

The proposal of implementing a business model entailing the digitalization of the ARM system
of Incepta Pharmaceuticals Limited



BUS 400

INTERNSHIP REPORT

The proposal of implementing a business model entailing the digitalization of the ARM system
of Incepta Pharmaceuticals Limited

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APPROVAL OF COMPLETION OF INTERNSHIP

Date: 10th December, 2016

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Subject: Completion of Internship under Incepta Pharmaceuticals Limited

To Whom It May Concern,

It is my pleasure to report that Saiyan Islam, ID: 12204085, has successfully completed his three-month duration of internship under the treasury wing of the Finance & Accounts Department of Incepta Pharmaceuticals Ltd.

In the short time, Saiyan worked with our team engaging in the assistance of managing the remittance report from our domestic depots and also maintaining the records of some of our foreign vendors. Additionally, he was also engaged in maintaining the documents enlisting the daily transactions between our company and some private banks. Saiyan has also utilized his notable skill in the English language to provide ideas regarding the promotional activities of our company. On various occasions he got to display the richness of his talent to such an extent that he even got applauded by our department head, the CFO of Incepta Pharmaceuticals Ltd., Mr. Naimul Huda, FCMA, ACA.

It was a pleasure supervising Saiyan these three months. Saiyan's hard work and contributions to our company were greatly appreciated and our office staffs and co-workers enjoyed his wonderful personality. We pray that he achieves further success in his coming years.

Sincerely,

Internship Supervisor
Mohiuddin Ahmed
Senior Manager, Finance & Accounts
Incepta Pharmaceuticals Limited

Approved by:

Academic Supervisor

ACKNOWLEDGEMENTS

At first I want to sincerely present my gratitude to the Almighty, Allah (Subhānahu Wa Ta'Ala), it was solely due to His ultimate permission that I got to successfully complete my internship along with this internship report.

Firstly, I want to acknowledge all the people, whose effort led to the compilation of this report. I would like to express my sincere and immense gratitude to my internship supervisor, Mr. Mohiuddin Ahmed, Senior Manager of the Treasury Wing of Finance & Accounts Department of Incepta Pharmaceuticals Ltd., who was not limited to being solely my supervisor but rather a guardian feeding me with his continuous professional guidance and a sincere well-wisher. Next, I want to address the intellectual advices given to me by the CFO of Incepta, Mr. Naimul Huda, who ended up being my role model and a mean to continue my journey in the field of Finance & Accounting. I also want to distinguish the motivation given to me upon the acknowledgement provided by Mr. Ferdous Khan, General Manager of the Sales Department. I want to appreciate the time given to me by the Senior Manager of Cost and Management Accounting, Mr. Md. Abdus Sattar in discussing the relevant costs involved for the project proposed in this paper. I want to acknowledge the efforts of Mr. Md. Ziaur Rahman Mollick Mr. SM Tonmoy and for being my acting supervisors and also providing me with valuable data and guidance when it was needed. Additionally, I want to personally thank Mr. Md. Monwarul Islam, Deputy Manager, Finance & Accounts for providing me with the required figures for the creation of this report. I also want to express my sincere gratitude to the IT department, namely Mr. Rubel Islam, for giving the time in sharing the IT infrastructure and other relevant information and Mr. Md. Anwar Hossain, Senior Manager of IT Department for sparing me some time for a short interview.

Lastly by not the least, I want to convey my immense gratitude towards my academic supervisor, Mr. Saif Hossain, Senior Lecturer, BRAC University. It was his for his valuable suggestions and guideline which helped me to prepare this report in a well-organized manner.

In conclusion, I want to state that I am truly indebted towards Incepta Pharmaceuticals Limited in providing me with my very first full-time job experience and the essence on being in the corporate field. I honestly believe that the experience gained in the last three months is going to help me out profoundly as build on my career.

Yours Sincerely,

Saiyan Islam

BRAC Business School

BRAC University

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
ARM	Accounts Receivable Management
CCD	Credit Control Department
CRM	Customer Relationship Management
CWH	Corporate Warehouse
DA	Distribution Assistant
DC	Data Center
DIC	Depot in Charge
DR	Data Replication
ERP	Enterprise Resource Planning
ICL	Incepta Chemicals Ltd.
IHHL	Incept Hygiene & Hospicare Ltd.
IHNL	Incepta Herbal & Nutricare Ltd.
IPL	Incepta Pharmaceuticals Ltd.
IMS	Institute of Mathematical Statistics
IT	Information Technology
IVL	Incepta Vaccine Ltd.
JPEG	Joint Photographic Experts Group
NPV	Net Present Value
SAP	Systems, Applications, Products
SBU	Strategic Business Unit
SD Module	Sales & Distribution Module
VM	Virtual Machine

EXECUTIVE SUMMARY

This is the internship report based on the three month long internship experience that was gained upon working on a business model dedicated towards improving the Accounts Receivable Management (ARM) designated to the treasury wing of the Finance & Accounts Department of Incepta Pharmaceutical Limited. The report initially discusses the background of the pharmaceutical industry and the profound level of success gained by Incepta Pharmaceutical Limited (IPL), then the report goes into discussing the structure of the distribution and the IT system of Incepta. Then the report goes into the possible scope of implementing the SD Module of the SAP software within the depots so as to gain from the benefits of decentralization. The paper also recommends the usage of two software- BillQuick & Izitru so as to gain efficiency in the management of its new system. A systematic cost and benefit analysis is done to evaluate the effectiveness of the entire business model. Based on the findings from the cost and benefit analysis, NPV analysis is done to justify the likelihood of future benefit on behalf of the company. The report concludes giving some recommendations for the betterment of the company.

