Business Process Reengineering

A REPORT ON INFORMATION TECHNOLOGY STRATEGY, DESIGN AND IMPLEMENTATION

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EXECUTIVE SUMMARY

This project was done to understand the current organisation structure of Company and how new IT strategy can be implemented to give a competitive edge to the firm. Through this project, I tried to extend to my theoretical knowledge to look at real life implementation in an organisation. New technologies such as Big data, cloud computing and Blockchain are being adopted in a rapid rate. Through this report, various stakeholder analysis and financial analysis has been done regarding viability of the project.

Data collected mostly from secondary sources like firm website and government websites to get relevant information. For cloud ROI calculation, cost has been calculated from oracle pricing model.

Our design and suggestions mostly hover around cloud computing, as the firm only offers services that to overseas clients. The new infrastructure will help boost the work efficiency as well more secure system. That will provide customer confidence as well as higher revenue. The risk management and change management frameworks has been designed keeping in mind a step by step transition.

Change is essential for a digital agency as every month new technology or tools are coming to market as well as algorithms are changing across digital advertisement platforms and other major channels. To adopt faster and have a streamline structure for service rollout and monitoring it is important to implement cloud computing strategy. Company needs to look out for competitors and have a technological leadership to achieve organisation goals complemented with new IT strategy.

OBJECTIVE

To design and implement the IT Strategy for xxx Ltd.

The detailed description of the objective is as follows:

- Analyze the Digital Agency sector and the organization structure of the company
- Assessment of the different risks in the sector
- Analyzing the functions, applications and technology in the company
- Design Big Data Strategy for the firm
- Design a Cloud Strategy for the company
- Build the Technology Scorecard for the departments
- Develop strategy on the Change Management and Implementation Strategy
- developing the managerial implications and action plan for each stakeholder
- define proposed advantages of the IT implementation

Methodology: following methods have been taken to collect the data for the organization structure and technology scorecard and do the complete parts of the projects (Technology Scorecard, L0 diagram, L1 diagrams, L2 diagrams, IT Strategy Framework, ROI Calculation)

- Secondary research to understand the digital agency organization structure
- Secondary research on industry growth, standards and metrics used
- Collected financial statements from the Ministry of Corporate Affairs website
- Mapped vision, the mission from available public statements given by the company in its website and other social media or public online listing accounts
- L0, L1, L2 diagrams and other organisation diagram were drawn after analysing operations and services at the company.

Data Collection

The data collected for the project was completely through secondary research only. After went through company Ltd. Websites and various social media accounts. Also I collected financials and stakeholder information from Ministry of corporate affairs website. A detailed analysis have been done regarding any requirement of IT strategy implementation and how it will benefit the firm. We analysed various departments including Finance, Sales, and Operations with detailed information for some sub departments. For respective department, analysis has been done regarding department level requirements. Further analysis of interdependency between departments has been explored for detailed IT strategy.

The budget for cloud strategy determined from pricing plan of oracle cloud service and ROI also calculated respectively. I also analysed various risk factors and challenges associated with the implementation and what benefit the stakeholders will be getting.

Industry Analysis

These factors are the external factors impacting company's business as well as Digital agency as a whole.

Political Factors

- Geopolitical relationship due to major income from outsourcing customers
- Tax policy
- More adoption of globalisation in developing countries

- Political action of storage or maintenance of internet data

Economic Factors

- Rapid growth in developing countries
- Increase in disposable income
- More adoption of digital channels by traditional companies
- Economic growth rate
- Inflation or interest rate

Social Factors

- Entrepreneur or digital first business nature
- Increase in online transaction or higher reach to customer
- Increase in preference for high quality service online
- Attitude towards short term and targeted campaigns

Technological Factors

- Changes in the marketing and content platforms and tools
- Changes in digital advertisement format or algorithm
- Increase in number of internet users
- Diversification of traditional business to online

Environmental Factor

- Regulation regarding carbon footprint
- Support for ethical content or marketing campaigns

Legal Factor

- Regulatory support for privacy, data or online consumer rights
- Patents and Intellectual property rights laws
- Regulatory impact of adoption of new technology like 5G or AI
- Regulatory changes for online or overseas transactions or business

Organisation

Vision: With a deep understanding of the stimuli for Digital Marketing basics, customer requirements, and the capability to translate them into customer-desired offerings through leading-edge research.

Mission: To acquire a space in the field of SEO/SMO and become one of the largest companies in the world in providing excellent and unique service.

Business Goals:

Company has a minimal market share of 0.05% from all the digital agencies working in the US, with total revenue of $16.5 bn. Company has a 1.8% average growth rate of over 1.8%, which is lower than the industry standard of 4%. Business Goals of company is as follows:

- Reach Industry growth rate of 4% of the company's growth rate of 1.8%.
- Increase Market Share to 0.5% from the current Market Share of 0.05%.
- Increase Net Profit Margin to 10% from current Profit Margin of 7%.
- To Increase Repeat Business or Customer Retention.

Business Metrics:

Financial Metrics:

- ROI: Net Profit/Investment
- Profit After Tax
- Total Turnover

Marketing Metrics

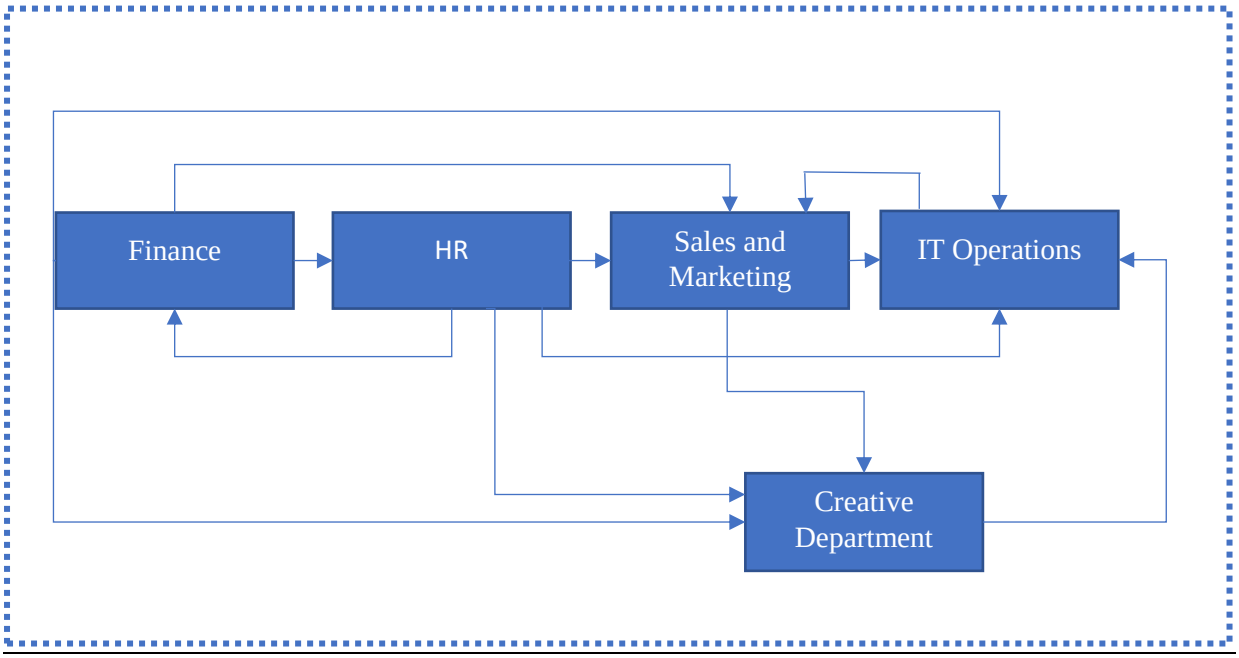
- Net Promoter Score
- Lead-to-Client Conversion Rate
- Market Share

