Report on

'Impact of Huawei Cloud Solution in Bangladesh business and its Information System'

By

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ID: 18104237

An internship report to BRAC Business School in partial fulfillment of the requirements for the degree of Bachelor of Business Administration

BRAC Business School

BRAC University

September,2022

Declaration

The declaration is made as follows:

- For pursuing the degree at BRAC University, I submitted an internship report that is an unique work of mine
- No information that has been accepted or submitted for a separate degree at a university or institution is included in the report
- Report does not include any previously published or written content created by a third unless it is properly cited and fully disclosed

Student's Full Name & Signature:

_____

Meraj Abid

Id: 18104237

Supervisor's Full Name & Signature:

_____

Hasan Maksud Chowdhury

Assistant Professor

BRAC Business School

BRAC University

Letter of Transmittal

22nd September 2022

Hasan Maksud Chowdhury

Assistant Professor

BRAC Business School

BRAC University

Subject: Internship report on "Impact of Huawei Cloud Solution in Bangladesh"

Dear Sir,

This is my honor to submit my internship report on the impact of Huawei Cloud Solution in Bangladesh. I have prepared this report on my three months internship period in Huawei Bangladesh. The final requirement for receiving a Bachelor of Business Administration degree from BRAC Business School is the internship report. During this period, I learned about the corporate culture's technological businesses. I did my best to compose my internship report using what I knew.

I gained knowledge and insight from working with the dynamic team at Huawei Cloud department. I value the time, information, counsel and assistance you have provided me. I made and effort to prepare the report accordance with the norms and procedures set forth by BRAC University for internships.

Thanks & Regards

Meraj Abid

ID: 18104237

BRAC Business School, BRAC University

Acknowledgement

Firstly, I would like to convey gratitude to my honorable supervisor Hasan Maksud Chowdhury, Assistant Professor of BRAC Business School, BRAC University. Whose guidance helped me a lot regarding writing my internship report. He has helped me throughout whole process to understand the report topics thoroughly.

The experience of working in Huawei Bangladesh is overall great. Huawei is a leading technological company in worldwide. Working here helped me to understand the corporate culture and how it is works and how should I prepare myself for this. Furthermore, I would like to express my gratitude towards Huawei Bangladesh for giving me this opportunity to work in here. Also thankful to them for allowing me to collect information and assisting me in every possible way.

My endless thanks to Mr. Peter Pan CEO of Huawei Bangladesh for arranging this internship program. This is the first Huawei arranged internship program for students and it has started from Bangladesh. I am extremely lucky to be a part of this journey. Lastly, my sincere gratitude towards my on-site supervisor Md. Shajahan.Ahmed Cloud Business Development manager of Huawei Cloud team for supporting me throughout my internship period.

This internship program will help us to prepared ourselves for the corporate world.

Executive Summary

The basis for this paper is a three-month internship with Huawei Bangladesh. By working in the Huawei Cloud team, it gave us the idea of Cloud, basically about the Huawei Cloud and its process and impact in Bangladesh business information system.

Now in this modern era we cannot progress without the help of the technology. And Huawei is doing this favor for us for the past 30 years. They have technological experience of 30 years and they are using this experience worldwide including Bangladesh. They are expanding their business day by day. They are doing business for consumers, careers and enterprise. And for these three sectors they have more than six business solutions. Apart from this they are doing ICT infrastructure to support industrial digitalization. They are doing business in more than 170 countries and for this they have employees around 195,000. And the main reason of the success of Huawei is that 54.8% of their employee are engage in R & D sector which make sure the continuous development of Huawei Technologies.

During my internship, I had the opportunity to work with Huawei Cloud team. It gives me the chance to learn about all aspects of Huawei Cloud as well as other Cloud system too. As a result, this report is based on Huawei Cloud and its impacts in Bangladesh business. How Huawei Cloud works for Bangladesh and their facilities and benefits for the Bangladesh business. For this reason, the first is based on the overview of the internship. In this part I have mention the information about the student, along with internship outcomes, benefits for the student, student's contribution to the company. The second chapter is consisting of organization part. Here, I have mentioned the overview of the company and its business. Also, competitive analysis regarding the industry. The last chapter is about project part and of the internship. Here I have done some analysis and mention about the findings. In addition, at the conclusion of the analysis, some personal recommendations were made.

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Chapter 1: Overview of the Internship

1.1 Student Information

Name of the Student: Meraj Abid

Student ID: 18104237

Major: Computer Information Management

Minor: Human Resource management

Department of bachelor's in business administration, BRAC Business School

1.2 Internship Information

1.2.1 Company Details & Period

Company Name: Huawei

Department: Huawei Cloud

Address: Level-08, Lotus Kamal Tower-2,

Plot-59 & 61, Gulshan South Avenue

Gulshan-1, Dhaka-1212, Bangladesh

Period: 16th June 2022 to 29th September 2022

1.2.2 Company Supervisor Information

Name: Md. Shajahan Ahmed

Designation: Cloud Business Development Manager

1.2.3 Job Scope

1.2.3.1 Job Description

As an intern in the Cloud department of Huawei I had to carry out variety of responsibilities both researches based and filed task. Firstly, I had to learn about Huawei Cloud and how does it work. For this reason, I had to go through all the details about Huawei Cloud and its service. Mainly my role was a Business Development Executive so, I had to work on the business matters mostly. I had to work for the new business for that need to conduct meeting with the clients and deal about their requirements and helped to find out a perfect solution for them as per their requirements. Moreover, it helped me to increase my network and get the opportunity to learn about the corporate world and how it works. Furthermore, I had the opportunity to work with my line manager for multiple project which helped me to learn about procedure Huawei follows for their customer.

1.2.3.2 Primary Responsibilities

- Develop ideas for new business engagement
- Finding new opportunities and new business for the Cloud department
- Handle existing business accounts
- Make a strong pitch for new business purpose
- Follow-up with existing partners for business
- Visit different types of company with my line manager for enterprise business, career business

1.2.3.3 Secondary Responsibilities

- Worked with the Huawei PR team for the advertisement of Huawei Cloud and Huawei Digital department

- Participated in a Campus Recruitment program with PR team

1.3 Internship Outcome

1.3.1 Student Contribution

Huawei is a renowned company. And the best part is that I had the opportunity to work with the core team member from Bangladesh as well as with Chinese members too. It helps me to learn about the business and how it works. Huawei is a technological company who are working with business in Bangladesh and government closely for many years. As an intern I had the freedom to work like a permanent employee. By myself I on-board customer like Drik gallery, Madina Cement, Sondhani life insurance and many more. For that reason, I had to meeting with them several times with proposal of Huawei Cloud like what we are offering for them and how will Huawei conduct the process and the benefits of this procedure. Moreover, I had to work with their data and how we will help to migrate their data Huawei Cloud. This technical thing helped me a lot to learn about Huawei cloud and its process as my major is computer information management this thing helped me a lot to enhance my knowledge. Furthermore, I had to organize meeting for supervisor and carry out other task that were assigned by my supervisors.

1.3.2 Benefits of the Student

Huawei has a great environment of personal growth. Huawei offers the chance to work in an office environment and makes a substantial contribution to the company. Additionally, it has many benefits for network pointing. Those are:

- ✓ **Communication:** The key is communication, so use it. Huawei managers do communications in a very professional manner. I got the chance to properly learn and use both verbal and nonverbal communication.

- ✓ **Networking:** The importance of establishing contacts and solid relationships with professional's people contribute to the development of a career path. Experienced managers of Huawei come from many MNC's and institutions. Engagement with professionals helps to learn in a various way.
- ✓ **Constructive Criticism:** Utilizing constructive criticism to understand patterns and it aids to resolving those flaws. Praise also increases self- confidence and provides job happiness.

1.3.3 Difficulties faced by the student

I had not to face any difficulties my internship period. As I already done with my all the courses so I gave my full attention on internship and immense level of pressure at work helped me to grow my confidence.