OVERVIEW OF PHARMACEUTICAL INDUSTRY IN BANGLADESH

Pharmaceutical sector is technologically the most developed manufacturing industries in Bangladesh and the third largest industry in terms of contribution to government's revenue. The pharmaceutical industry in Bangladesh is accounted as an emerging industry. Though the capital requirement is immense, over the years the health care expenditures by the government has significantly risen and to equalize with the increasing demand for other healthcare products and services, there has been an increase in funding and inflow of investment into the industry resulting in the increase of the size of the total market. There are around 250 licensed pharmaceutical product manufacturers in the country; however, currently a little over 100 companies are in operation. It is highly concentrated as top 20 companies produce 85% of the revenue. According to IMS Health, a US-based market research firm for the healthcare industry, the retail market size is estimated to be around BDT 84 billion as on 2011. (Ahmed, 2016)

OVERVIEW OF INCEPTA

Incepta Pharmaceuticals Ltd., being established in the year 1999, is considered one of the most renowned pharmaceutical companies in Bangladesh with one fully operational plant at Zirabo, Savar, Dhaka (Zirabo plant) and another at Dhamrai, Dhaka. With the company's concentration on investing in research and development, it has had a strong start to its journey in the industry.



Figure 1: Logo of Incepta

Incepta Pharmaceuticals Ltd, being the key producer in the country, offers a diverse range of dosage forms with an aim to deliver unconventional and technologically advanced products to Bangladesh. It has a vision to become a research based global pharmaceutical company with a

concern to discover and enhance innovative products for overseas as well as to help develop the nation. Operating overseas, the company is gradually expanding its reach to several continents such as Asia, Africa, Central America and Latin America. With the commencement of several authorized facility, Incepta Pharmaceuticals Ltd. has been successful selling their products in the local market as well as the international markets, increasing employment by creating job opportunities locally. Over the years it has become one of the few companies in Bangladesh that has made outstanding contributions to the country's balance of trade, exporting its products to forty-four countries across the globe creating a global image for the pharmaceutical industry in Bangladesh.

Incepta Pharmaceuticals is comprised of the following strategic business units (SBUs):

1. Incepta Pharmaceuticals Ltd. (IPL)
2. Incepta Vaccine Ltd. (IVL)
3. Incepta Hygiene and Hospicare Limited (IHHL)
4. Incepta Herbal & Nutricare (IHNL)
5. Incepta Chemicals Ltd. (ICL)

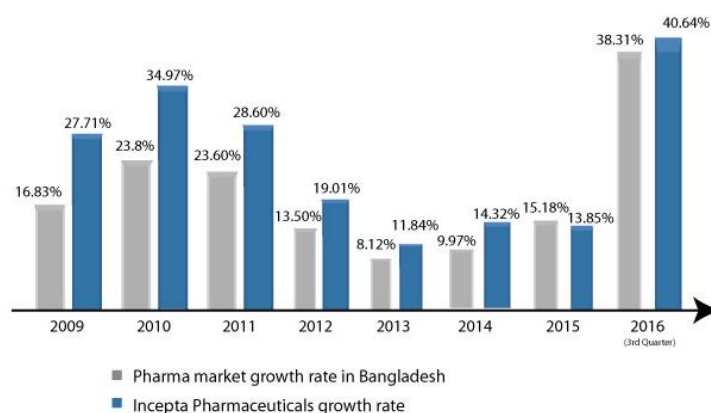


Chart 1: Growth rate of the industry vs. growth rate of Incepta (Source: Incepta, 2016)

Presently, Incepta Pharmaceuticals Ltd. is now the second largest pharmaceutical company of the country and recognized as the fastest growing of the top five manufacturing company in the country. The company's distribution channel is comprised of 21 depots around Bangladesh (Appendix B).

1. THE BACKGROUND OF THE STUDY

1.1 Understanding the need of technological advancement in the pharmaceutical industry

The pharmaceutical industry has been experiencing a tremendous boost in its technological sector for the last few decades. According to the financial analyst agency, PwC (2009), who went into predicting the future of the pharmaceutical industry, stated that the business environment for the pharmaceutical industry is seamlessly changing in the context of social, demographic and economic factors, thus there is a need for this industry to tackle these challenges; thus companies need to strengthen their technological advancements and also strengthen the relationship with their stakeholders, especially the suppliers. Additionally, the agency even states that for pharmaceutical companies to prosper, they need to make a transition from mass marketing to segmented marketing.

Since its birth, Incepta Pharmaceuticals Ltd. has been launching new and innovative products in order to fulfill unmet demand of the medical community. The focus has always been to bring in more technologically advanced molecules and innovative dosage forms to the country. Moreover, in 2015, the company introduced its data center as it has made a remarkable attempt in condensing its data in a systematic manner. The company continues to make ground-breaking achievements in its field in medical science.

1.2 The problem statement

According to Senior Manager, Mohiuddin Ahmed (Appendix A-1), the company, which started off with just Tk. 5 crore (Tk. 50 million) as a startup, now stands its ground having a sales figure of Tk. 140+ crore per month and all these have been achieved in 16 years of operation. The company is growing at a tremendous rate of an average of 15% per year (EBL Securities Ltd., 2015). In order to achieve economic efficiency in its business activities, it must find means to acquiring data in real time. Presently the company inputs all its sales related data at depot level and which is transferred daily to the Systems, Applications, Products (SAP) being supported by

its own data center. In regards to its business process, the process of data input can certainly be improved and further enhanced with the implementation of the SD Module of the SAP software thus decentralizing the data management system acquiring real life data and reporting. The depots designated in collecting the sales proceeds maintain most of their accounts digitally but their experience can be further improved through the usage of application software like BillQuick. On a daily basis, remittance reports come in detailing the sales collection for the day. A part of these reports are sent by postal mail while a better business proposal can be implemented through the use of technology. Thus this report entails recommendations for digitalizing a significant portion of its finance function which is its accounts receivable management. By following them, Incepta Pharmaceuticals Ltd. can experience further optimization in its operational activities and derive benefits from a more digitalized version of its finance function.