IT Operations Metrics

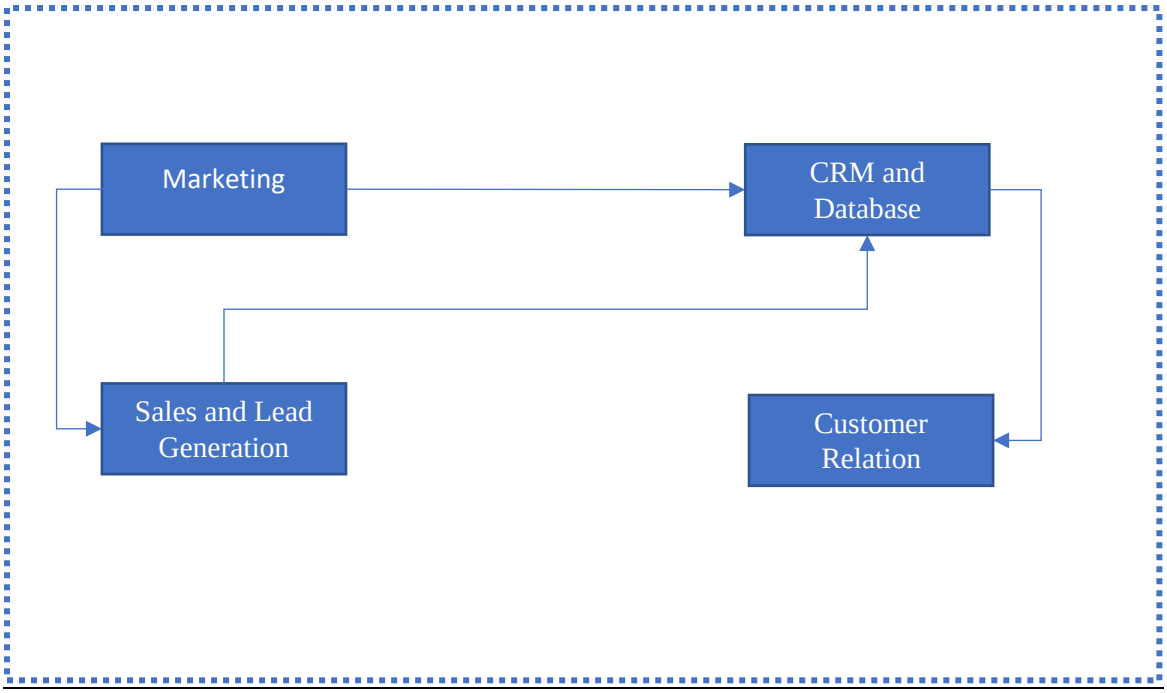
- Project Satisfaction
- Project Cost

Organisation Structure

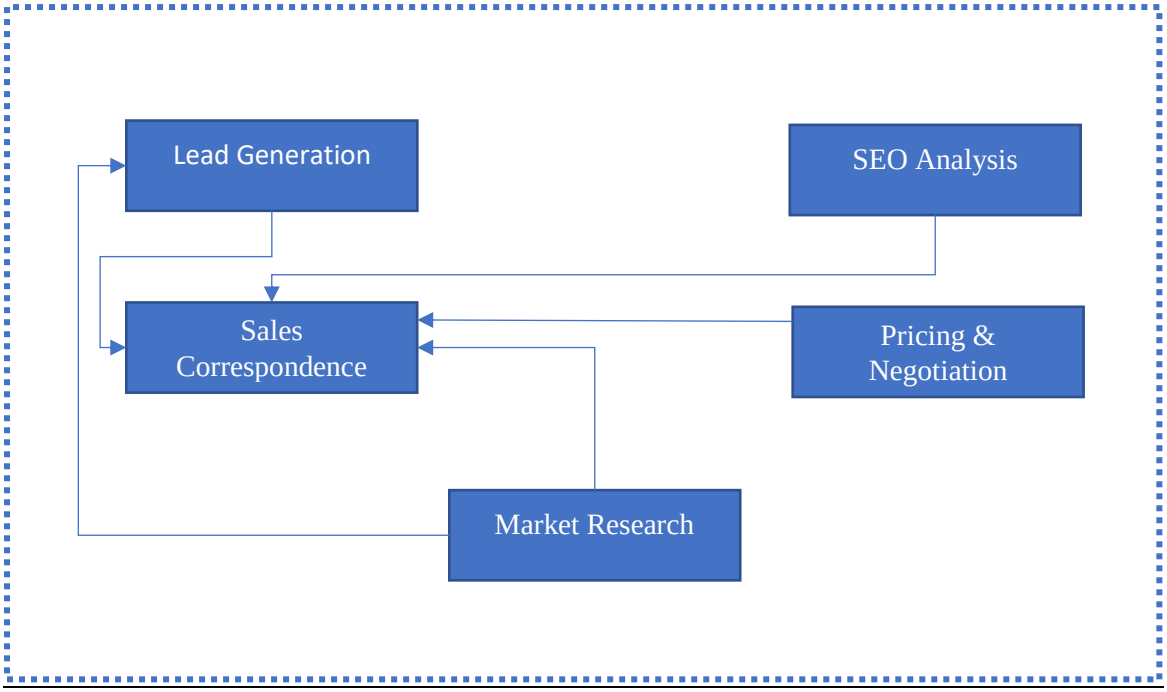
L0 Diagram or Context diagram of Company



