In the Indian sense where land count is small and broad holdings, entering a multitude of smallholder farmers is the path to the future nutrition.

Tops fresh vegetable chain in Thailand

- Around 250 manufactures shipped the items three days a week directly to the store. Post harvest losses were high due to the lack of pre-cooling and refrigerated transported transported. Professional development initiated such as good agricultural practices for crop safety goods. World fresh quality standard has been increase to 98percent.

Mahagrapes

- Mahagrapes is a partnership firm of sixteen grape growers' cooperatives. It acts as facilitator, quality controller, input supplier and service provider to member society
- The success story of Mahagrapes was due to the grape growers been able to linked to foreign markets and have compressed the supply chain. Bringing the precooling technology and the cold storage facilities proved to be an important export resource along with a strong public private partnership. The appearance of Indian horticulture export has become more formal with facilities like extensive network of financial institutes as we as labs

Methodology

- The aim of the paper is to deal with crisis with Agri Food supply Chain in ASSAM which got broke down during Lockdown fighting against pandemic , Low productivity due to flood and lakhs of migrant workers returning to native from various corner of the country for which the explorative study design was conducted with several research articles available in the webpages. Articles were search from different search sites and categorized as per the need and challenges taken by other countries Pre COVID 19 and in India to revive the broken Agri supply chain

Key Findings

- Integrated supply chain
- Digitalization in supply chain
- Mobile Application with regional language

Discussion

- Due to the COVID 19 pandemic the outdated technology has disrupted numerous supply chain around the world. Traceability may fall apart for unexpected reason may be due to some network shutdown. Most procedures revolving around deliveries often run with a paper-based, face to face signature although social distancing mechanism are in place, they can find it difficult if is impossible to enforce causing supply chain to further disrupted. So, adopting to technological advancement which is used for product identification quality and safety calculation, genetic analysis, data processing, geospatial data sharing and data integration will be beneficial for long run. Mobile app serving as versatile method for information to farmers, information such as crops production, post-harvest processing, value addition and marketing combined with weather report and warning alert facilities will help the farmer to procure the lost in advance. Assam State Agriculture Marketing Board has flex the APMC laws where farmers are allowed to open village market bi weekly still digitization is superior than tradition supply chain in terms of pandemic as well as supply chain.

Conclusion

As supply chain has been broken down, free play of demand and supply should be encouraging with removing entry and exit barriers from market should be the priority, promoting standardization and discussing quality and safety concerns creating a clear risk control framework for market development. This can only be possible to achieve with Digitisation of the available knowledge at various supply chain rates. The degree of integration of services depend upon the exchange of knowledge among the players. It is noted that the major players attempt to gain vertical/horizontal integration in different events ending up swallowing up the weak ones. Basic training for users should be given in various platform for accessing to information and e -readiness parameters with awareness related to integration of digital media into governance process in agriculture. One-step-backward and one-step-forward approach with proper information for whom were the ingredients and food/feed obtained? And To whom the products were sold?

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FUNDAMENTALS OF PROJECT PLANNING AND MANAGEMENT

BY ADITYA SAIKIA

COURSE DESCRIPTION

Fundamentals of Project Planning and Management will introduce to basic concepts from project planning, critical path method, network analysis, and simulation for project risk analysis. We will gain an appreciation for what is required in planning and executing large-scale projects and gain an understanding of Agile Project Management principles. Together, we can develop an awareness of some behavioral biases that come to play in project settings and identify how these impacts the planning and execution of a project.