1.3.4 My Recommendations

My recommendations for Huawei would be:

- Huawei Cloud is consisting of less team members. Which creates some problems like my supervisor and director of the cloud team couldn't give the required time sometimes because of the work pressure they had. So, if they increase the team member and continue this internship program in future then it would be helpful for the interns as well as for the company too.
- Huawei Cloud market reach is not up to the mark. I believe, to success in this field in our country Huawei Cloud needs to focus more on their marketing as competitor like Amazon, Microsoft doing business in Bangladesh for many years so to compete with them marketing is a must for Huawei Cloud team.

Chapter 2

2.1 Introduction

Huawei is a Chinese multinational technological corporation. Huawei primarily manufactures and markets consumer electronics, smart gadgets, and telecommunications equipment. Recently, they have also been concentrating on the Enterprise Solution, which links technology and business. The Huawei Cloud Service is also included in this. Former deputy regimental chief of the People's Liberation Army Ren Zhengfei created Huawei. At first, Huawei just makes phones and switches; subsequently, they broaden their product line. Over 170 nations are receiving Huawei's services. In 2012, they surpassed Ericsson to become the largest global manufacturer of telecommunications equipment, and in 2018, Huawei surpassed Apple to become the second-largest global manufacturer of smartphones. Huawei started working in Bangladesh 1998 and they are providing every service in our country also they are working with our government to provide technological service.

2.2 Overview of the company

Since its founding in 1987, Huawei has grown to become a significant participant in the smart device and ICT infrastructure sectors. We operate in more than 170 countries and regions, employ about 195,000 people, and serve more than three billion people worldwide.

Huawei aims to integrate digital technology into worldwide in order to create a fully interconnected, intelligent world that includes every individual, home, and places of business. In order to build the foundation for an intelligent future, we shall advocate for open access networks and fight for universal connectivity. Huawei also provide a range of computing resources to deliver ubiquitous cloud and intelligence. Huawei also provide digital platforms to help all businesses and organizations become more flexible, effective and dynamic. Not to mention, Huawei also use AI to reinvent the user experience and provide people a more personalized and intelligent experience.

The company's main objective is to satisfy its client. To better serve our consumers, we are raising yield and boosting soil fertility. The company's core principles are 'Continue to be

customer-centric and deliver value for customers. Authority must be delegated in order to promote the facilitation and application of the corporate principles. However, the unchecked exercise of power would eventually undermine such shared values of there are no effective controls in place. Each governing body is subject to checks and balance and has clearly defined powers and duties. The company has strong internal governance structure. The consequence is a closed cycle of authority and a cyclical succession of authority that makes sense.

Vision & Mission

Bring digital to every person, home and organization for a fully connected, intelligent world. For achieving their vision and mission Huawei is working very hard with technology and they are trying to implement it towards the world by making technology easy and available.

Strategic Objective

- ➢ Reaching towards the clients as much as possible
- ➢ Improve portfolio optimization to boost business toughness. As a part of those efforts, Huawei will raise its investment in sectors that rely less on complex production techniques as well as in components for intelligent vehicles. Huawei will increase its software expertise as well
- ➢ To enhance mobile communications, make the most of 5G and define 5.5g with industry peers
- ➢ In all user situations, provide a seamless, intelligent, and user centric experience
- ➢ Create innovative technology to reduce energy use for low carbon world
- ➢ Deal with problems with supply reliability

Core Values

Based on its values, Huawei develops. The clear direction and sense of ownership offered to employees can be attributed to Huawei's growth in recent years and decades. According to the company's founder Ren Zhengfei, integrity sums up the essence of Huawei's culture. Their most valuable intangible asset, integrity, is the key to their survival and cornerstone of both personal

and corporate growth. Customers always come first at Huawei. Only because of its clientele is Huawei able to exist. Logically, client centricity is the goal. With inspired dedication, they succeed in reaching their aim. Perseverance is a quality that shows determination since it involves staying the course when things get tough and maintaining focus on long term objectives despite short setbacks. Growth through reflection is the process of favorably affecting the other guiding principles by using the knowledge from experience and thought. Given that Huawei is a global firm, openness is crucial to its success.

2.2.1 Business Overview

Huawei's main business is dedicated to technology and technology related activities. As we already know now is the technological era. To run a business technology needs to relate with it in order to meet up customer requirements and other aspects. Huawei mainly focusses on technological solution. They are now operating more than 170 countries and for this purpose they already opened a business office in Bangladesh too and currently working closely with government for many things for making things digital and more up to date. They are providing various service for our country and monitoring them closely. First smart city of Bangladesh Sylhet was created with the help of Huawei. Rather than that they are also working with telecommunications giant like Grameenphone, Robi, Banglalink and Teletalk for their technological part too

2.2.2 Nature of Business

Huawei provides various service for various business. Their R & D team is always working in the backend to give the perfect support to the team so that they can give the continuous support towards the customer. As an example, wherever they work they keep the blueprint of the project so that when they start working in a new country or new sector regarding the same sector, they can easily implement the idea or if necessary, thy make certain changes according to the project. Huawei is engaging themselves in different kind of businesses. Now a days Huawei is giving their services for consumers, enterprise solution, carriers and many more.

2.2.3 Details of the product and services

Huawei mainly producing products and services for Consumers, Carriers and Enterprise. Between this three they have multiple sectors of services and products. To achieve Huawei's vision and mission they focus on ICT technologies that enable digital and intelligent transformation. They focus on information distribution, interaction, transmission, processing, storage, learning, and inference, and provide innovative products, solutions, and services for carrier's governments, enterprise and consumers. Every year they spend 10% of their revenue on R&D to continually enhance their technological capabilities. Their end-to-end technologies in devices, connectivity, and cloud are what separate us from the pack. This is how they maintain their competitive advantages in product innovation and synergy in the era of ICT convergence and provide targeted services to different customers based on their needs. They are investing more in connectivity computing and cloud service domains to create value for our customers and society at large. Building on decades of ICT expertise, they are currently expanding into the intelligent automotive component and digital power markets. They are continually innovating and working with partners to drive digitalization in various industries and accelerate their pace towards a fully connected intelligent world. Huawei offers the following offers and services.

Device:

In 2020, Huawei's Consumer BG kept the demands of customers as its top priority. Quickly create a fully networked, intelligent planet. As it, they remained committed to giving them a fantastic, intelligent experience across all devices. As well as a dedication to constant innovation to provide value for customers. The products are below:

- ✓ Smartphones
- ✓ Wearables
- ✓ Smart home devices
- ✓ Telematics
- ✓ Lifestyle services across all scenarios

Intelligent Automotive Solution

In the ensuing ten years, both intelligence and electricity were developed. Will advance and ICT will be incorporated with the automobile sector based on Huawei. China will sell more than 2-% of all new cars by 2030. Automobile will be equipped with autonomous technologies; 5000 TOPS worth of processing power and in-vehicle. There will be more than a hundred links in the network. The automotive sector will experience rapid expansion. In automated vehicles, automated structures, and services and skillful movements. To bolster this Huawei will use ICT to make things better by favorable to automakers and a more intelligent automobile industry. Improved automobiles should be produced. The products are below:

- ✓ Intelligent driving
- ✓ Intelligent sensing
- ✓ Intelligent vehicle cloud

Connectivity

We are moving into the age of intelligence at a dizzying pace. The digital transition is beginning to affect many different industries. New standard of intellectual advancement. Being accessible is having an impact on many facets of our lives, families, and industries. Instead of merely making every effort to provide services. Connectivity is growing to offer individualized and deterministic services since then, bandwidth has grown. Hundreds of megabits per second to gigabits per second across all media, as well as manual network upkeep. They are being replaced by highly automated models. Below are the following products:

- ✓ Wireless network
- ✓ Data Communications
- ✓ Transport Network
- ✓ Access network
- ✓ Core Network

Computing

By 2030, the physical and digital worlds will be integrated. Making it possible for seamless machine-human convergence to interact both emotionally and perceptually. With AI, be

widespread and help us to go past human limitations. The device will serve as a microscope and telescope for scientists, enhancing our understanding from the smallest quarks to the largest particles, of all kinds the cosmic events. And to compete with the new world Huawei is producing the following products:

- ✓ x86
- ✓ Kunpeng Computing
- ✓ Ascend Computing
- ✓ Cluster Computing
- ✓ Data Storage

Cloud

Transition of IT infrastructure to the cloud. In order to meet our carrier client's, need numerous cloud-native technologies exist that IT-CT synergy and cloud networks are also mentioned. By the end of 2021, Huawei had been working very hard on cloud computing. Services offered by more than 120 carriers globally.