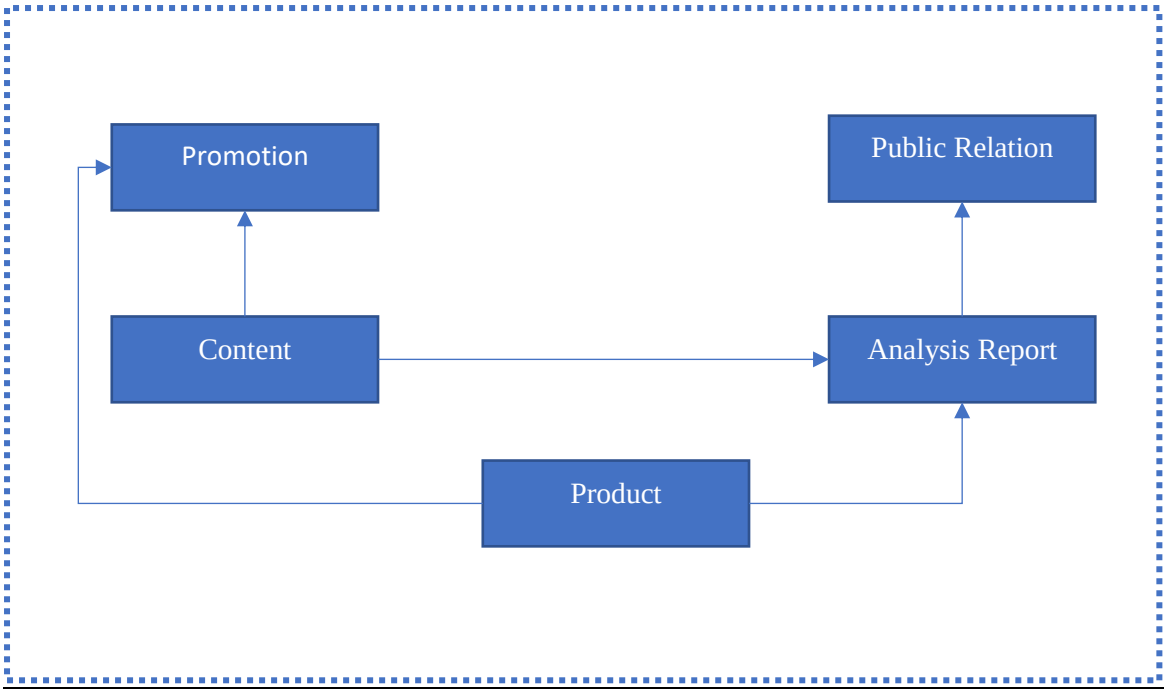
L1 Diagram of Sales & Marketing



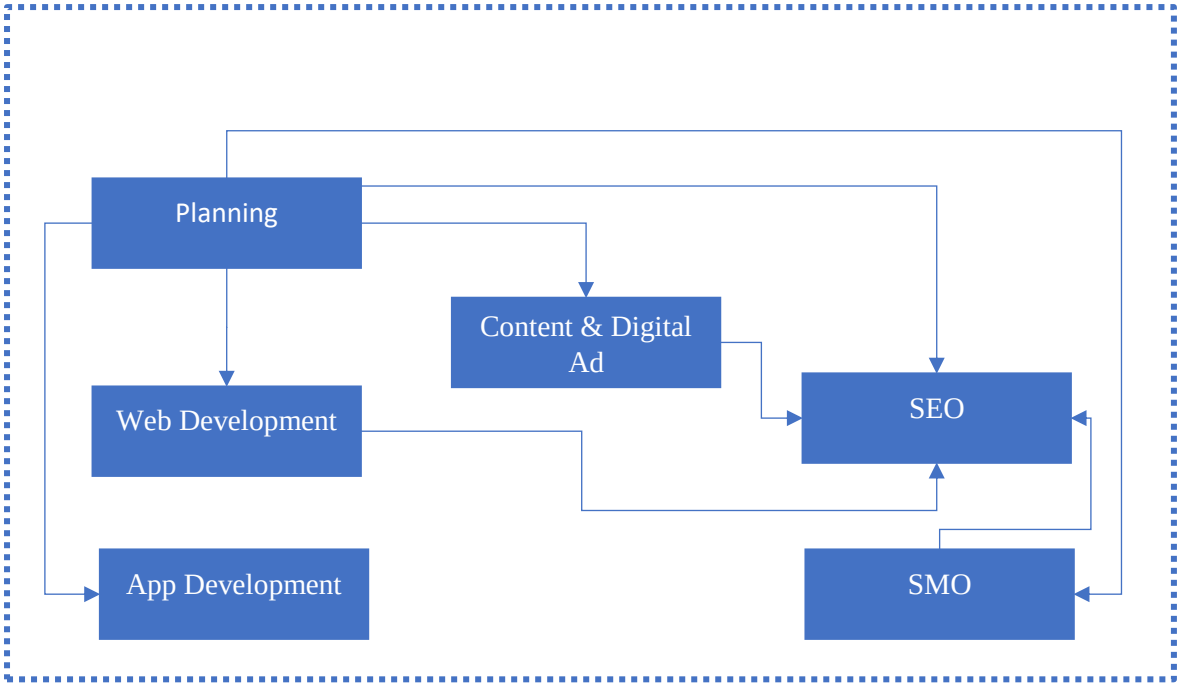
L2 Diagram of Sales & Lead



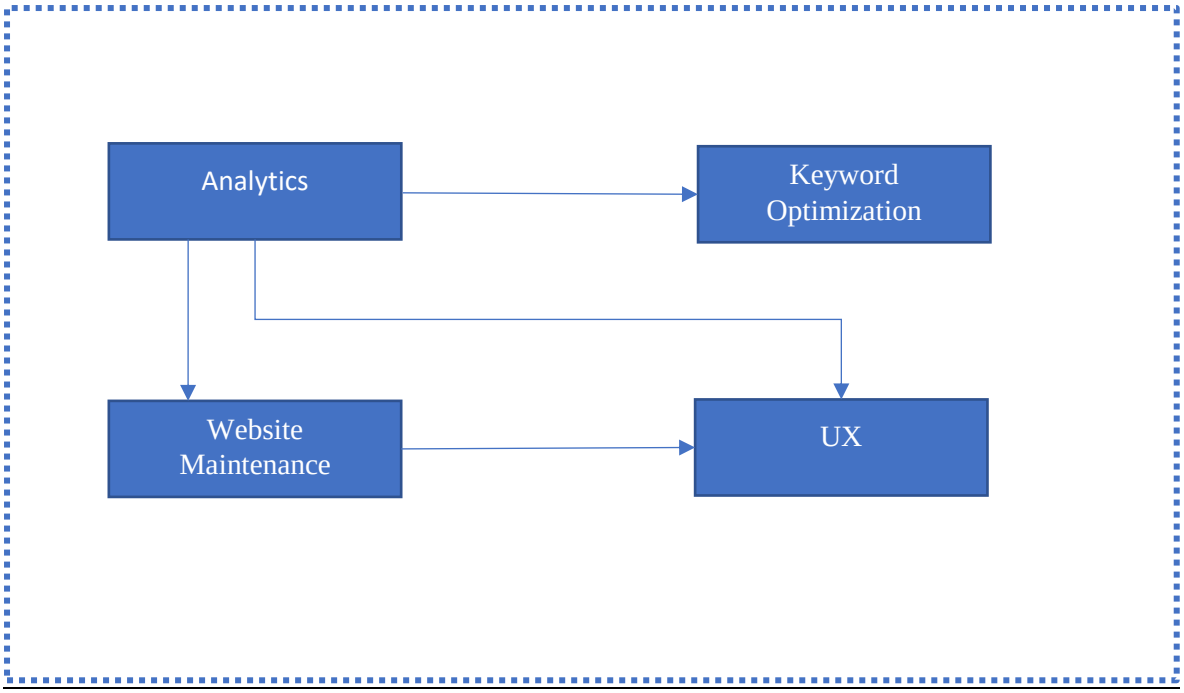
L2 Diagram of Marketing



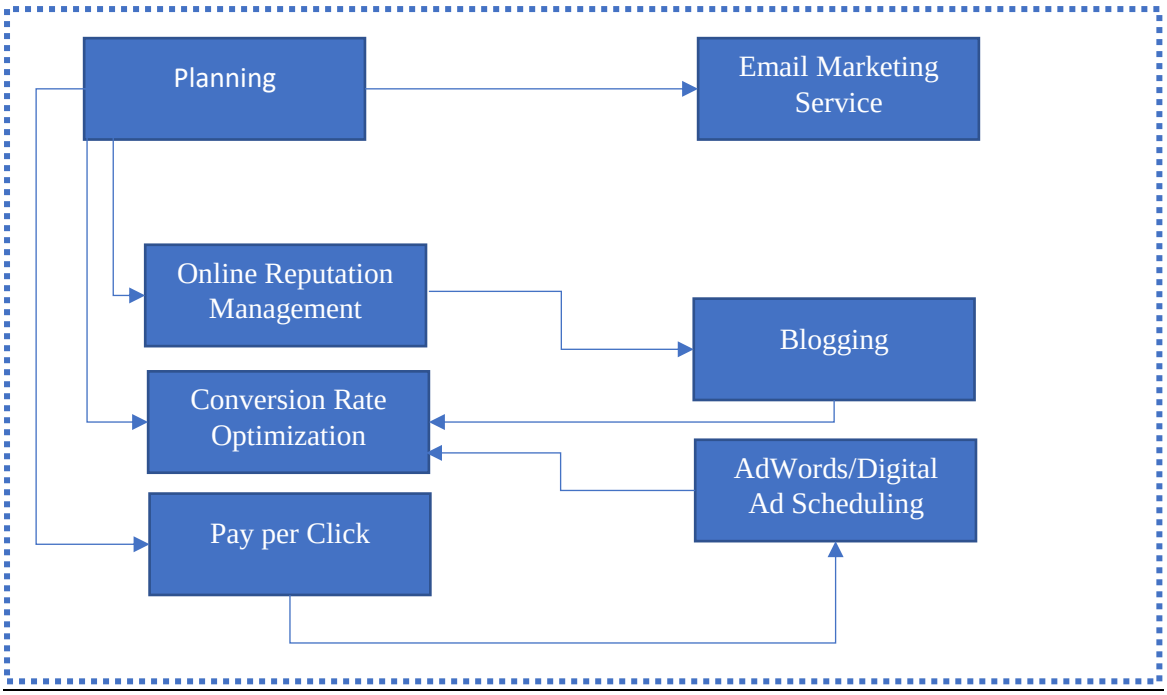
L1 Diagram of IT Operations



L2 Diagram of SEO



L2 Diagram of Content & Digital Ad



Functional Goals & Functional Metrics

Four departments with corresponding weights:

1. Sales & Marketing (30%)
2. IT Operations (30%)
3. Creative Department (20%)
4. Human Resource (20%)

Functional Goals concerning departments as follows:

Departments	Sales & Marketing	IT Operations	Creative Department	Human Resources
Functional Goals	Improve Revenue Growth	Improve Product Performance	Improve Creative Production Process	Upskilling/training for the employee with the latest technology
	Improve Customer Retention or Satisfaction	Optimize Operations process or efficiency	Increase the efficiency of the creative team	Improve employee engagement
	Enhance Sales closing Performance	Enhance customer engagement or experience		Maintain a higher retention rate
				Increase the pool of eligible candidates

Departmental Scorecard

Sales & Marketing Department (30%)