COURSE DESCRIPTION

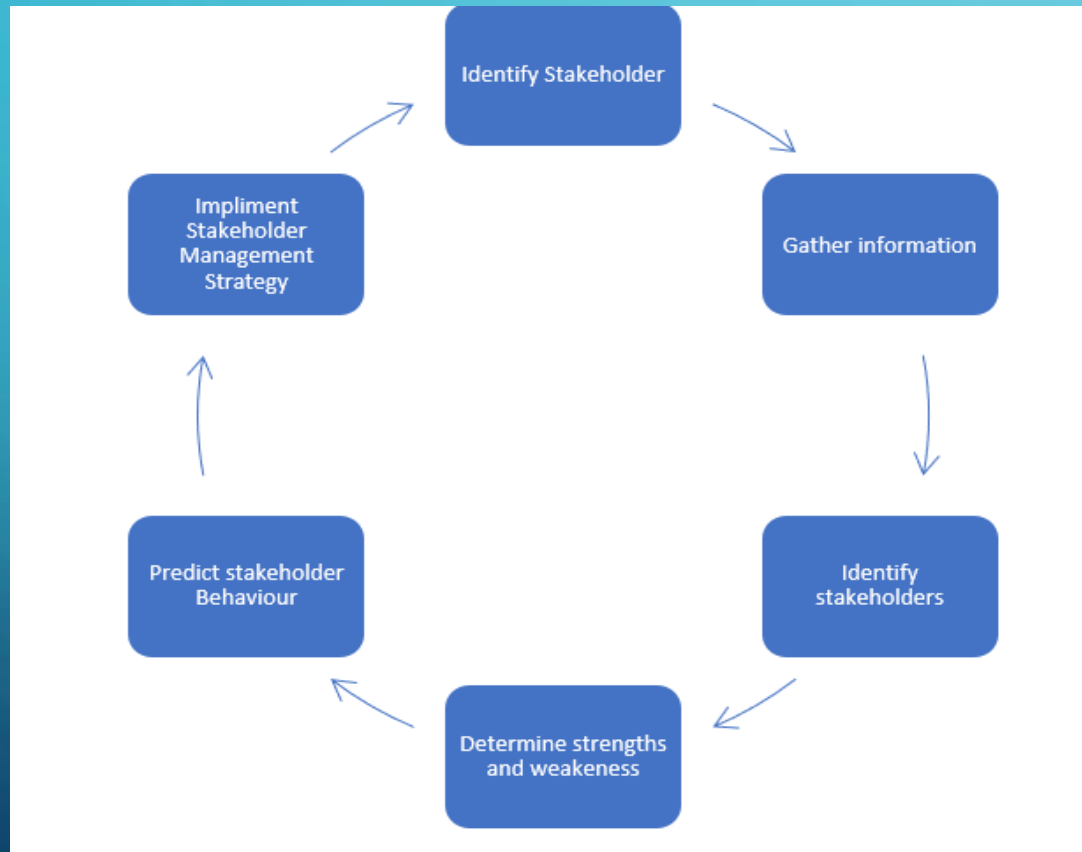
What is project?

- A project is a temporary endeavor undertaken to create a unique product or service.

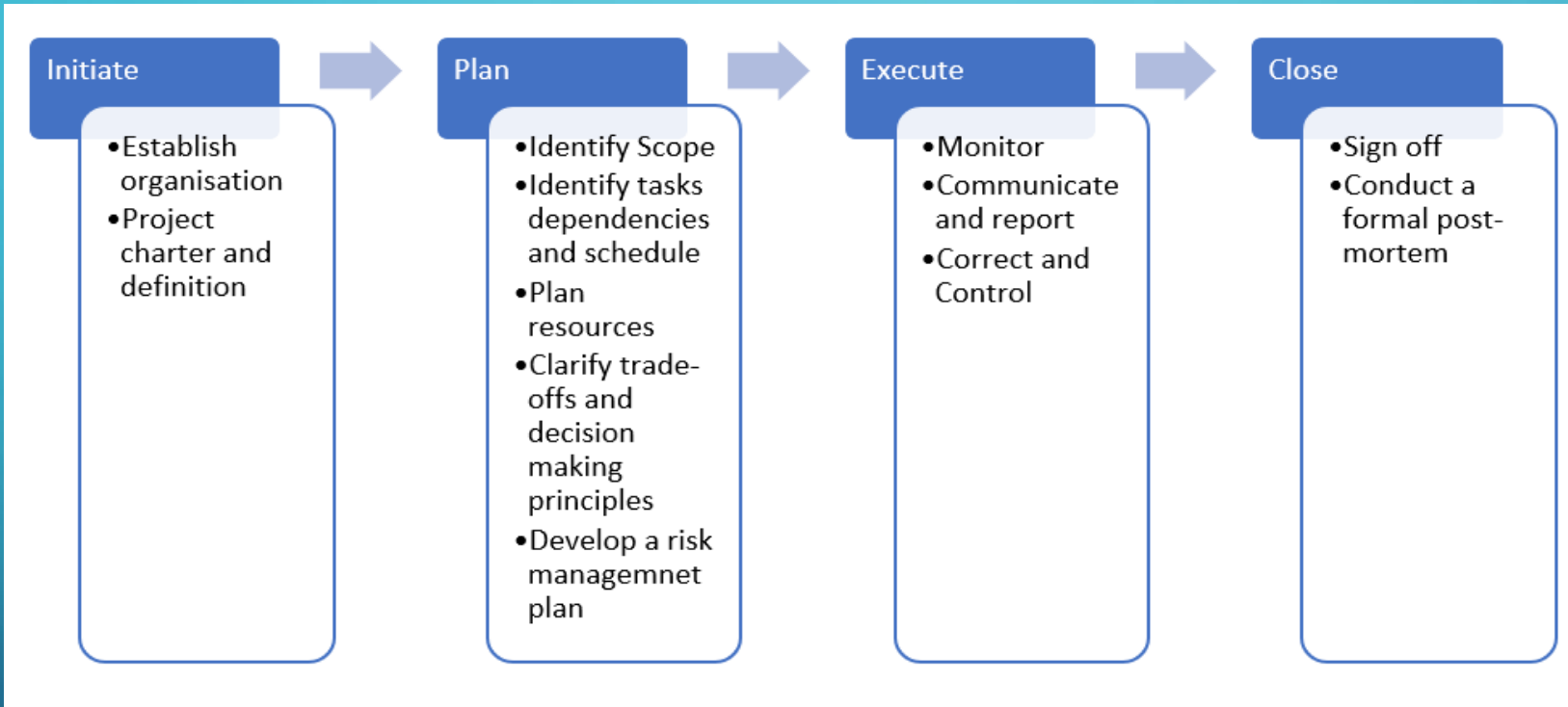
Why does it matter that we clarify what is a Project?