2. THE PURPOSE, OBJECTIVES, METHODOLOGY, TIMELINE & LIMITATIONS OF THE STUDY

2.1 The purpose of the study

The purpose of this study is to devise a proposal entailing a sustainable business model for Incepta Pharmaceuticals Ltd in context to improving the Accounts Receivable or Remittance Receivable Management on behalf of the Treasury sector of the Finance & Accounts Department. In particular, the aim was to examine the present accounting practices, technological infrastructure in using the SAP and other application software and thus ultimately propose the development of a more decentralized, real life and digitalized business model with the goal of introducing a far more efficient accounting practice when it comes to managing its remittance receivable from its active depots.

2.2 Objectives of the Report

The following are the overall objectives of the report:

- To know how the ARM system is presently managed at the depots of Incepta Pharmaceuticals Ltd.
- To know the present IT infrastructure and SAP system of the IT Department.
- To know how the existing data entry of the ARM system can be improved, thus devising a business model for the improvement of ARM.
- To know the cost and benefits associated in introducing the proposed business model.

2.3 Overall Methodology

This paper has made use of both primary and secondary data materials which have been properly cited. The following are methodologies used to meet the objectives of this report:

- In order to know the present data entry system related to accounts receivable at the depots, the Senior Manager of the treasury wing of Finance & Accounts Department of Incepta Pharmaceuticals Ltd.- Mr. Mohiuddin Ahmed and Finance Officer- SM Tonmoy have been interviewed. Secondary data from online sources related to ARM has also been used.
- In order to know the present situation of the IT infrastructure, Rubel Islam, System Engineer of the IT Department of Incepta Pharmaceuticals Ltd. has been interviewed. Secondary data related to data centers and the SAP system has also been used.
- In order to devise a well-refined business model to improve the ARM system, interview from Rubel Islam revealed the possibility of enhancing the SAP system upon configuring the SD module; along with these suggestions in using software- BillQuick & Izitru has been given, with the aim of creating a better workflow of the ARM System. Mohiuddin Ahmed and SM Tonmoy of the Finance & Accounts Department have also been interviewed along. Furthermore relevant data from secondary sources related to SAP modules and software- BillQuick & Izitru has also been used.

- In order to know the cost and benefit of the entire business model, an NPV analysis has been done evaluating the financial effects of implementing SAP SD Module, BillQuick & Izitru with the advice from Mohiuddin Ahmed has been done. Moreover secondary data from official sites of BillQuick & Izitru has also been used.

2.4 The timeline of the study

The study was conducted for 3 months from the date starting from the first week of September 2016 to the first week of December, 2016 and is comprised of the following steps:

- First Month (September – October): Collection of secondary data
- Second Month (October – November): Analysis of secondary data
- Third Month (November – December): Collection & analysis of primary data

2.5 Limitations of the study

This study is formed using data where most of the figures given by the experts (or interviewees), in the form of primary research material, are basically all estimates and can be subjective. Another issue is that since the company, in context to this report, is a private limited company and maintaining confidentiality is vital for the business thus this report has been created upon using the data being available to a scope of an intern. Thus this report had to make use of information collected from secondary sources.

3. FINDINGS & DATA ANALYSIS

3.1 The distribution system of Incepta Pharmaceuticals Ltd.

The figure illustrated bellow has been formatted based on the explanations given by SM Tonmoy, Officer, Finance & Accounts:

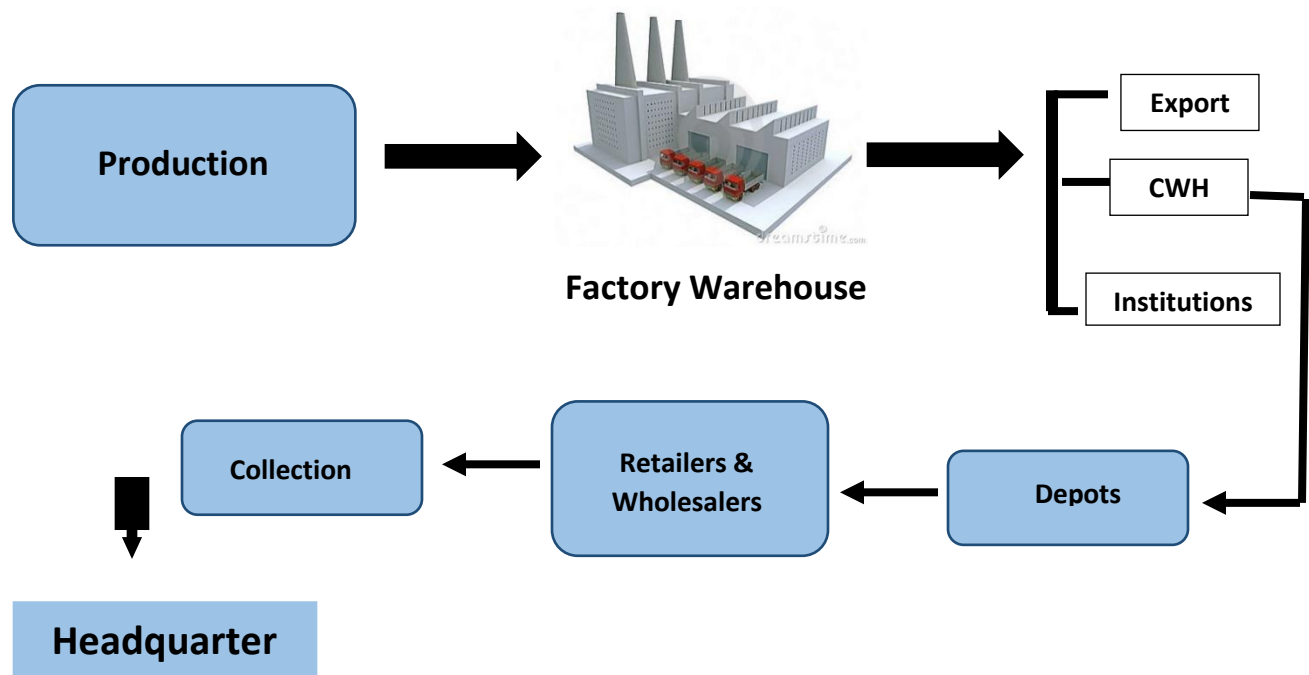


Figure 2: The distribution & collection system of Incepta Pharmaceuticals Ltd.

Firstly, all the production of the medicine takes place either at the Savar plant or the Dhamrai plant. The produced goods are then transferred to the factory warehouse located at the same place as the plants. Then from there, the finished goods are branched out into three categories and distributed:

1. One portion of the goods goes directly for export. According to Mohammad Monwarul Islam, Deputy Manager, Finance & Accounts, (Appendix A-3) the sales revenue of IPL is estimated to be Tk. 13 billion, per year.

2. Some of the goods get directly transferred to Incepta's institutional buyers like Labaid Hospital, Apollo Hospital, Marie Stopes etc.
3. A majority of the portion goes to the Corporate Warehouse (CWH) which is located at the same place as the Dhaka depot and it is from here all the goods are transferred to the 21 depots around the country.

From the regional depots, the goods get distributed to the wholesalers and retailers and it is then the depot's own responsibility to collect the sales proceeds from the retailers/wholesalers, make all the necessary adjustments like any deductions or transfer of funds and deposit the proceeds to the bank, especially at banks like HSBC, Standard Chartered Bank. As proofs of proceeds being transferred to the banks, the depots are obliged to send in a hardcopy of the remittance report by mail to the headquarter, the data collected through the reports is then transferred to the database through the ERP software, known to be as SAP.

3.2 Summary of the Accounts Receivables Management & Control Policy

The company made the Accounts Receivable Management & Control Policy which was developed by the Credit Control Department (CCD) of Incepta. Due to the confidentiality of the provided information, a brief summary of its core functions has been discussed below.

The Depot in Charge (DIC) and Distribution Assistant (DA) are not allowed to deliver any of its goods until the order has been received through authenticated sources. This is done for the sake of keeping a proper documentation of the customers. Once collecting the proceeds, the DIC must make sure to collect them directly from their customers. The depots regularly send the required statements to the Head Office. The DIC and an assigned person are jointly responsible to verify the balance of customers at least twice in a year on cutoff date. The DIC is obligated to send in all reports on a daily basis outlining all the required information on collection and expenses. The reports with its attached documents are sent in by postal mail and also email. The figures mentioned in the reports are then inputted in their database through the SAP software.

In order to achieve further efficiency, Incepta can look forward to turning its entire process digitalized with the use of the SD Module of SAP and other application software which will be discussed as the report progresses.

3.3 The technological infrastructure of the data center at Incepta

According to Rubel Islam, System Engineer, of the IT Department (Appendix A-4), Incepta has based its database management system upon using private data centers. The data centers are configured upon the infrastructure provided by VMware. The company uses VMware's Software-Defined Data Center. According to its website, VMware (2016) claims the following regarding its software-defined data center:

Servers deployed at the data center operate at less than 15% of capacity, bringing in more flexibility in managing data. CPU and memory are decoupled from physical hardware, creating pools of resources for use wherever needed. Each virtualized application and its operating system are encapsulated in a separate, isolated software container called a virtual machine (VM). Many VMs can be run simultaneously on each server, putting the majority of hardware capacity to productive use.

The results have transformed server efficiency by offering:

- Superior performance
- Higher availability
- Significant savings

For its hardware, the data center uses HPE 3PAR StoreServ Storage bringing in remarkable speed in transferring data to the data center. Rubel Islam (Appendix A-4) further states that the company has two data centers- one being termed as the Data Center (DC) and another being termed as Data Replication (DR). Every time data is inputted at the DC, the same data is replicated and failure of system, if occurred, the same files can automatically be accessible via the DR within just a span of ten to fifteen minutes. This system has been delivering incredible

results in dealing with the ERP system of Incepta. This system can be further improved and the next section discusses the proposal of a further digitalized system in detail in the form of a well-refined business model.

3.4 Business model of digitalizing the management of remittance receivable

The business model proposed in this report is composed of three separate projects integrated together to allow flexibility and efficiency in the workflow of the management of accounts receivable. The three projects are as follows:

- The implementation of the SD Module in the SAP System
- The implementation of an online based software, Izitru
- The implementation of an application software, BillQuick

Δ The implementation of the SD Module in the SAP System:

Presently, the data entry system at the depots is Oracle-based where data is inputted using the Oracle based software at a daily basis. Upon configuring the SAP SD Module, Incepta is not only going to derive benefits upon decentralizing its business operation but also be able to monitor the collection of its sales proceed in real time.