Functional Goals	weight	Functional Metrics	Objective	Metrics	weight
Improve Revenue Growth (40%)	0.12	(Sales for last year/ sales for the present year)*100	Improve Baseline sales (30%)	Expected sales without marketing activities (Forecasting)	0.036
			Enhance sales value productivity (35%)	Total sales revenue/total no. of sales agent	0.042
			Reduce missed sales opportunities (35%)	(Uncontracted opportunity / total opportunity) * 100	0.042
Improve Customer Retention or Satisfaction (30%)	0.09	Net promoter score = (% of promoters - % of detractors)	Reduce Customer churn (40%)	(No. of the customer at the beginning of period – No of the customer at the end) / No. of customers at the beginning	0.036

			Rise in repeat purchase (30%)	No. of returning client / no. of total clients	0.027
			Engage loyal customer (30%)	No. of repeat client / no. of total clients	0.027
Improve sales closing performance (30%)	0.09	(No. of deals closed / no. of sales proposal) * 100	Optimize time period to achieve sales quota (20%)	(sales / target sales) * 100	0.018
			Improve revenue per sales calls (25%)	Revenue from sales calls/total no. of calls	0.0225
			Reduce the duration of the sales cycle (30%)	Average (time between initial sales step to final payment)	0.027
			Maintain customer acquisition growth (25%)	(New customer / total customer) * 100	0.027

IT Operations Department (30%)

Functional Goals	weight	Functional Metrics	Objective	Metrics	weight
Improve Product Performance (35%)	0.105	Rank Top 3/5 product with higher sales revenue and they're average	New patent awarded (30%)	No of patents awarded / no of patents filed	0.0315
			Introduce New Product or feature on package bundles (40%)	Total no. of new product or feature released this year / total number of product or services provided	0.042
			Increase Product ROI of top-performing services (30%)	Revenue generated from the product in one period / Cost to develop the project	0.0315

Optimize Operations process or efficiency (35%)	0.105	(Expense incurred last year – Expense incurred this year) / expense incurred last year	Minimize service down issues (35%)	(Agreed service time – downtime) / agreed service time	0.03675
			Maintain On-time delivery (35%)	On-time completion of project / total number of active project	0.03675
			Increase in-house bug detection (30%)	No of defect or bug in service detected in house / No of bug or defect reported	0.0315
Enhance customer engagement or experience (30%)	0.09	No. of complaints or rejects in one period / Total no of active contracts	Faster resolution of client issues (25%)	Issue Resolution Rate = (Solved Tickets) / (Tickets Received) x 100	0.0225
			Increase upselling with existing customer (20%)	(No of upselling contracts present year – no of upselling contracts last year) / no of upselling this year	0.018
			Faster communication or response (20%)	Average (time required to respond to a client from initial communication by the client	0.018
			Growth in customer referrals (35%)	(New customer referrals present year – customer referrals last year) / new customer referrals this year	0.0315

Issues and challenges faced by Company

1. Adoption of recent technologies with higher frequency: Since digital marketing tools and algorithms evolve rapidly concerning various platforms, it's challenging for the company to go for efficient tools and technology combinations.

2. Industry regulation and data security concern: with an increase in user base, more and more customers expect to have control over data. There are industry regulations like GDPR and change the business structure.

3. Highly competitive market: the rise of local agency and crowded market, it's challenging to have differentiation as well as a regional approach due to the global business model.

4. Gaining more prospects: due to high competition, it's harder to get prospects and then convert it into a deal as well as to keep doing repeat business.

5. Client Relation management: Client retention decreases rapidly over time due to some uncertain nature of campaign outcome.

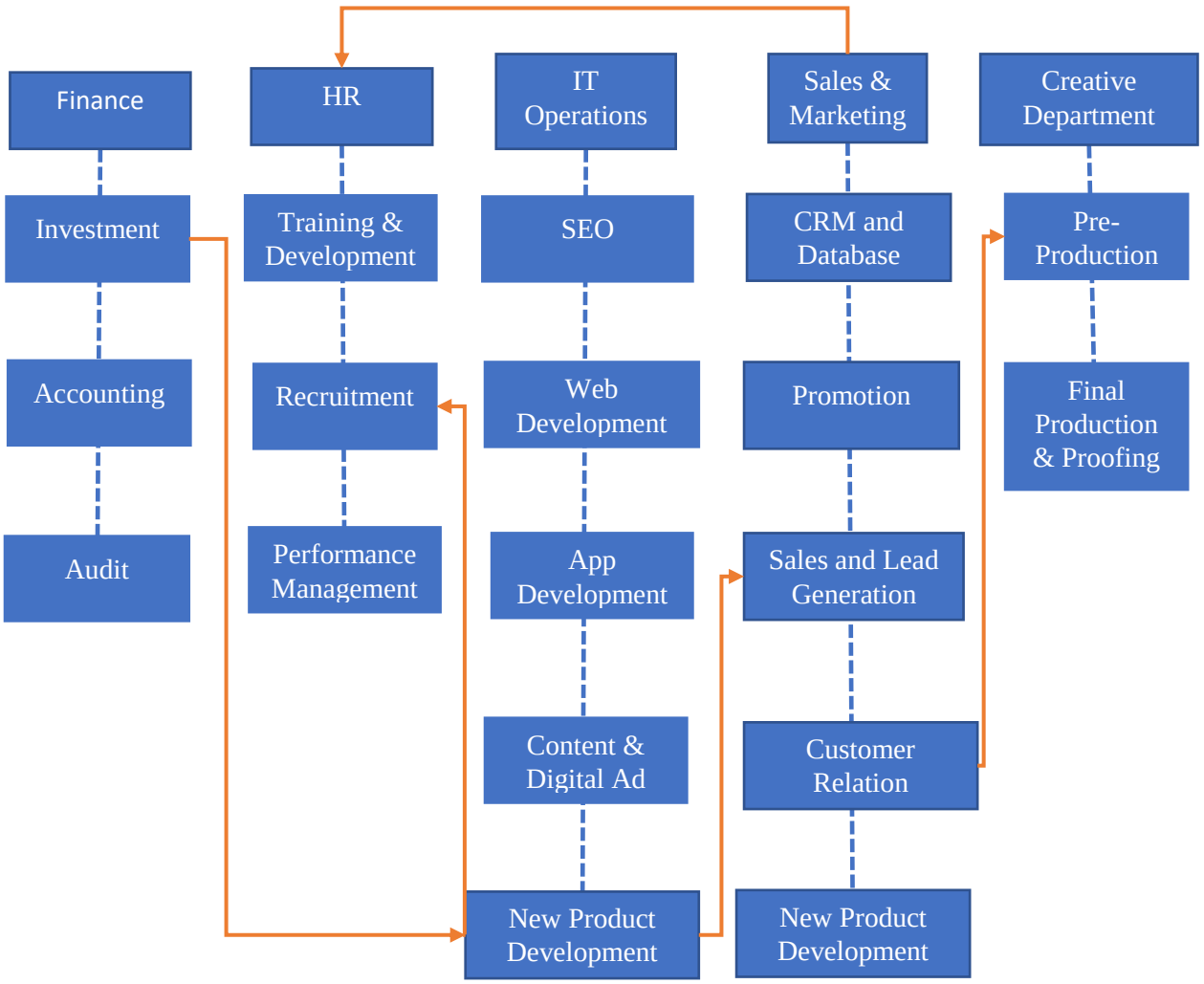
6. Right talent and lower turnover: due to the uncertain nature of the active customer, the company opts for the temporary or contractual worker, which leads to losing out some bright talent as well as higher turnover during downtime.