- ✓ Public Cloud
- ✓ Hybrid Cloud

Digital Power

Recent innovations in renewable energy, such solar and wind energy will progressively take the place of fossil fuels. Power Electrical and Digital technology have advanced significantly. Further controlling power with digital bits, the energy systems watts are distributed properly. They will also employ sophisticated software a 'energy cloud'. By 2030, wind and solar energy will rule the energy landscape, and 50% of electricity produced worldwide will come from these, predicts Huawei. Renewable electricity will make up more than 30% of all energy use our electrical use. Over 50% of sold vehicles will energize. Around the world, green energy will produce more than 80% of the electricity network architecture.

- ✓ Smart PV

- ✓ Site Power

- ✓ Data Center Facility

- ✓ DriveOne

- ✓ Embedded Power

- ✓ Integrated Smart Power

2.3. Management Practice

2.3.1 Organogram of Huawei

Ren Zhengfei
Founder & CEO

Meng Wanzhou Deputy Chairwoman, CFO	**Song Liuping** Chief Legal Office & Chief Compliance Officer	**Ren Shulu** Chief Logistics Officer	**Yao Fuhai** Director, Chief Supply Chain Officer
Tian Feng President APAC	**Chen Lifang** President of the Public Affairs and Communications	**Wang Tao** President of Products & Solutions	**Richard Yu** President, Cloud & AI Business Group
Ding Yun Executive Director, CEO of the Carrier BG	**Li Yingtao** President of the 2012 Laboratories	**Peng Zhongyang** Director, President of the Enterprise BG	**Tao Jingwen** Director, President of the Quality, Business Process & IT Mgmt Dept
Xu Wenwei Director, President of the Institute of Strategic Research	**Yan Lida** Director, member of the ICT Infrastructure Managing Board	**Yu Chengdong** Executive Director, CEO of the Consumer BG	**Bryan Che** CSO

Figure 1

Board & Advisors

Guo Ping Deputy Chairman	**Hu Houkun** Deputy Chairman	**Li Dafeng** Supervisory Board Member	**Li Jie** Chairman of the Supervisory Board
Li Jin'ge Supervisory Board Member	**Liang Hua** Chairman	**Xu Zhijun** Deputy Chairman	**Peng Bo** Director
Li Jianguo Director	**Shi Yanli** Supervisory Board Member	**Lyu Ke** Supervisory Board Member	**Ma Qingqing** Supervisory Board Member

Yang Li
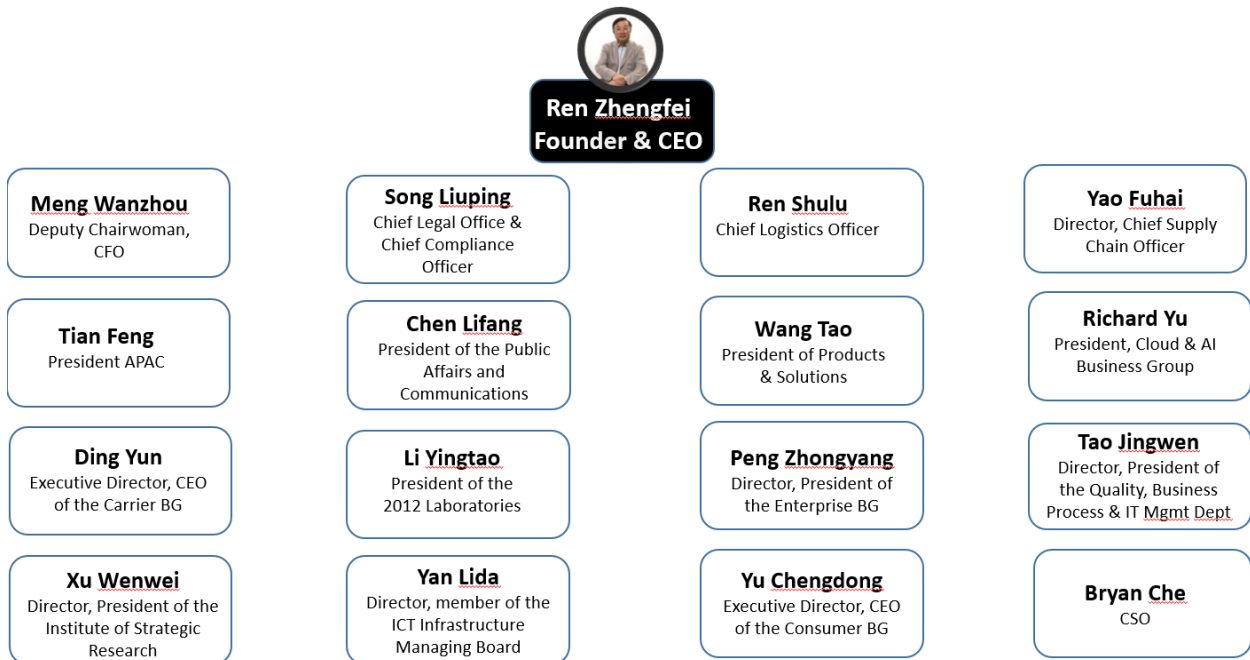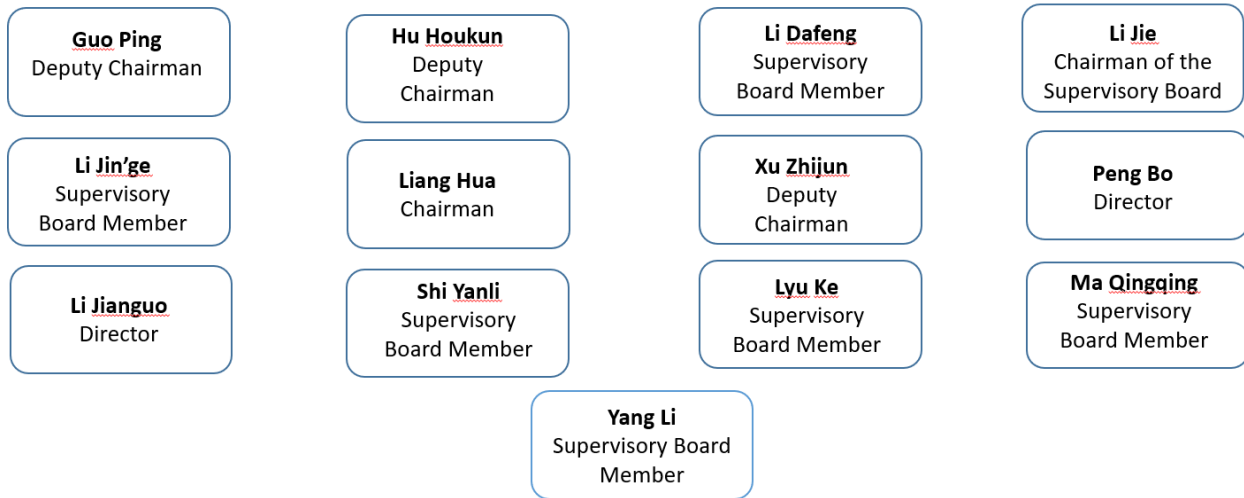Supervisory Board Member

Figure 2

2.3.2 Human Resource Planning Process

The Human Resource Department's Operation division focuses mostly on employment, or the activities that occurs after an employee join. This division also did extensive research on benefits and pay. Before joining, a job request is publicized, and a statement is made public. The human resources division oversees several tasks:

- Joining- This process includes collecting the joining documents, certificate verification and reference verification through email. The joining documents consists of collecting know your employee (KPE) form, nominee form and gratuity form. After confirmation of permanent employment arrange life and health insurance for the permanent employee.
- Confirmation- This occurs after the completion of an employee's probation period and the line manager; head of corresponding department had filled up an evaluation form of the employee.
- Appraisal- Huawei shares its revenue with their employees. Every six months there is a performance evaluation off all employees. HR collects the evaluation form and generates and categorizes a list of for promotion, transfer to other departments and performance improvements plans.