Ezigbo (2012) states, upon defining decentralization, that it refers to the systematic effort to bring dispersal of the decision making power to the lower levels of the organization. In decentralization, only the broad powers will be reserved at the top level. Such powers include power to plan, organize, direct, and control.

Cramm (2008) concluded upon her study that for an IT system to be decentralized, it is an ideal option to decentralize the IT function in a centralize manner. The configuration of the SD Module can be considered a notable example of “decentralizing the system in a centralized manner”. As the depots will be entering the data related to their collection of sales proceeds and

stock update, the corporate house will be actively monitoring their entries so as to verify their entries, thus conclusively though the SAP system has been decentralized, or in other words, more “integrated”, the decentralized data entry function will be governed in a centralized manner.

Upon decentralizing the business operation in its data entry of sales and distribution through the configuration of the SD Module, Mohiuddin Ahmed, (Appendix A-1) that the SAP system of the depots, which is presently Oracle-based, is going to be more integrated in nature where real time data will be generated centrally in the SAP. The depot officers will be inputting is the daily sales invoice and stock update. Thereupon, the introduction of such upgradation can possibly boost up the motivation within the employees and management as they will be getting real time reports to take various types of business decisions promptly.

For verification of the data inputted, the Treasury department can actively check receiving live updates regarding the balances being inserted by the depots.

Δ The implementation of the online-based software- Izitru

Upon preparing the remittance reports, which contains the daily cash transactions in context to depots, the depots send their reports by postal mail and also email. This manual business practice can be further improved through digitalization where the depot officers can scan their daily remittance as well as other reports and send it to the officers at the corporate house of Incepta. SM Tonmoy (Appendix A-2) raised the point that the scanned image can be subjected to photo manipulation through the usage of photo editing tools. The solution to this lies within the usage of image editing software. One of the most highly reliable of such software is an online freeware program named Izitru.

Regarding the software, Dartmouth professor, Hany Farid, developer of Izitru, claimed the named to be pronounced a bit like "is it true". The software lets the user upload a photo and automatically get a computer's analysis of whether or not it may have been modified. The results are simplistic, generally telling you that it believes an image to be an original — as in, it's come straight from a camera — or that an image may have been modified, meaning it's been saved again since coming out of the camera. (Kastrenakes, 2014)

Izitru is said to bring more authenticity to digital images, it being a new online service that tests the validity of the uploaded images belonging to specific users. One of the biggest advantage of Izitru is that the software is user-friendly, being simplistic to the user. When the images get uploaded to the system, the image testing system begins automatically. All the images must pass individual forensic tests that include analysis of device signature, JPEG structure, JPEG coefficient, sensor patterns, and double JPEG detection – all in just under a minute. After the tests, uploaded images are rated from “High Trust” all the way down to “No Trust.” Users can flag questionable images using a “thumbs down” button. Ever since its advent, Izitru has been the “game-changer” to the world of photography bringing authenticity to the photos and images being shared over the internet. (Melvin, 2014)

The likely benefits Incepta can gain from Izitru are that the officers at the corporate house can easily check the authenticity of the scanned images of the remittance and other reports. Additionally, Izitru allows its user to detect where the image has been manipulated through the forensic test thus adding further reliability to the software’s functionality. The implementation of this software is going to add further flexibility within this proposed business model. Lastly, this service is available for free for its user thus the company can render its service without having to pay any charge.

Δ Implementation of the application software- BillQuick

The accountants of the depots are assigned in dealing with the daily transaction between the depots and their respective retailers. The information regarding the daily collection from the depot assistant is disseminated to the depot accountants through the publication of a report which details the collection made daily and amounts outstanding if any. The data is eventually inputted in the remittance report when the collection is transferred to the banks and the SAP system in form of sales revenue. In course of dealing with the daily collection of the outstanding amount, the depot accountants can make use of an application software which can keep track regarding the amounts outstanding. BillQuick is one of such application which is supported on PCs and any Android devices. This application also has the ability of notifying customers and the collectors regarding the amounts outstanding by the customer, in case if customers delay in paying their

required amount. This subject has also been emphasized by PwC (2009), the company needs to take advantages of modern software, which Incepta has been executing quite well over its lifetime. Presently, there is a lot of customer relationship management (CRM) software but the most popular one being used worldwide is BillQuick.

According to its website BillQuickOnline¹ (2016), BQE Software is a world leader in time tracking, billing, project management and accounting software for professional services firms. Its products, including BillQuick, ArchiOffice and EngineerOffice, simplify the way information is entered and utilized by firms. With over 350,000 users, BQE is the trusted solution worldwide for architects, engineers, accountants, attorneys, IT consultants and business consultants. The company is headquartered in Torrance, California with offices in Australia and Europe.

In its review, Software Advice (2016) has provided the following review regarding BillQuick: “BillQuick offers some of the most flexible time billing and project management solutions on the market, both in terms of functionality and deployment. Available as a stand-alone solution, self-hosted or a cloud service, BillQuick offers comprehensive business accounting, project management and business intelligence in a system flexible enough to support a variety of industries, including construction, architecture, engineering, accounting, consulting, graphic and interior design and more.”

The software being cheap can be considered helpful for the depot accountants as well as the delivery assistants. Using this software, they can track retailers if amounts are in due or even keep contact with the customers to enrich the relationship between the collectors and the accounts receivables. Thus this initiative enhances promotes the culture of CRM within the core function of the company.