7. Irregular nature of the project: which leads to underutilization of available workforce

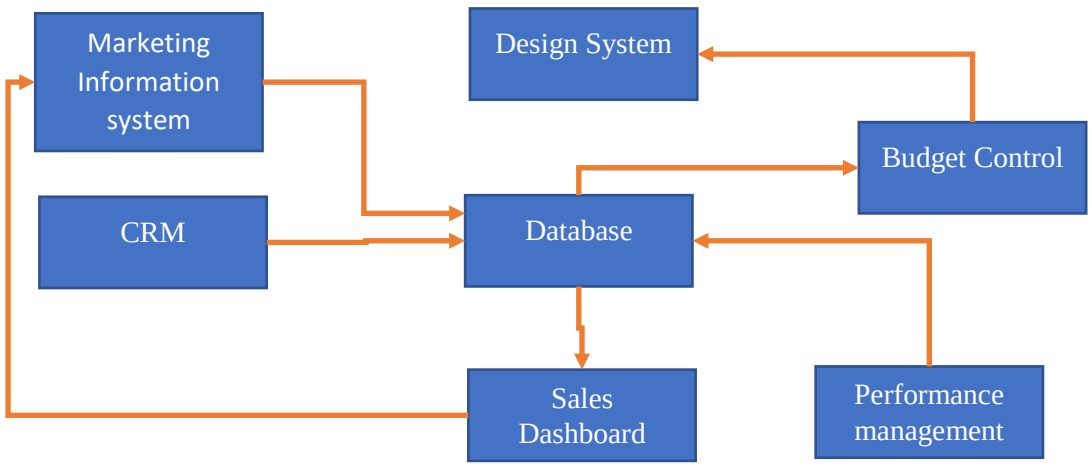
8. Measurement of ROI: changing the nature of platform pricing as well as digital consumer behaviour, it's challenging to measure the right ROI in terms of campaigns run by the company.

Solution Proposed

Process Integration

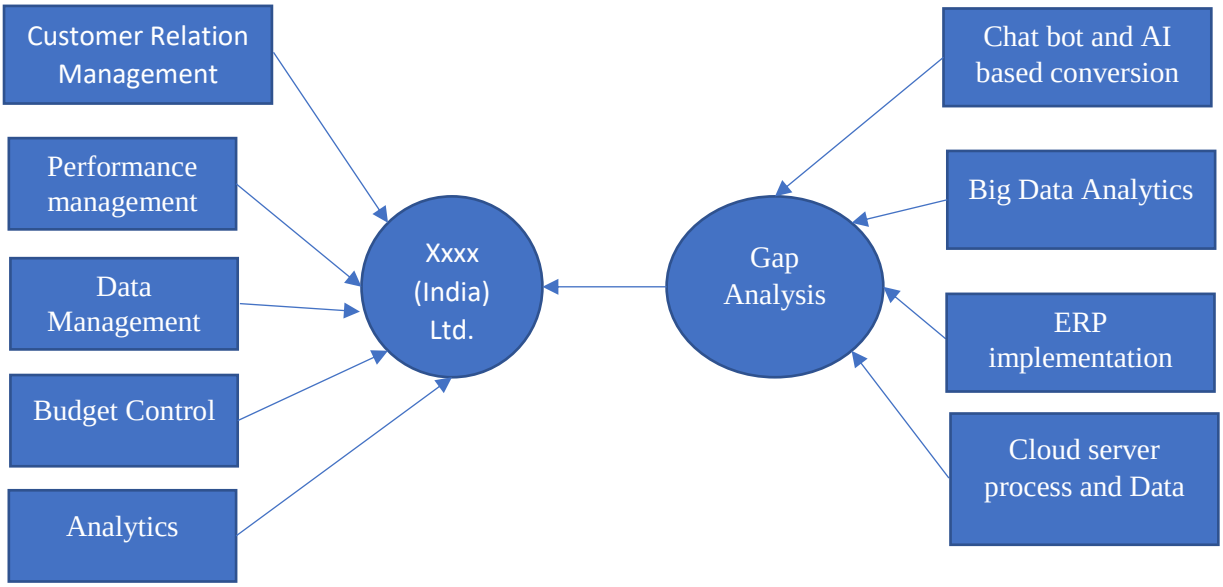


Application Integration



Technology Integration

Digital agencies are working in a highly competitive market. With the rise in the use of the internet, the channels of communication are increasing rapidly; to come up with an efficient combination of channels as well as the platform becomes challenging. Whereas, technology is evolving at a higher rate, so digital agencies have to adapt to new technology as well as do change management frequently. Technology is changing, so as the challenges faced by the firm concerning project implementation and maintenance.



Cloud Strategy

Cloud Service requirement

With the rapid adoption of the internet, the big challenge for firms is due to an increase in the number of channels where marketing can be done. Competitors using precision marketing to get hold of the costumers aggressively. There are instances where digital campaigns go wrong even with proper planning to changing scenarios across various platforms.

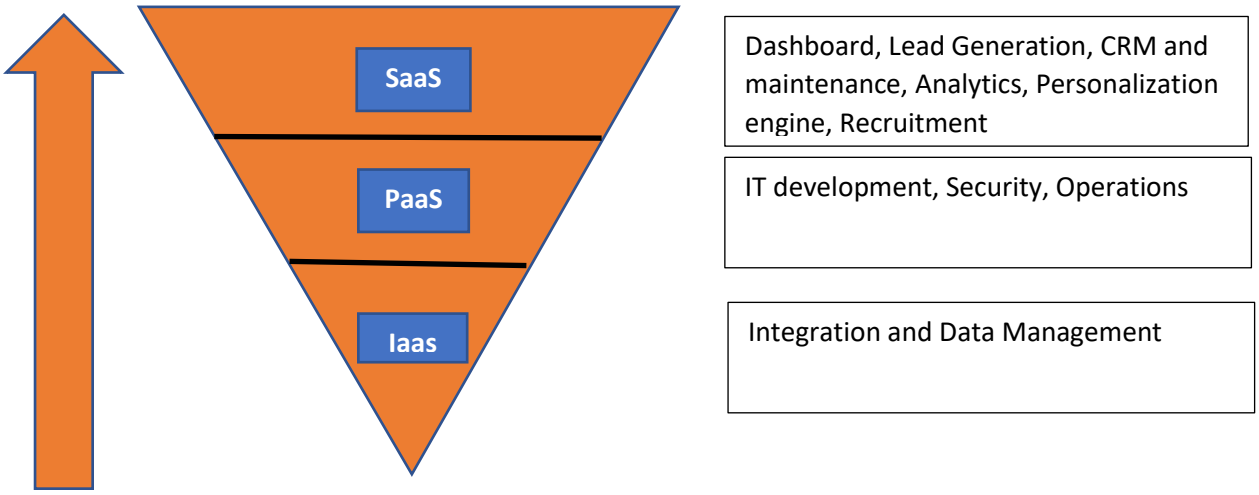
Technology, data, and data analytics are the leading factor of success across digital agencies. Cloud offers affordable and scalable access to Data management, tools for Security, analysis, and various campaigns. To adapt to this fast-changing business environment, every stakeholder needs a real-time flow of information as well as a flexible platform for change. So, Cloud service is a must-have for digital agencies in the future.

Requirements for a Cloud Infrastructure:

- Service and Resource Management
- Data Centre Management tools Integration
- Real-time Reporting and visualization, Security
- Faster Deployment and control
- Interface for Users, Admins, and Developers

Cloud Delivery Model

The Cloud delivery mix for Company will provide tools for development, CRM, data management, and real-time information sharing. The delivery model will map various functions to the kind of model needed.



Software as a service (SaaS): SaaS is the uppermost layer in the Cloud. Here, users take advantage of cloud servers over the internet to access available software instances with real-time and uniform information sharing.

Platform as a service (PaaS): Development team or operations team can configure the cloud infrastructure according to the firm's need at this level. This platform also contributes to the security aspect of the whole business.

Infrastructure as a service (IaaS): This is the lowest level in the cloud model. Here, Cloud provides machine resources to the firm, including Integration and Data management. It is an efficient foundation for the firm.

Firms can pick machines according to their need from widely available choices like Amazon, Azure, and Ubuntu, etc.