- Transfer- There are one type of transfer procedure: Department wise transfer. IN this task, HR department works with the admin and IT to generate memo and details regarding the job descriptions.
- Resignation- The HR carries out the entire procedure of the resignation for both the parties (resigning employee and corresponding department)
- Final settlement- This task includes the preparation monetary statement for the provident fund, gratuity, and salary of employees.

2.3 Marketing Practice

In the modern marketing era, creating a solid integrated marketing channel is crucial. In order to stand out in the competitive market, a company must discover ways to connect with its customers target market. Huawei takes part in numerous marketing camping's aimed at both

Promoting the business and its products will help them reach their target market. Huawei advertises employing the subsequently means:

- Press release
- Social Media posts
- Featured Articles
- CSR activities
- Collaboration with Government for multiple projects such as seed for futures.

Public Presence in Bangladesh year 220	
Particulars	Number
Press Release	42
Feature Articles	5
Interview	1
Media Visit	3
Events	7 signature events
Pr Value	24,616,000
Interview	129,180,878

Figure 3: Public Presence in 2020

Digital Presence in Bangladesh year 20202	
Official	356,540
Engagement	35,161,878
Reach	29,272,806
Impression	129,180,878

Figure 4: Digital Presence in 2020

2.5 Financial Performance and Accounting Practices

2.5.1 Accounting Practices

Huawei's financial report is prepared on the historical cost basis and the financial report is determined from 1st January to 31st December each year and it is done by the Huawei head quarter in China.

2.5.2 Financial Performance

Financial graph of Huawei from year 2017 to 2021. Here we can see the gradual improvement of Huawei in financial sector.

	2021		2020	2019	2018	2017
	(USD Million)	(CNY Million)	(CNY Million)			
Revenue	99,887	636,807	891,368	858,833	721,202	603,621
Operating profit	19,044	121,412	72,501	77,835	73,287	56,384
Operating margin	19.1%	19.1%	8.1%	9.1%	10.2%	9.3%
Net profit	17,837	113,718	64,649	62,656	59,345	47,455
Cash flow from operating activities	9,360	59,670	35,218	91,384	74,659	96,336
Cash and short-term investments	65,304	416,334	357,366	371,040	265,857	199,943
Working capital	59,122	376,923	299,062	257,638	170,864	118,503
Total assets	154,184	982,971	876,854	858,661	665,792	505,225
Total borrowings	27,465	175,100	141,811	112,162	69,941	39,925
Equity	65,040	414,652	330,408	295,537	233,065	175,616
Liability ratio	57.8%	57.8%	62.3%	65.6%	65.0%	65.2%

Figure 5: Financial Performance of Huawei

2.6 Operations Management and Information System practice

In this digital era, IT initiatives are a fundamental part of an organization business strategy. As a technological related company, it is a must for Huawei in order to grow and compete effectively with its competitors. As an example, from the very beginning Huawei is very careful about its operation management and information system practices. For Bangladesh from 2016 Huawei is using platform like cloud to give the service for customers. In this way they can easily maintain the service procedure. In recent years Huawei upgrade their system by using Huawei Cloud. They are using Huawei Cloud as their data storage so that all the country they are operating can access the data and use this data as per their requirements. For the application all the Huawei office is also using Huawei cloud in this way they get everything as per their needs. By using the Huawei Cloud all the Huawei center connected with each other and furthermore, if they need any help, they can easily get it. As an example, first smart city in Bangladesh is Sylhet. Huawei and government worked together for this purpose. As Huawei has previous experience about smart city, they have stored the blueprint of previous smart city so when they started building the

Sylhet smart city project, they use the previous smart city blueprint and make changes as per requirement. So, basically cloud system helps Huawei to maintain a chain system.

In order to evaluate and oversee significant IT-related projects, Huawei formed an IT Steering committee. Additionally, it makes it simpler to confirm that the IT plan is in line with corporate strategy. The following are the main responsibilities of the IT committee:

- IT operations direction
- IT project planning
- IT- related project approval

The primary duties and roles of the IT steering committee, in addition to their activities are as follows:

- Establishing and achieving the strategic goals of the IT department
- Advising on ICT risk and controls
- Advising on the purchase of IT software and hardware
- Advising on the selection of technologies accordance with Huawei guidelines
- Advising on the regulatory and statutory requirements in accordance with Bangladesh rules and regulations.

2.7 Industry and competitive Analysis

2.7.1 Porter's Five Forces

By identifying and analyzing the five competitive forces that support every organization, Porter's Five Factor is a strategy for evaluating an industry's shortcomings and strengths. The five forces are widely used to assess an industry or market competitiveness, attractiveness, and profitability.

The Porter's five forces of the Technology industry are as follows:

Power of Suppliers- Power of bargaining for the suppliers is very high because of the following reasons:

- ✓ There are not many choices for customer. They need to choose cloud between there or four companies like Amazon, Google Cloud Platform, Microsoft
- ✓ Dependency on Technological company who may also be competitors

Power of Customers- The bargaining power of the customer is moderate in terms of the following facts:

- ✓ Many choices for Cloud system, there are almost five more renowned companies who are providing Cloud system for the customer
- ✓ There are few more companies who selling Cloud as third party
- ✓ Some business also has a dominant position as a result of their sizable customer base and competitive product line

Potential of new entrants into the industry- The barriers for new entrants are moderate in terms of the following facts:

- ✓ It requires sizable investment for setup a Cloud based company
- ✓ Along with regulatory issues according to that company
- ✓ However new company are doing Cloud business as a third party

Threat from Substitutes- The threat from substitute is quite low due to the following reasons:

- ✓ It is tough for a new company to entry this industry as there is already too many renowned companies are doing this business
- ✓ People trust company like, Huawei, Microsoft, Amazon, and Google as they are doing business for a long time

Industry Rivalry- The competitiveness in the industry is quite higher because of the following reasons:

- ✓ The competition between Amazon and Huawei is quite high. Competition between others company is also high because the product is same but what make difference is how the company is giving facilities for the customers

2.7.2 SWOT Analysis

A SWOT analysis seeks to identify the organization's advantages, disadvantages, opportunities, and threats. While strengths and weakness concentrate on the internal environment, opportunities and dangers concentrate in the external world.

Strengths-

- ✓ Huawei maintains a very strong list of shareholders
- ✓ Relationship with corporate clients is incredible. For this reason, Huawei maintain a credit rating
- ✓ Risk management system also well-structured for Huawei
- ✓ They have enough capital to maintain high capital ratio

Weakness-

- ✓ Huawei doesn't have the permission for doing direct business in the company. They must use a third party to do business. For example, if they want to business in Bangladesh, they need to use a third party because they don't take payment in BDT. So, partners make sure that Huawei is getting the payment in Dollar. Also, partner do other things for the clients as a representative of Huawei.
- ✓ The ban of USA for Huawei is creating a negative impact for them. People are afraid of taking their product for this reason

Opportunities-

- ✓ The middle-class business is expanding in new ways
- ✓ By collaborating with Robi, Grameenphone, Banglalink has made the shareholder list stronger, and opened itself for many opportunities
- ✓ The six-month internship program of Huawei encourages young and fresh minds to be part of the workforce
- ✓ Now is there of internet and digitalization, Huawei can broaden both the use of mobile devices and the internet

Threats-

- ✓ Huawei faces a huge threat from Amazon cloud, Microsoft cloud, and Google cloud platform
- ✓ Price range and other benefits is a threat for Huawei. As if another company lower its price and higher its benefits for a project then it is a threat for Huawei
- ✓ Product and services are very limited in this sector of business which is a problem for Huawei
- ✓ As a result of Covid-19, every regulation and system have altered, which has impeded Huawei's operation