- First if we define a project properly, then we can find the correct tools to use when we plan and execute projects. In addition, projects and processes, they might have different objectives. And therefore, we're going to measure their success on different criteria. Finally, all the projects have the feature that they are supposedly unique. They have certain traits that come with being unique and being temporary. And we can cater for those and we can plan accordingly.
- Three objectives of a project are Scope, time and budget.

Project Organization and Stakeholder



Project life cycle



Project Crashing

- Project duration can be reduced only by shortening critical activities.
- It may be worth spending money to reduce the length of a project.

Project Wrap Up

Project planning is crucial for project success.

- A project plan is a guide, not a schedule of what will exactly happen.
- Follow the project planning cycle.
- Make sure the goal of the project is clear to you.
- Ensure project scope is complete (most crucial part of planning).

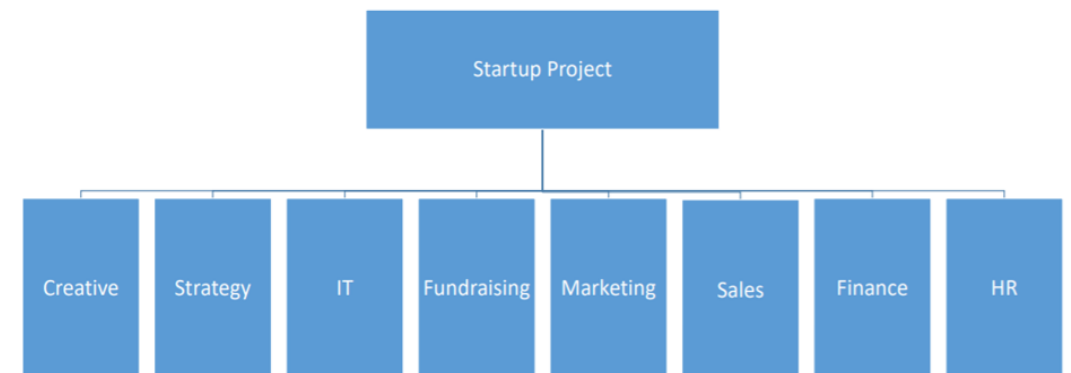
Project Risk Management

Identification	Assessment	Response Planning	Monitoring and control
• Brainstorming checklists, previous projects, experts • Risk Register	• Impact • likelihood • Prioritized Risk Registered	• Identify response strategy to each risk • Assign responsibilities	• Update risk probabilities • Execute planned strategy if events occur

Budget Risks

- Cost estimates are subject to variations.
- Foreseeable risks can cause the actual project cost to different from planned.
- Establish some contingency budget.
- Budget contingency should be allocated at a project not task level (provides more flexibility for the project manager).

Start-up project



Learning Methodology

In this course PPT, Video and Cases all were used

Key learning

- Why it is important to identify a project
- Project cycle
- Risk management
- Budget risks