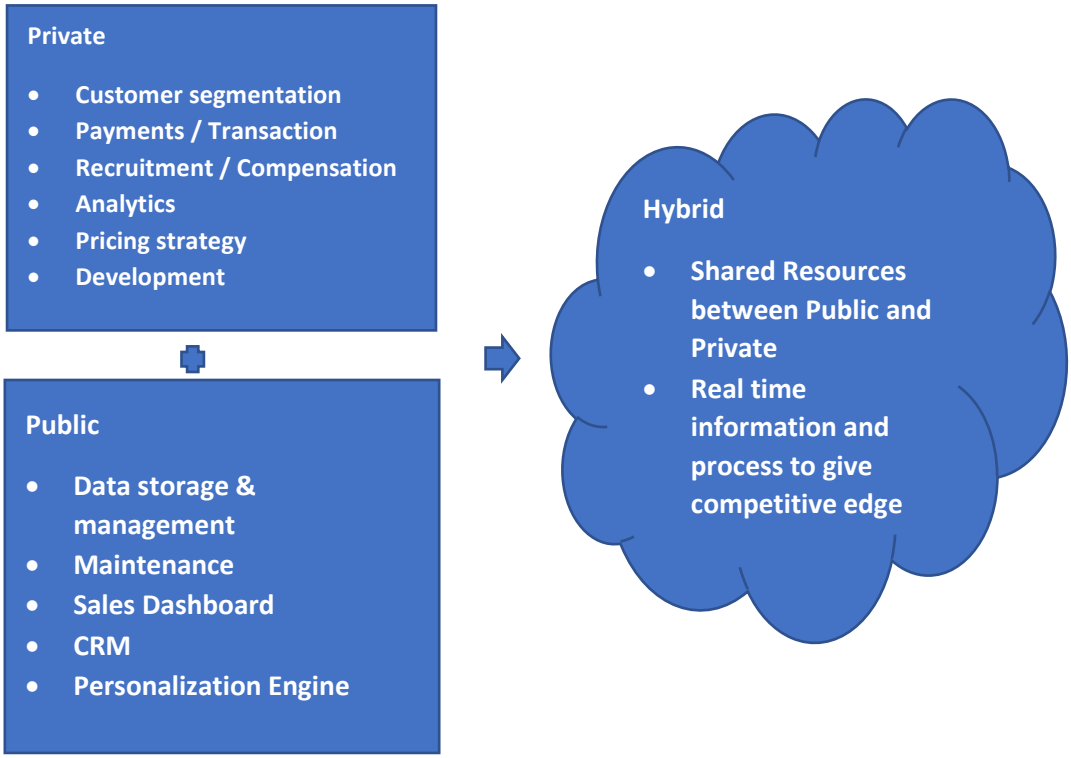
Cloud needs to be implemented in line with the firm's vision, mission, and strategy. The procurement of cloud service, as well as management, needs to be done by top management. Relevant training to staff or consumers for cloud service-related skills needs to be done. Lastly, Cloud strategy should comply with regulatory and legal requirements.

Cloud Deployment Model

There are 3 significant types of deployment models including Private, Public, and Hybrid. For company's Business Goals, there is a need for Hybrid model implementation with all collaboration and widely used functions in Public cloud and Business strategy-related functions and High priority functions under Private Cloud.

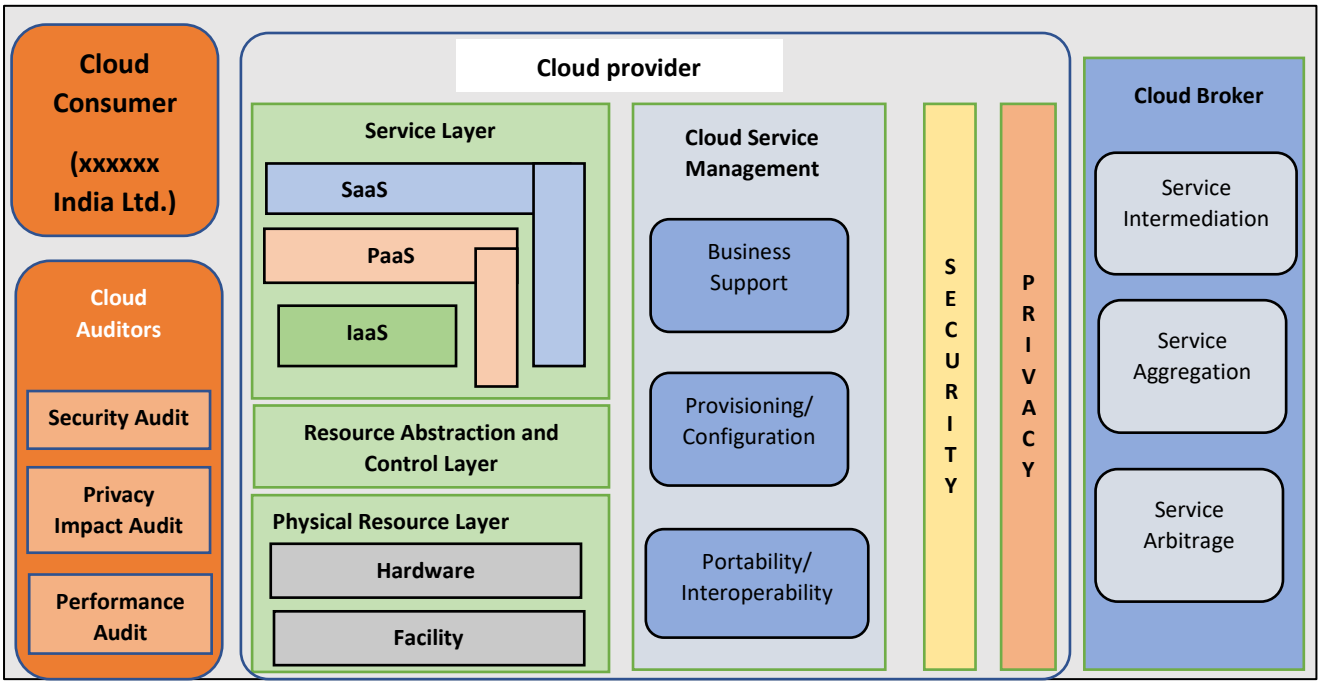
Public Cloud: It is a cost-effective and pay-as-you-go model. Whereas there as higher security risks and fewer customization options.

Private Cloud: It is exclusively for a firm which higher Security. Whereas costlier, compared to Public Cloud due to maintenance and regular updates, needs to be done by the firm.



Cloud Infrastructure

This conceptual reference model of cloud infrastructure provided by NIST. Which defines major actors, and their functions in cloud computing.



Benefits for Stakeholders

- Better Operations: Services can be provided in real-time as per customer needs. Real information sharing would reduce conflicts across projects and departments.
- Technology Innovation and development: Use of latest technology with efficient ROI and higher customer satisfaction

- Customer Experience: with personalization engine and better CRM, help to improve current customer experience
- Better Insights: Insights about customer behaviour would increase the decision-making process
- Customization: Focus on precision targeting to have a competitive edge.
- Reduction in Expenses: In the long term, cloud implementation would lead to less operational expenses.
- Better Security: customer data, data across the various platform with various formats would be secure and increase customer confidence.
- Better disaster management: in case of disaster, operations would be active for users. Using analytics, the firm can recognize the loss-making project and avoid them.

Cash Flow Statement

Base Case Scenario

*All numbers are in the form of Rs. only

	2019	2020	2021	2022	2023	2024	2025
Total Revenue	29581953.4	33427607.3	37773196.3	42683711.8	48232594.3	54502831.6	61588199.7
Operating Expense	16696727.0	17197628.8	17713557.7	18244964.4	18792313.3	19356082.7	19936765.2
IT Opex	9614178.8	11056305.6	12714751.4	14621964.1	16815258.7	19337547.5	22238179.7
Total OPEX	26310905.8	28253934.4	30428309.1	32866928.5	35607572.1	38693630.3	42174944.9
CAPEX	17388.7	18258.2	19171.1	20129.6	21136.1	22192.9	23302.5
IT CAPEX	1214713.0	1275448.7	1339221.1	1406182.1	1476491.2	1550315.8	1627831.6
TOTAL CAPEX	1232101.7	1293706.8	1358392.1	1426311.8	1497627.3	1572508.7	1651134.1
TOTAL EXPENSE	27543007.5	29547641.2	31786701.2	34293240.3	37105199.4	40266139.0	43826079.0
GROSS PROFIT	2038945.9	3879966.1	5986495.0	8390471.5	11127394.9	14236692.6	17762120.6

This cash flow projection for without cloud strategy. Taking past cash flow into account 13% has been considered as the revenue growth for company Ltd. Due to the agency nature of business and online business, significant expenses are in OPEX compared to CAPEX. Where Operating Expense increases at a rate of 3% and IT OPEX at 15% (due to the adoption of new tools and new subscriptions). For capital expenditure expects to grow at a 5% rate according to past cash flows.

For the strategy with Cloud, operating expenses increased by 2%, whereas IT expenses increase at a rate of 12%. Cloud expenses were calculated using an Oracle calculator in the form of a subscription basis. The WACC has been taken as per the industry average of the technology industry at 12.33%.