2.8 Summary & Conclusion

Huawei is a leading technological company. Which is currently also working in Bangladesh directly and indirectly. In Bangladesh, Huawei is working closely with the government for the betterment of our country. They are taking so many initiatives for the technological advancement of Bangladesh. First smart city of Bangladesh is Sylhet which is a product of Huawei. Other than that, from the beginning of 2016 Huawei is cloud service worldwide and from the beginning of 2019 they have started to give their cloud service in Bangladesh too. Huawei is also taking part in the telecommunications advancement of Bangladesh. They are closely working with the leading telecommunications giant of Bangladesh such as, Robi, Grameenphone, Banglalink, Tele talk. They have introduced 4g in Bangladesh and help the telecommunications company to build it and adopt the changes. They are planning to introduce 5g by 2025 not in a big scale and now they are working for this purpose. However, Huawei Cloud is facing some problems due to the rules and regulations of Bangladesh government. Like, bank of Bangladesh's cant uses the cloud service as Bangladesh government doesn't give them the permission to store their data in some other country. Also, this rule is applicable for the government too. They can't store their own data in other country. Also, if they want to use the cloud service then they must use Private Cloud which is quite expensive. Regarding of these problems Huawei is working too hard to introduce cloud service in Bangladesh. Already many businesses are switching to cloud, but that number is not much. For this purpose, Huawei is making plan as per as the middle-graded business and lower graded business too. Huawei needs to try their level best to maintain everything in a very subtle manner.

Figure 6 Clients of Huawei Cloud

In figure 9 we can see some portion of Huawei Cloud customer list from Bangladesh. Major big companies like ifad, DBC news, Madina cement, are taking the service from Huawei. So, in the end we can see that Growth rate of Huawei Cloud is giving them the success result

Chapter 3 Project Part

"Impact of Huawei Cloud Solution in Bangladesh Business and its information System"

3.1 Introduction

3.1.1 Background

Significant progress has been achieved in releasing people from their many needs and gratifications thanks to technology. In this modern world now a days everything we are doing is related to technology. If we are not advanced enough to make these changes in our daily life and business, then we will not be able to keep our pace with rest of the world. We are not anymore dependent on infrastructure-based structure for data center, data storage and other things. Now day by day we are becoming independent by using cloud service. Cloud service is making our life easy by optimizing our cost, access to the data center anytime we want, lower maintenance and many more. To run a business, run government first we must make sure that our data is safe and sound. Data protection and data recovery is a must now a days because information is the new powerhouse. If we can't store and protect data properly then it is obvious that we will not be able to continue our business properly. Solution of all these problems is Cloud. More than three decades of ICT and digitalization experience are made available through Huawei Cloud. Huawei collaborate with their clients, partners, and developers to embrace digital technology and provide everything as a service as they build the Cloud infrastructure for an intelligent future. Huawei Cloud is operating worldwide from the beginning of 206 and from the beginning of 2019 they are operating in Bangladesh continuously. Main moto of Huawei is to make an intelligent world by connecting technology. Huawei is providing all kind of technological solution for business, digital government welfare, education, media, manufacturing, internet gaming and retail, logistics, and healthcare and many more. They are working very hard to implement their vision and mission which is "**Bring digital to every person, home and organization for fully connected, intelligent world".** And for this reason, they are using major portion of their revenue for R & D sector. Because Huawei believes in continues development.

From 2016 Huawei is working very hard in Bangladesh for the implementation of Cloud in every sector so that everyone can take the facilities and benefits of technological advancement.

3.2 Objective

3.2.1 Broad Objective

The main objective is what any research eventually tries to achieve. It explains why the investigation was conducted. The overall objective of the effort is:

To find out the impact of Huawei Cloud System on business information system of Bangladesh.

3.2.2 Specific Objective

To give the project a clear direction, the study should be divided into a few separate objectives. The following are the reports explicit objectives:

- Firstly, must evaluate the process of Huawei Cloud that how they are engaging with the business and what they are providing for them
- Comparison between the other Cloud system and Huawei Cloud to find out why people will choose Huawei Cloud
- Lastly evaluate and analyze cost optimization and service performance of Huawei Cloud

3.3 Methodology

For research to be successful, one must use a productive and successful technique. The project's conclusions and analyses are t supported by primary data as I got the opportunity to work with direct business in Huawei as well as secondary data.

3.3.1 Primary Data

In order to collect primary data, I have taken the interview of the Huawei Cloud Manager and other employees. Also, this report made based on personal experience, observation and as I got the chance to work with direct business, so it gives me some data to analyze the impact of Huawei Cloud in Bangladesh and comparison between the other clouds.

3.3.2 Secondary Data

For secondary data, I have collected data from the Annual reports of Huawei, website sources, Journal of the organization.

Secondary data sources:

- Huawei's annual report
- Huawei's website, published articles and other documents
- Other related reports on the similar topic

3.3.3 Sample Size

Since the report's focus was more on experience than on research, I decided against conducting a poll and instead engaged in in person interviews and direct business involvement to assess the report's effects and how they are evolving. Have held a targeted discussion in a group setting with them for qualitative research for the project. Also, to ensure reliable information they were the authentic source for collecting data.
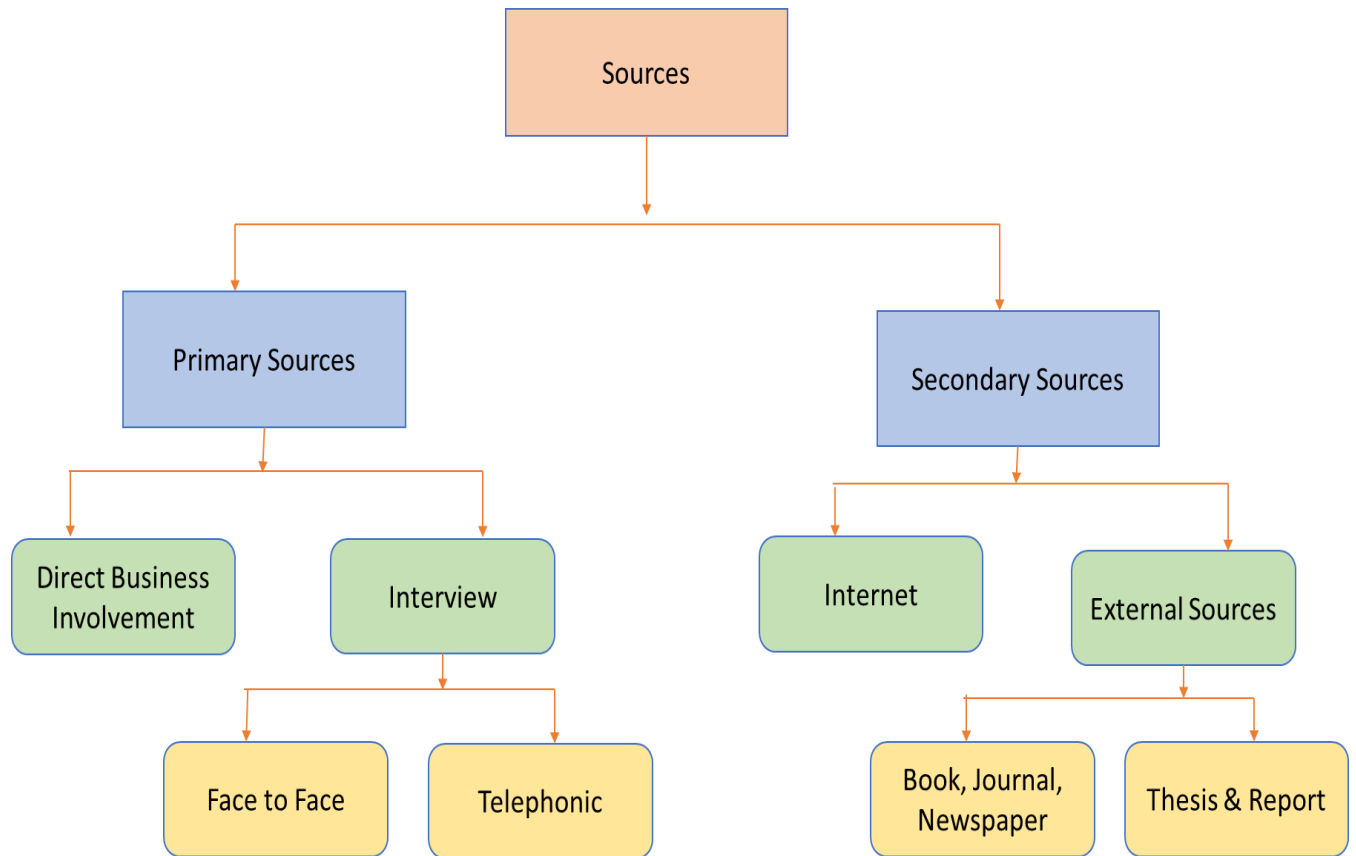
Figure 7 Methods of Data Collection

3.4 Findings and Analysis

The most important part of our internship report is the project section. All the students' knowledge from there had to be applied in this circumstance. I finished the project component in accordance with the criteria and guidelines for the BBA internship report for my field of study, CIM.