4. EVALUATING THE COST/BENEFIT OF THE PROJECTS

4.1 Costs and benefits of introducing the SD Module in the SAP Software

SAP by far is considered the best software tool when it comes to ERP. Unlike any other software, it adds in accuracy, flexibility and smoothness in the workflow of any business. SAP has a lot of modules within its functions. Some of them being:

- SAP Financial Accounting (FI)
- SAP Controlling (CO)
- SAP Sales and Distribution (SD)
- SAP Production Planning (PP)
- SAP Materials Management (MM)
- SAP Quality Management (QM)
- SAP Human Capital Management (HCM)

For the decentralization of sales being recorded in the SAP software by the depots, the SD module needs to be configured within all the depots and given on their current technological configuration, it is possible to activate the SD module within the depot though according to Rubel Islam (Appendix A-4) it will involve few types of cost. The types of cost involved are as follows:

- Cost of configuring the hardware of the depots with the SAP software
- Cost of buying new IP addresses from the SAP database
- Cost of training staffs in using the SAP software

Once asked about the total amount of introducing the entire project of configuring the SD module in the SAP, it was stated by the Senior Manager of the IT department, Mohammad Anwar Hossain (Appendix A-5) with it being an estimated figure of Tk. 1.5 crore.

Thus the initial cost of introducing the SD Module for all the depots is as follows:

Cost of introducing SAP SD Module = Tk. 15,000,000

Upon interviewing the Senior Manager of the Cost Sector of the Finance & Accounts Department, Mohammad Abdus Sattar, (Appendix A-6) gave an estimated figure of Tk. 1.2 crore of annual boost in income (upon gaining efficiency in dealing with inventory and thus reducing the overhead incurred due to time lags) made upon introducing the SAP SD Module within the depots.

Total additional income generated annually for the first year = Tk. 12,000,000

Total additional income generated for the second year = Tk. 13,000,000 (due to an increase in efficiency in using the system for one whole year.

According to SM Tonmoy, (Appendix A-2) the estimated annual fee for all the 21 depots are as follows:

Annual Fee for the first year = Tk. 1,000,000

Annual Fee for the second year = Tk. 1,100,000 (due to an assumption that the number of users for system may increase)

The components within the SD Module of the SAP software have been listed below. All of these components are required for the proper functioning of the SD Module.

Components of SAP SD Module are as follows (Eshna, 2012):

- SAP-SD-MD: Master Data
- SAP-SD-BF: Basic Functions
- SAP-SD-SLS: Sales

- SAP-SD-SHP: Shipping
- SAP-SD-TBA: Transportation
- SAP-SD-FTT: Foreign Trade
- SAP-SD-BIL: Billing
- SAP-SD-CAS: Sales Support

According to Eshna (2012), the following are the advantages of configuring the SD module within the SAP system:

- Track of sales transactions
- Record or pre-sale and post-sale process
- Tracks sales data along with team performance
- Defined process for sales and distribution
- Categorization of diverse sales and process
- Effective management of sales documents in a unified system

Mohammad Abdus Sattar, (Appendix A-6) believes that the greatest advantage of introducing the SD Module within the depots is that the company will be able to record sales and its inventory in real time, thus the lead time in holding and ordering the inventory will be reduced and eventually this ensures a smoother flow in managing the company's operations. Moreover, this project will allow the company to identify which medicines are being purchased the most by customers coming from specific location, thus the marketing department of Incepta will be able to segments its market and be able to take effective marketing decisions. Additionally, due to the profound benefits of this project, the company is most likely to retrieve its invested capital on the SAP SD module project within two years.

4.2 Cost and Benefit Analysis of introducing BillQuick

From its official sources, BillQuickOnline² (2016) charges \$24.95 per user per month with a capacity of unlimited number of users. According to the Human Resource Management department of Incepta Pharmaceuticals Ltd, there are 250+delivery assistants in action and a total of 25 depot accountants designated at the 21 depots. According to XE.com (2016), the exchange rate of dollar to taka is 79.6. The BillQuick application will be used by the 25 depot accountants, thus the total annual fee of implementing BillQuick will be:

$$25 \text{ users} \times \$24.95 \times 12 \text{ months} \times \text{Tk. } 79.6 \text{ (exchange rate)} = \text{Tk. } 595,806$$

Implementing BillQuick does not involve any form of capital cost as the application software is supported for all Android devices, only annual subscription fees are the sole expenses involved. It has been taken as an assumption that all the 25 depot accountants possess the appropriate cellphones for the installation of BillQuick as they regularly need to keep in contact with the retailers and wholesalers.

In order to operate BillQuick the depot accountants will need Internet connection. For that, according to SM Tonmoy (Appendix A-2), a package of 2.5 GB per month, costing Tk. 305- to be provided by Incepta, will suffice the requirement. Thus the total annual expense for the Internet will be:

$$25 \text{ users} \times \text{Tk. } 305 \times 12 \text{ months} = \text{Tk. } 91,500$$

Therefore the total expense for implementing BillQuick in the business model will be:

$$\text{Tk. } 595,806 + 91,500 = \text{Tk. } 687,306$$

As for the benefits, the recovery cost of collection and receivable is estimated to be reduced by a figure of Tk. 50 lakh (5 million) yearly as per the belief of Mohiuddin Ahmed (Appendix A-1).