		2019	2020	2021	2022	2023	2024	2025
WITH CLOUD	**Total Revenue**	29581953.4	33427607.3	37773196.3	42683711.8	48232594.3	54502831.6	61588199.7
	Operating Expense	16696727.0	17030661.5	17371274.8	17718700.3	18073074.3	18434535.8	18803226.5
	CLOUD OPEX		1200000.0	1200000.0	1200000.0	1200000.0	1200000.0	1200000.0
	IT Opex	9614178.8	10767880.2	12060025.8	13507228.9	15128096.4	16943468.0	18976684.1
	Total OPEX	26310905.8	28998541.7	30631300.6	32425929.2	34401170.7	36578003.7	38979910.6
	CAPEX	17388.7	18258.2	19171.1	20129.6	21136.1	22192.9	23302.5
	IT CAPEX	1214713.0	151839.1	151839.1	151839.1	151839.1	151839.1	151839.1
	CLOUD CAPEX		200000.0	100000.0	100000.0	100000.0	100000.0	100000.0
	TOTAL CAPEX	1232101.7	370097.3	271010.2	271968.7	272975.2	274032.0	275141.7
	TOTAL EXPENSE	27543007.5	29368639.0	30902310.8	32697897.9	34674145.9	36852035.7	39255052.3
	GROSS PROFIT	2038945.9	4058968.3	6870885.5	9985813.8	13558448.4	17650795.8	22333147.4

From the above table, we can conclude there is an increase in profit with cloud implementation. Calculating NPV with taking 10 years of cash flow is ₹ 2, 63, 27,045.40.

	2020	2021	2022	2023	2024	2025
ROI	0.61%	2.78%	4.65%	6.55%	8.48%	10.43%

Assumption: Cloud strategy will be implemented from the 2020 financial year. Check Attached Excel for a 10-year cash flow calculation.

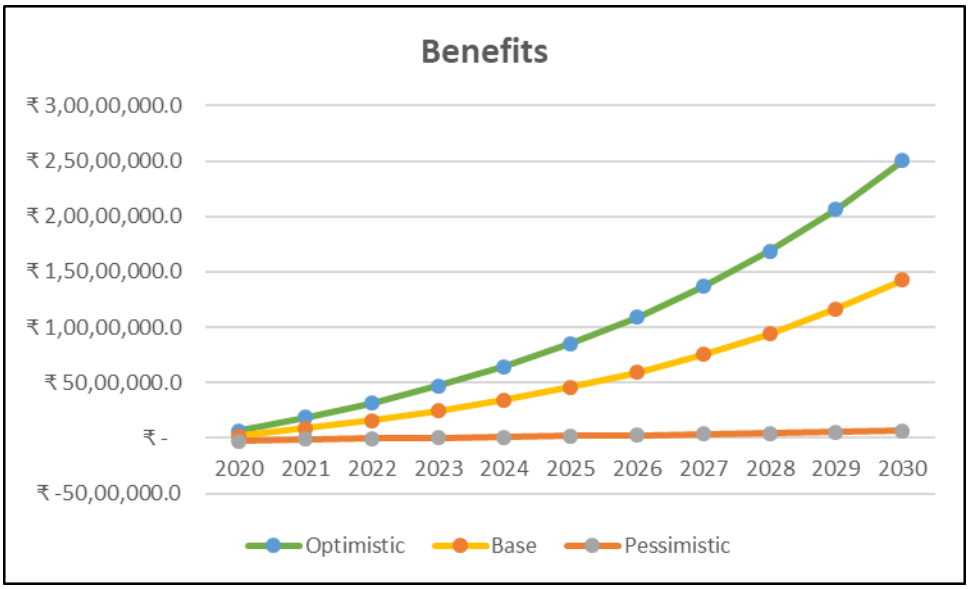
Sensitivity Analysis

					NPV (₹)
Optimistic	**Operating Expense increased by 1%**				**₹ 4,46,33,249.14**
	IT Opex Increase by 9%				
Base	**Operating Expense increased by 2%**				**₹ 2,42,19,954.69**
	IT Opex Increase by 12%				
Pessimistic	**Operating Expense increased by 3%**				**₹ 5,30,704.45**
	IT Opex Increase by 15%				

1. Benefits

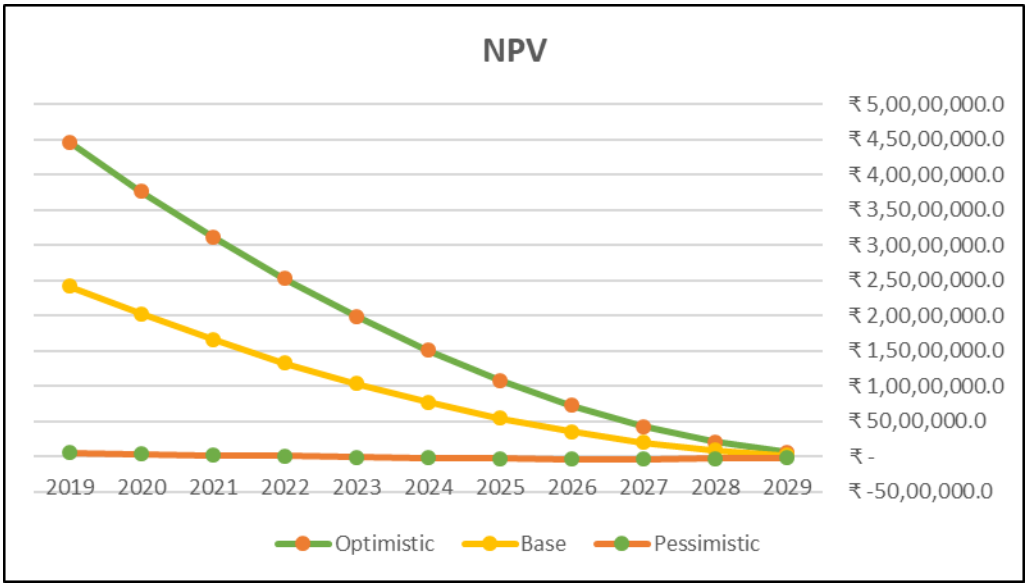
	2020	2021	2022	2023	2024	2025	2026
Optimistic	₹ 6,34,394.8	₹ 18,60,754.0	₹ 31,67,976.7	₹ 46,86,345.2	₹ 64,51,073.3	₹ 85,03,084.9	₹ 1,08,89,912.7
Base	₹ 1,79,002.2	₹ 8,84,390.4	₹ 15,95,342.3	₹ 24,31,053.5	₹ 34,14,103.2	₹ 45,71,026.8	₹ 59,32,981.6
Pessimistic	₹ -2,76,390.5	₹ -1,12,618.0	₹ -45,657.0	₹ 24,652.1	₹ 98,476.7	₹ 1,75,992.5	₹ 2,57,384.1

Taking 10-year cash flow into account, the sensitivity graph for benefits is as follows:



2. NPV

Taking 10-year cash flow into account, the sensitivity graph for NPV is as follows:



Cloud Brokerage

Cloud services brokerage (CSB) is an IT position and business paradigm in which a firm adds value to one or more cloud services on account of one or more users of that service via three fundamental roles, including aggregation, integration and customization brokerage. A CSB enabler contributes technology to achieve CSB, and a CSB provider offers joined technology and methodologies to execute and maintain CSB-related plans.

Here, company should partner with a cloud brokerage. It would give the firm a lot of choices from various technological offerings. Even if the cost were higher, it would be beneficial for the firm in the long run. The brokerage firm will do cost-benefit analysis and organization structure analysis to help the firm to choose from various cloud offerings. The cloud broker can provide consultation to the firm on significant expense area and other advanced technology integration.

Use of Big Data or Block chain

Due digital nature of whole operation and services with focused on overseas client, company needs to focus the cloud strategy with complement of Big Data and Blockchain. There are major implication of this technology at specific business processes.

1. Big Data: Big data needs to implement majorly every function in the firm. Be it customer interaction or finding new customer leads. Since firm handle very large digital marketing initiatives from small client to a large firms, use Big Data can help in analytics as well to employee any RPA or AI related tools for higher efficiency and more return. Which would lead to more retention of customers.