The aim of my research, then was to show how Huawei's technological solution impacted in business information system in Bangladesh.

As an intern in the Huawei Cloud team firstly I got the chance to learn about Huawei Cloud and its competitors. Findings and analysis part is related with my organizational responsibilities too as I have conduct multiple business-related work for Huawei. Here I am adding the part that Huawei Cloud is helping the Bangladesh business and its information system. This also includes Bangladesh government.

3.4.1 Findings and Analysis from organizational Responsibilities

Firstly, I want to show the graph how Huawei Cloud is growing its business.

Growth Rate:

Figure 8 Position in the Cloud market

Huawei started their Cloud journey from the beginning of 2016. Before that Cloud from other companies like amazon, Microsoft, google, ali baba already dominating the field. So, to compete with them Huawei speed up their R & D sector. As a result, Huawei Cloud became the fastest-growing vendor, connecting and serving customers worldwide.

| 112% | 2.6 mn 63% | 6,100 67% |
| sales growth in cloud markets | developers worldwide | partner applications and certified solutions |

Figure 9 Growth rate of Huawei

Above mention figures shows the growing result of Huawei Cloud. Started from 2016 Huawei Cloud has increased their sales rate last year 112% in cloud market. Furthermore, for this progress in the cloud market they have increased the developers worldwide by 63% which is another reason for Huawei Cloud to growing this faster. Moreover, investing in R & D most of the revenue make sure the continuous development of Huawei. To compete with other Cloud system recently Huawei Cloud also increase the number of partner applications and certified solutions so keep pace with world. As a result, now they have all kind of solutions regarding Cloud service as they are working worldwide.

This progress in R & D sector also effected the global and local market for Huawei. As we can see in the figure that Huawei currently leading the second position in China market. Alibaba started the Cloud business many years before Huawei regarding this fact Huawei now closing to number one position in China market because of their service towards the customer. Moreover, about the whole world Huawei currently in the number 5 position globally. It means the continuous development of Huawei is affecting the scenario as we know that in this sector often customers are not interested to switch from one company to another because of the hustle they must face. But Huawei Cloud system make this thing much easier for that customer is now choosing them.

This whole system effected our country Bangladesh too. As I already mentioned earlier that Huawei Cloud start their journey in Bangladesh in 2019. But in this short time due to their positive attitude, they are doing good business in Bangladesh too.
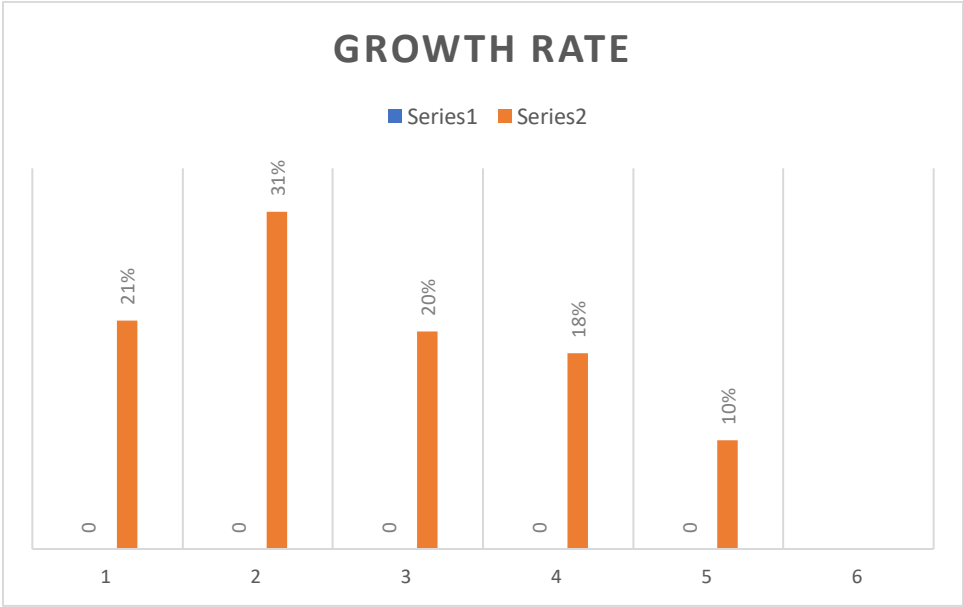

Figure 10 Growth rate between the other Cloud System

From figure 10 we can see the competition between Huawei Cloud and others. Here, we can see that Amazon Cloud system is leading the market by 31%, then it comes to Huawei 21%, then Microsoft, Google, other Cloud providers are in the next position.

Cost Optimization:

The main problem of infrastructure based technological things is it is too much costly. So, sometimes it is quite impossible to maintain it. To solve this problem Cloud system is the answer. But it is also true that, installing Cloud is not an easy thing to do it is also costly. But it varies between the company. The costing of the Cloud depends on the company that how they are making it.

Particulars	Amazon Cloud	Huawei Cloud
Instance Flavor	T4g.xlarge	S6. xlarge.4
Basic/Turbo frequency	Up to 3.0 GHz	Up to 3.5 GHz
Processor generation	1st generation intel Xeron Scalable Processor	2nd generation intel. Xeron. Scalable processor
CPU credit/hr	54	Burstable performance is not restricted by CPU details
Maximum PPS (10000)	15	25
Network Performance	Moderate	High
Total Cost	$128.61	$88.90

Figure 11 Cost comparison between Huawei Cloud and Amazon Cloud

Huawei Cloud is leading the market for many reasons. One of the main reasons is **Cost Optimization.** Not only company can reduce their cost of the product. Because it depends on both hardware and software. Other companies like Amazon, Microsoft, Google do the major work about the software but for hardware they depend on others. On the other hand, Huawei is fully dependent regarding this matter. Huawei technologies is providing their own software and hardware. So, costing of their product is not that much. Because everything they are making on their own as they are not dependent this reduces their costing. As their costing is low so whenever they are doing business, they can give the customer the lowest price in the market. Furthermore, they have the power to give the customer up to 40% discount if the deal is too big. This is what makes Huawei Cloud growing faster.

Now, we are going to find out the impact of Huawei Cloud in Bangladesh business and its information system:

Cloud is a on demand thing. Means if a company thinks that they need a cloud system or data center right at this moment then they easily make a cloud a system for themselves. Huawei Clouds mainly benefits the Bangladeshi business companies by:

- ✓ Optimizing the cost

- ✓ 24/7 technical support

- ✓ Huawei Cloud works on a specific side. Means they are expert for some services which gives them the benefits from the business companies from Bangladesh

Recently many business companies from Bangladesh getting the help from Huawei Cloud. And this helps is giving them more advantages about doing the business.

Now we will look into and analyze how Huawei Cloud is helping the business information system of Bangladesh and how Huawei Cloud is helping the business to get more efficient financially also how the business of Bangladesh is improving the services of themselves.