4.3 Costs and benefits of using Izitru

It may seem that in the raw sense, the online software, Izitru may not involve any cost; however, SM Tonmoy (Appendix A-2) suggested that since the depot officers now have an additional responsibility of scanning so for that it is needed to allocate an expense for that. He suggested that the expenses involved being around Tk. 1000 per month for each depot. Thus total expense is:

Annual Total Expense: Tk. $1000 \times 21 \text{ depots} \times 12 \text{ months} = \text{Tk. } 252,000$

As for the monthly savings upon using Izitru, he (Appendix A-2) suggested that it will be equivalent to the annual savings made on the postal charges, savings on warehouse space and photocopy charges. Average monthly courier or postal charge is said to be around Tk. 400. Thus total saving made upon using Izitru is:

Annual Total Savings on postal charges: Tk. $400 \times 21 \text{ depots} \times 12 \text{ months} = \text{Tk. } 100,800$

Annual Savings on warehouse expense: $50 \text{ square feet} \times 100 \text{ taka rent of per square feet of monthly rent} \times 12 \text{ months} = \text{Tk. } 60,000$

Annual savings on photocopy at depots: Tk. $1,000 \times 21 \text{ depots} \times 12 \text{ months} = \text{Tk. } 252,000$

Total savings upon using Izitru: Tk. $100,800 + 60,000 + 252,000 = \text{Tk. } 412,800$

4.4 The NPV Analysis

Investopedia (2016) defines the NPV analysis as, “The difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyze the profitability of a projected investment or project.”

The formula for NPV is as follows:

$$NPV = \sum_{t=1}^n \frac{NCF_t}{(1 + k)^t} - NCF_0$$

NCF_0 = initial cash outlay on project
 NCF_t = net cash flow generated by project at time t
n = life of the project
k = required rate of return

Figure 3: Formula for finding NPV, Source: Real Estate Investment Software Blog (2016)

As per the recommendation of Mohiuddin Ahmed (Appendix A-1), the required rate of return or the interest rate has been taken as 9%.

The calculation has been based on the following assumption:

- Annual Subscription Expense of BillQuick will remain unchanged as it is believed that number of users of BillQuick will remain unchanged.
- Annual Internet Expense will remain unchanged.
- Annual Savings & Expense for using Izitru will remain unchanged.

Look into Appendix C for the calculation of the net present value.

NPV = 12,977,108

5. RESULTS

Based on the data collected, it can be stated that all of the projects of introducing the SD Module for the SAP software, making use of the services provided by BillQuick and verifying scanned documents through the free online software titled, “Izitru”. Here is a table summarizing all the major findings of this study. (All the figures are in BDT):

Project	Startup Cost	Annual Revenue	Annual Expenses
SAP SD Module	15,000,000	12,000,000 (1 st year)	1,000,000 (1 st year)
		13,000,000 (2 nd year)	1,100,000 (2 nd year)
BillQuick	None	5,000,000	595,806
Izitru	None	412,800	252,000

Table 2: Table summarizing the cost and benefits of the three projects

The resultant NPV comes as a large positive value of Tk.12,977,108, making the entire project a favorable one with incredible results and it is believed that this will surely improve the workflow of the accounts receivable management system.

6. CONCLUSION

The pharmaceutical industry in Bangladesh is growing at an overwhelming rate. Since the entire industry is, by principle, more capital intensive, each and every business within the industry must exhibit diligence whenever it comes to dealing with technology and innovation. Already Incepta Pharmaceuticals Ltd. has been displaying incredible results over their business operations by delivering better and cheaper medicines limited not only to the people of Bangladesh but also to other parts of the globe. Their scintillating growth rate of an average of 15% per annum is a proof of this. For the company to display further wonders in the coming future, they must make

amends to their business operation so as to achieve the required optimality in making the best use of its resources. Upon utilizing its existing resources and also adding further improvements to its financial operations, namely its remittance receivable management, Incepta Pharmaceuticals Ltd. can also surely experience growth and development within the core functions of its business.

7. SIGNIFICANCE OF THE STUDY

This study mainly attempted in finding means of improving the function of the Treasury Wing of the Finance & Accounts Department. At Incepta, the Finance & Accounts Department has been subdivided into four ‘wings’, namely-

- Treasury Wing- Delegated into looking after banking operations, fund management and receivable
- Cost& Managerial Accounting Wing- Delegated into looking after the costing side of business, operations and projects.
- Financial Accounting- Delegated to preparing the financial statements of the business
- Internal Audit Wing- Ensuring professional ethics, integrity and objectivity when managing the accounts.

Among all the wings of Finance & Accounts department, it is the Treasury wing which manages all the revenues and inflows coming into the business. For any business, for its growth and advancement, it is an undoubtable fact that the company needs to devise ways to improve the cash flow of the business. Since this study is aimed towards the Treasury Wing of the Finance & Accounts Department of the company, it can be derived that the whole business will be benefitted from the research information provided in the study even after the fact that most of the data revealed in the research are all estimates from the respective interviewees.

8. RECOMMENDATIONS

Based on the findings, the first recommendation for the company would be to implement the SD module for the SAP system so that the company can easily derive benefit upon decentralizing its remittance receivable management. By making use of the software- BillQuick & Izitru, the company can reduce a lot of unnecessary expense and have a strong control policy. Moreover, managing the financial side of the company is automatically going to have a positive impact on the entire operation of the business. Also the data retrieved inputted through the SD Module in the SAP system by the depots can be used to identify the pattern of sales based on specific location and from real time data, marketing strategies can be formulated. Since this study was solely based on the Treasury side of the company, another recommendation which can be stated that Incepta can conduct further researches like this in the coming future for their own benefit in order to find out further areas of improvement in other departments of the organization.