2. Blockchain: Blockchain can be implemented specifically for security reasons. The online nature of transactions and information sharing between clients are very sensitive nature. So use of Blockchain would improve operations from any kind of external of internal threats as well as give credibility to its customer.

Risk Analysis

In digital agencies, Risk management is complex due to use of IT. Project management and very much marketing focused initiatives. So all the relative risks from these categories merged for digital agencies.

With certain goals firms follow specific risk management frameworks. There need to be evaluation, measurement and monitoring of risks needs to be done. Framework needs to comply with any regulatory board as an integral part. This framework will help the firm's exposure to risks.

The risks associated with the firm's activity can be external or internal, like market or economic scenario or very tight competitive environment. There is a growing impact of security risks associated with online businesses.

Risks in the organisation can be divided into different risk areas:

- Technology: Risks associated with obsolete technologies or tools, any server failures. Further risks of scalability and compatibility of various tools or programs used to have a unified effect.
- Cyber: Risks of unauthorised access or any confidentiality breaches can lead to legal issue as well as retention customer very hard.
- Operations: External or internal events or conflict can impact organisation's daily function and loss of control
- Data Leakage: Global framework for data in use or transit needs to be processed and encrypted in a well-defined form.
- Privacy: Risks associated with handling of private information of client or use of unethical digital marketing tricks to get higher ROI which might not benefit or exploit someone's privacy. The risks can happen without knowing as well as to which type of service the company offers and what kind of tools they use for the same.
- Third-Party: To lower operation cost, firms use many third-party technologies and platforms to operate the business, any loophole from the third-party side can harm company's business.

Risks Evaluation or Measurement:

Risk evaluation can happen taking 5 factors into account, those are Probability of risk, and Impact of risk, how vulnerable the risk will be, who the stakeholders responsible are and what kind of motivation might have impacted the decision.

Risk identification can be done in a whole organisational level as well as the functional levels. It is important to calculate all the risks listed above for any kind of project.

To measure the risks associate firm can follow these techniques:

- Operational risk indicators or fraud losses can be measured against the revenue or PBT. Check any larger deviation.
- Use of value at risk approach to determine any risks associated with the Expected value
- Liquidity position of the company can be tracked as well

Risk Monitoring:

There need to periodic risk reports need to prepare taking into the account of every stakeholders, business partners and all the projects firm is involved in.

Risk response:

There need to various services to mitigate those risks:

- Digital identity: use of secure digital identity according to international standard can have effective authentication as well as lower risk of identity theft.
- RPA: Enabling RPA to check any disturbance in the project could enhance cyber security as well as faster risk management
- Blockchain: Secure transaction as well as internal or external process using Blockchain to avoid any threats.
- Fraud Management: with proper identification of client as well as partner need to secured and followed by companies act, 2013.

- Use of Cyber Analytics: Analytics solely for risk evaluation and monitoring.
- Digital Risk Strategy: by establishing an organisational level governance framework to address these risks

Roadmap for cloud strategy

Cloud Implementation has various stages, as follows:

- Assess: Migration Groundwork
- Planning: determine strategies
- Migrate: Move infrastructure to Cloud
- Optimize: Consider all operations and efficiency

Phase 1: Assess

First, determine the migration team to be responsible for the whole cloud implementation project. The team would include representation from all stakeholders in the firm. Consult brokerage firm on cloud requirements and prioritize which cloud service to choose from. Then, determine which application should move to cloud infrastructure (Private or public component). Specifications of security and compliance requirements need to be checked. SLA and high availability need to be validated before the next phase.

Phase 2: Planning

Determine a strategy to move, upgrade, build, or integrate different applications in the existing Information system infirm. Plan and then design the cloud infrastructure needed for the firm's business goal. Create a migration plan for existing systems or applications as well as the firm's data. Testing of data migration needs to be done. Then Security controls would be validated and performance measured concerning the previous infrastructure. At the end of this phase, evaluate cloud footprint cost and make necessary changes in the plan for the actual migration.

Phase 3: Migrate

In this phase, migration needs to follow the migration plan using a phased approach. Evaluate existing issues and customize Cloud.

Phase 4: Optimize

Do service management to keep a check on previous business infrastructure and cloud one: control and monitor Cloud usage and application efficiency. Implement efficient tools or go for a higher model according to business needs. Explore scalability options and cloud costs. Lastly, update and maintain cloud infrastructure as needed.

Change Management

Change management is essential to transition from old system to new IT implementation within the organisation and other external stakeholders step by step. It also checks and control new implementations and its risk then go for next stop. Main objective of change management is to mitigate risk and effects.

Four steps to be followed in change management is a follows:

- Request for change
- Planning and change evaluation
- Approval of changes
- Changes implementation & Review

With completion of one cycle new request for next step implementation happens until all implementations get implemented.

Request for change: Start of new IT implementation or next implementation of IT strategy. Management team of various functions decide on this.

Planning & Change Evaluation: Impact and Risk measurement associated with planned change. Cost benefit analysis for make sure plan going as expected. Check for any implementation or compatibility issues.

Approval of changes: With analysing all the factors, the Cloud implementation team go for implementation.

Changes implementation and review: Scheduling of work is done as well as transition from old systems.

After implementation, HR takes responsibility along with IT team make sure all the stakeholder get acquainted to new system. Review is made regarding success of implementation and monitor the working of new system as well as its efficiency before moving totally to new systems. All the changes step by step needs to be stored to find implementation issue in the future.

Managerial Implications

- **Employees:** Cloud Implementation would have numerous impacts on existing employees as well as future employees. Communication and data transfer between different departments and projects will be faster, gives rise in operational efficiency. There will need to do change management less frequently than before, but at the initial implementation phase, the company needs to make sure change is successful in the firm.
- **Cost:** Public cloud computing offered by leading companies comes at a very cheaper form and more efficient at data storage and processes. It can provide an increase in terms of resource availability and faster working.
- **Customer Experience & Product Development:** After cloud implementation, it's easier for the firm to create products and provide services or new product development and managing various marketing campaigns (for the client as well as in-house needs). With an increase in data availability and easy analytics implementation, insights generated would help business decisions and increase awareness about changing customer needs and behaviour.
- **Marketing:** Instant survey and use of analytics tools can be done with the help of the Cloud. Research and personalization engines can give better pricing predictions and better customer segmentation and profiling. The faster and efficient marketing process for clients and as well as the firm itself.

Stakeholders	Action Items
IT Operations Team	• Manage Integration, migration, and maintenance to cloud infrastructure • New Product development, testing, and collaboration faster and effective • Control manage Cloud and keep a check on SLA implementation
HR Head	• Changing the structure and function of the HR team to use Cloud-based analytics and tools. • Implement frequent change management or training across the firm
Marketing Team	• Real-time market data and analysis on customer segmentation and sentiments

	• Pricing strategy and personalization did efficiently and more accurate than before • Enabling precision targeting
Creative Team	• Real-time access to customer needs and collaboration with the Operations team. • Easy to implement various formats of creative work across various platforms.

Differences between proposed strategy and original strategy to be adopted at company (India) Ltd.

The hybrid cloud model is suggested with significant work on the public Cloud. Concerning the delivery model, SaaS for business applications, real-time visualization, and maintenance have been proposed. PaaS for operations, Security, and development processes, whereas IaaS for Data storage and processing.

Some reasons for the difference in proposed and original strategy can be the following:

- Understanding and preference difference of cloud infrastructure team organized by the firm at phase 1 of cloud implementation.
- Changes in government regulation regarding data privacy and Security (Like Personal Data Protection Bill, 2018, or GDPR) can have an impact on the cloud model, due to outsourcing nature of data storage and processing.
- Supplier Availability at the time of implementation can differ the cloud pricing cost as well as tools available on a subscription basis.
- Top management support through the whole migration process can impact the implementation process.

Conclusion

Through various study of secondary data and financial, I got to narrow down various organisational goal as well as functional goals. With technology scorecard, further definition of various goals has been done with their respective metrics. With gap analysis, report found various way cloud strategy can help the company to work efficiently as well as with higher retention of customers. With that goal we have suggested new IT strategy implementation with cloud computing, big data and Blockchain across functions and designed framework for risk management, change management as well as implementation. Respective sensitivity analysis as well as NPV has been calculated for this large investment which turns out to be benefiting the organisation to lower the cost and increase revenue also this implementation with provide a competitive edge to the firm.