Sondhani Life Insurance

Sondhani Life Insurance is a leading life insurance company of Bangladesh. They are dealing with thousands of data each day of their clients. And this data is very important for them as well as for their clients too because based on their data the insurance thing works. This huge data requires of a big data center which is a costly thing for them because day by day this data is increasing, and it requires continuous nurture and attention. Recently, Sondhani Life Insurance started working with Huawei Cloud. Before the Cloud system they were using on premise data center which was a disadvantage for them because of:

- Because of the costly. It is difficult to maintain a on premise data center. On premise data center requires many things such as, temperature needs to be perfect, continuous electricity

- For on premise data center everything needs taken care manually like troubleshooting, data center management

- It is tough to recover data from on premise data center because of the manual data recovery system

- On premise data center limit the capital growth because it needs payment for additions and modifications. On premise data center needs software and hardware both services thus this increases the cost

- If a company operates in regulated industry, such as banking or healthcare, it is their responsibility to comply with all relevant rules and regulations as the owner and operator of the servers and on-site storage. If the infrastructure is found to be noncompliant, many individuals may need to pay attention to compliance, more money may be required for external audits, and there may even be fines

Huawei Cloud and Sondhani Life Insurance

Because of the above-mentioned problems Sondhani Life Insurance started using the Huawei Cloud. One of the main reasons was that their financial situation was not up to the mark. Technology helps to increase the financial activities too. Exactly Huawei Cloud is doing that for the Sondhani Life Insurance.

Particulars	Huawei Cloud
Instance Flavor	S6. xlarge.4
Basic/Turbo frequency	Up to 3.5 GHz
Processor generation	2nd generation intel. Xeron. Scalable processor
CPU credit/hr	Burstable performance is not restricted by CPU details
Maximum PPS (10000)	25
Network Performance	High
Total Cost	**$88.90**

Figure 12

Above mentioned particulars were the first requirements from Sondhani Life Insurance to see the difference between on premise data center and Cloud system and how they are impacting the business. The impact was:

- Automated system. Before Huawei Cloud they can only access the data from the on-premises data center, but after using the Huawei Cloud they get access of their data base from anywhere they want

- Data recovery and disaster system. Huawei Cloud is providing 27 regions and in that 27 regions they have 67 available zone. So, if for some reason one region faces any problem the data stored in that region will automatically transfer to the next available zone so in this way Sondhani Life Insurance's data will be safe and sound

- Website is a big factor for Sondhani Life Insurance. They are doing many businesses by using their website so it needs to be fast otherwise their business will be slow. By using

Huawei Cloud OBS service they are making the website faster and it reflects to their business financial progress too.
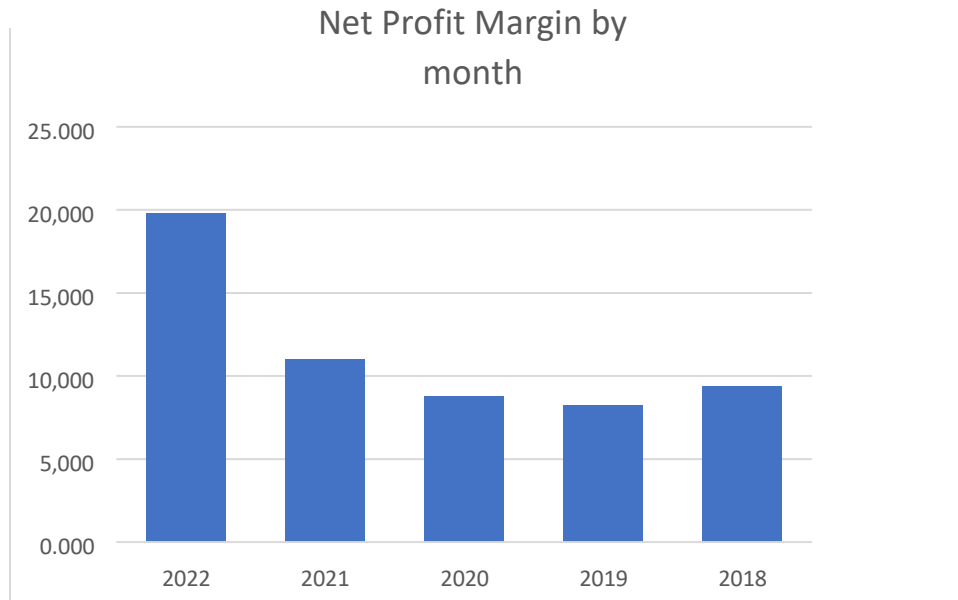
Net Profit Margin by month

25.000	
20,000	
15,000	
10,000	
5,000	
0.000	

2022   2021   2020   2019   2018

Figure 13 Net profit margin

By that financial graph we can understood the impact of Huawei Cloud in Sondhani Life Insurance. Huawei Cloud is helping Sondhani Life Insurance by

- Reducing the cost of maintenance of on-premises data center

- Increasing the speed of their website by using OBS system. So now they can engage more customer at a time

Drik Gallery

The drik gallery is a private art gallery in Dhaka. They are doing business in Bangladesh from 1989. As an art gallery they are main business is with the pictures as for that they also need to make sure the quality of picture and the availability of the pictures too. The problem they were facing:

- As an art gallery drik needs to deal with pictures. They have huge numbers of pictures for that reason they need huge data base so that they can maintain the picture quality

- They have more than 10 e-commerce sites for their business. It is tough to handle all these. And it was impacting their business too

Huawei Cloud and Drik Gallery

Huawei Cloud currently working with Drik Gallery. The impact of Huawei Cloud in Drik Gallery is:

- As they Drik Gallery works with the picture they need to make sure the storage system and quality of the pictures for that purpose they are using OBS system. Object Storage Service (OBS) provides stable, secure, efficient, and easy-to-use cloud storage that lets you store virtually any volume of unstructured data in any format and access it from anywhere using REST APIs.

Advantages of OBS System:

- ✓ High Performance

- ✓ OBS can handle high-volume concurrent connections and sudden traffic bursts. You do not need to worry about capacity. OBS can handle whatever you throw at it.

- ✓ Low Cost

- ✓ Scalable resources. You only pay for what you use.

- ✓ High Availability

- ✓ OBS delivers 99.995% availability. Your service continuity is guaranteed.

- E-commerce solution. Provides a one-stop solution that allows customers of all sizes to deploy their services rapidly while keeping costs down. The solution is **elastic**, **reliable**, and **secure**, making it easy for customers to deal with promotions, sweepstakes, and hot sale events all while maintaining rapid response as access requests increase.

Advantages of E-commerce Solution:

- ✓ Service neutrality
- ✓ Reduced TCO for e-commerce platforms
- ✓ Enhanced user experience
- ✓ Pleasant shopping experience
- ✓ Precise operating system
- ✓ Comprehensive protection

Paperfly

Paperfly provides total logistical solutions. They offer doorstep delivery services across Bangladesh, as well as choices for storage and fulfillment, at the union level. Since they started doing business in February 2016, they have grown to cover all 64 districts with the most extensive cash-on-delivery coverage.

The problem they were facing:

- Paperfly was using Amazon Cloud system. But the latency was not that good

- Need domestic or private data center

- Scalability for the company

- As they are providing logistics system throughout whole Bangladesh storage system is a must for them

Huawei Cloud and Paperfly

As paperfly was facing above mentioned problems so for that reason they are now connected with Huawei Cloud. The impact of Huawei Cloud in paperfly business are:

- ✓ Huawei Cloud fixed the latency problem for paperfly. As Huawei Cloud have optical fiber connection with Singapore for that reason Huawei Cloud choose Singapore as their region where the data will be stored. As Huawei Cloud have optical fiber connection with Singapore so for that reason the latency is minimum.

- ✓ Paperfly needs a domestic or private datacenter for themselves. As Huawei Cloud provide two type of cloud support one is Private Cloud another one is Public Cloud. Moreover, Huawei Cloud already build private data center for mir telecom and flora telecom. So, for this problem Huawei Cloud is building a private data center for paperfly logistics. In the private data center paperfly can use this as per as their need.

- ✓ Most of the websites are based on monolithic architectures. Means each feature are related to each other. The paperfly website was also monolithic architecture based. But

for some issues they need to auto scale some of the application. Auto scale means the size of the application will increase as per as the traffic. But as most of the websites are monolithic this was not possible before. But using Huawei Cloud's cloud container engine service feature of every website's application will be independent and can do anything as per the requirements.

✓ Scalability means auto scaling will start working when it is needed. Means if we continue the auto scaling process all the time then it will generate bill continuously. So we when scalable the website means the auto scaling will happen for that particular website when it is needed the most. So, in this way we can reduce the cost.

Huawei Cloud and Bangladesh Government

As per Bangladesh Government rules and regulations:

- No government information cannot be stored outside of the country

- This includes all the ministry and public bank of Bangladesh

But to keep the pace with the modern world it is important for Bangladesh to digitalize its system. Huawei Cloud along with Bangladesh Government are working together for this purpose.

As I earlier mentioned no ministry of Bangladesh cannot stored their data outside of the country. For that reason, Huawei Cloud is giving private cloud services to BCC (Bangladesh Computer Council). In private cloud they will get all the services from the just like the public cloud of Huawei, but public cloud can be used by many people. On the other hand, private cloud gives its services for a particular company.

Bangladesh Computer Council is using Huawei Clouds private cloud service. Furthermore, all the ministry of Bangladesh is using cloud service though Bangladesh Computer Council which they are getting from Huawei Cloud and because of that:

- ✓ All the information of Bangladesh government ministry is stored in cloud

- ✓ They are getting best bandwidth

- ✓ Cyber security for all the information

- ✓ Data backup and recovery system

- ✓ User specification. It means Huawei is giving their customer specific service so that they need not to spent money on the service that is not required for them. For that reason, Bangladesh Computer Council along with Bangladesh Government is using Huawei Cloud system

Apart from this some of the major findings that I go from Huawei Cloud is.

- ✓ Huawei and Huawei Cloud is working with all the telecommunications giants like, Robi, Grameenphone, Banglalink. Huawei Cloud is providing them Cloud system and by using this system they are making their network more suitable for the customer. Apart from this, Huawei Cloud is working with them closely to introduce 5g by the end of the 2023.
- ✓ Huawei Cloud contribution to Bangladesh ICT sector is massive. They are closely working with the Bangladesh government, ICT ministry of Bangladesh to introduce technological advancement in the whole country. They have provided the cloud service for all the ministry of Bangladesh government.
- ✓ Huawei is working in Bangladesh for more than 18 years. During this time period they have helped our country by providing many technological facilities like arranging ICT fair nationally and for university, seed for future and many more.
- ✓ Huawei Cloud is not only focus about big business in Bangladesh. They are providing solutions for small business too. For that they have some packages too which made specially for the medium and smaller business so that they can use the technological advancement to grow more.
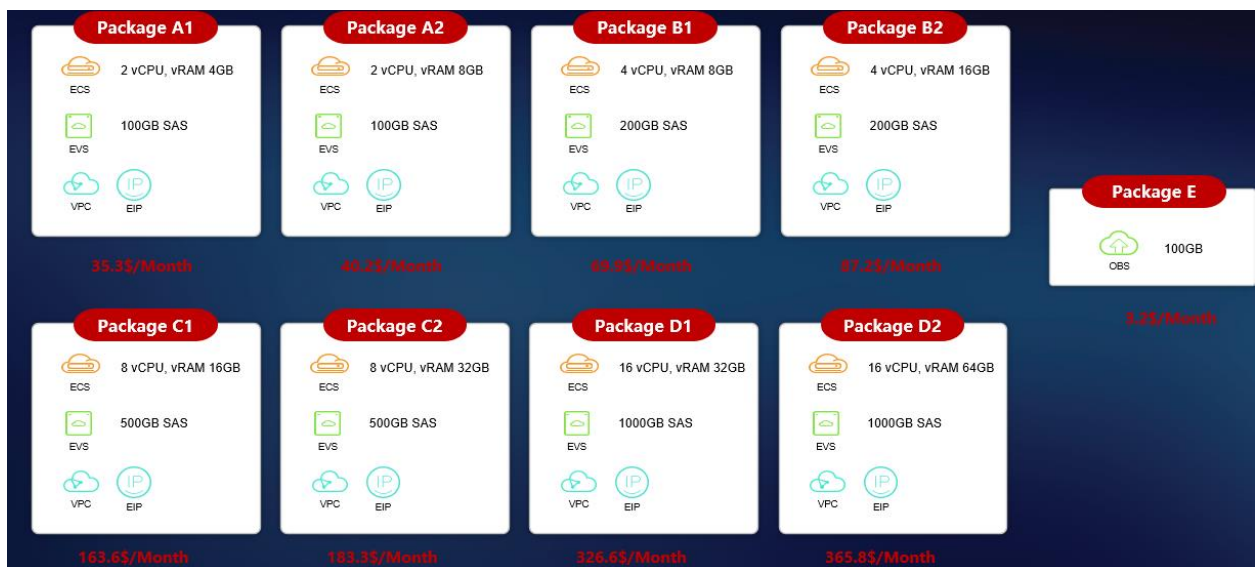
Above mention are the packages for the medium and smaller business. These packages had been made based on their needs and demands. The price of these packages is budget friendly so it will not create any financial pressure on them.

3.5 Conclusion

Huawei Technologies is doing great business for the world by trying to connect the world by technology and to make sure technological advancement for all the people. Huawei Cloud is a part of this. As we already know that Cloud is the new big thing in the world. We can use the Cloud as a technical solution. Like we can use the Cloud as the database, server, for cyber security purpose and many more. Most importantly Cloud is not a physical thing. Cloud is mainly a server and an alternative of a data center by connecting to the Cloud we can get all the features that we previously get from different ways.

To ensure technological service in Bangladesh Huawei team and board members are working continuously. But regarding of this attempt people are still not aware of Cloud service. This needs to be taken care fast. Otherwise, the plan of technological development could not be possible. The plan of Huawei Technologies is connecting the whole world digitally. For this purpose, they are working and innovating new ways. Seed for future is one of them, it is a platform where student can participate and give their idea about the technological innovation later Huawei team carry out with them regarding their plan and recognized them. This thing helps them to give the idea of innovation and digital world towards the students so that they can prepare themselves accordingly. The result of this program is huge. Even student from Bangladesh is joining the Huawei team in China as a prize of their innovative and great idea.

About the Huawei Cloud, team is making progress according to their plan. They trying to reach out the market as much as possible. In this way they can share the benefits and facilities of Cloud system which is the most important things for now. Because firstly, people need to learn about it. Needs to learn about benefits, and prospects too. This will increase the interest eventually of the people. Not only the big companies but also the medium and small company needs to apply cloud system for their business as day-by-day world will be tough. So, to survive in this world one need to be technologically advanced as a person and as a business. Otherwise, it will be difficult to compete with others. Huawei now working harder for this purpose only.

3.6 Recommendations

1. In Bangladesh most of are not advance enough to learn about the cloud. That is an unfortunate thing for us. Because world is progressing. Whereas other countries are trying their level best make their business and other things more technologically advanced. This needs to be change. Huawei Cloud should give focus regarding this matter

2. The image of Huawei is not great due various matters. This needs to be clear as the image of the company plays a vital role for their business engagement. Because of this situation Huawei Cloud is losing many business

3. Huawei Cloud needs to focus on branding activities by making advertisement for Tv commercial, social media platform, newspaper because this will increase the people's knowledge regarding the Huawei Cloud

4. To compete with the Amazon Cloud as they are holding the leading market share Huawei Cloud needs to modify some of their product and services. So that people get the chance to choose between the two. As of now Amazon Cloud do have some unique products which give them the advantage in this market. Huawei Cloud needs to work on this.

5. Huawei Cloud portal needs to be change. As the idea of this portal is mainly about the technological part. But this is not understandable for the people who are not from the technical background. Portal needs to simpler so that anyone can get the main idea about Huawei Cloud.

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