9. LIST OF APPENDIXES

Appendix A: List of interviews conducted

A-1 Interview on: Mohiuddin Ahmed, Senior Manager, Finance & Accounts, Incepta Pharmaceuticals Limited

Interview Date Range: 4th October 2016 – 30th November 2016

Q. What was the startup capital of Incepta when it first started its business?

A. An estimate of Tk. 5 crore (50 million taka).

Q. How much cost can the SAP SD Module recover?

A. Tk. 50 lakh (5 million)

Q. What is the present accounting software being used by the depots?

A. The software is Oracle-based.

Q. Upon implementation of the SAP SD module what will be the likely benefits?

A. The system will become more integrated with data entry regarding the sales and stock update will be updated regularly in real time.

Q. When calculating the NPV for the project, what should be my required rate of return?

A. Let it be 9%.

A-2 Interview on: SM Tonmoy, Officer, Finance & Accounts, Incepta Pharmaceuticals Limited

Interview Date Range: 1st October 2016 – 1st December 2016

Q. What is the total monthly sales figure for Incepta Pharmaceuticals Ltd.?

A. On average around Tk. 140+ crore (1.40 billion taka).

Q. What is the fee for receiving the mobile Internet service, provided by Incepta?

A. Tk. 305 for the 2.5 GB pack.

Q. Isn't it just fine to scan the documents from the depots instead of sending it by postal mail?

A. Nowadays photo editing tools can easily change the figures so we don't encourage the depot-in-charge to simply scan the contents of the reports and send it by email.

Q. What will be the fee of managing the SAP within the depots?

A. The annual expense of maintaining the SAP, along with its monthly fee is going to be around Tk. 10 lakh for each depot for the first year which can increase to 11 lakh in the later year for the possible increase in suppliers.

Q. What types of expenses will be saved upon using the application of Izitru:

A: The saved expenses are as follows:

- The postal charges of 400 taka per month for each depot.
- Savings of warehouse space of: 50 square feet $\times$ 100 taka rent of per square feet of monthly rent $\times$ 12 months = Tk. 60,000
- Savings on photocopy of documents = Tk. 1,000 $\times$ 2 $\times$ 12 = Tk. 252,000

Q. Will the scanning of files for the usage of Izitru incur any cost?

A. Yes since the officers at the depots then need to scan the file on a regular basis and the officers here need to check its validity. The average expenses involved should to be around Tk. 1000 per month.

A-3 Interview on Mohammad Monwarul Islam, Deputy Manager, Finance & Accounts, Incepta Pharmaceuticals Limited

Interview Date: 29th November, 2016

Q. What is the annual sales figure of Incepta Pharmaceuticals Ltd.?

A. An estimate around Tk. 13 billion per year.

A-4 Interview on Rubel Islam, System Engineer, of the IT Department, Incepta Pharmaceuticals Limited

Interview Date: 1st December, 2016

Q. Can you discuss the IT infrastructure of the company?

A. Incepta has based its database management system upon using private data centers. The data centers are configured upon the infrastructure provided by VMware. The company uses VMare's Software-Defined Data Center. For our hardware, the data center uses HPE 3PAR StoreServ Storage brining in remarkable speed in transferring data to the data center.

Q. Can you share some information regarding how the data is managed at the data center?

A. The company has two data centers- one being termed as the Data Center (DC) and another being termed as Data Replication (DR). Every time data is inputted at the DC, the same data is replicated and failure of system, if occurred, the same files can automatically be accessible via the DR within just a span of ten to fifteen minutes.

Q. For decentralization of the SAP, what does the company need to do?

A. We just need to configure the SD Module of the SAP software for the depots to enter into our database.

Q. For the initializing the SD Module in the SAP software, what are the costs involved?

A. There are costs involved some of them being:

- Cost of configuring the hardware of the depots with the SAP software
- Cost of buying new IP addresses from the SAP database
- Cost of training staffs in using the SAP software

A-5 Interview on Mohammad Anwar Hossain, Senior Manager, IT department, Incepta Pharmaceuticals Limited

Interview Date: 1st December, 2016

Q. For executing the SAP SD Module, can you provide a rough estimate of the cost of initializing the project?

A. Stating the actual cost is very difficult but if we take this entire initiative as an actual project, I would suggest that the cost would be around Tk. 1.5 crore.

A-6 Interview on Mohammad Abdus Sattar, Senior Manager of Cost & Management Accounts, Finance & Accounts, Incepta Pharmaceuticals Limited

Q. What will be the reduction of overhead once we implement the SD Module into the SAP software?

A. Now only considering the reduction of overhead is a wrong notion. Inflow of cash can take place in a lot of manner such as sales boost, efficiency achieved due to reduction of lead time, better management of stocks and also the advantage of observing sales in real time, all amounting to better resource planning and strategic decision making. For the amount, this should be boosting our income to around Tk. 1.2 crore in case of all the 21 depots for the first year and Tk. 1.3 crore for the second year. Moreover, the configuration of the SD Module will allow the company to identify which medicines are being sold the most by customers coming from specific

location, thus the marketing department of IPL will be able to segments its market and be able to take effective marketing decisions.

Appendix B: List of depots of Incepta Pharmaceuticals Limited:

Serial Number	Depot Location
1	Dhaka
2	Comilla
3	Chittagong
4	Sylhet
5	Barisal
6	Khulna
7	Rajshahi
8	Magura
9	Bogra
10	Rangpur

11	Mymensing
12	Noakhali
13	Cox's Bazar
14	Narayangonj
15	Tangail
16	Jessore
17	Moulovibazar
18	Dinajpur
19	Feni
20	Brahmanbaria
21	Pabna

Appendix C: Calculation of Net Present Value

Details	Year		
	Year 0	Year 1	Year 2
	<i>Amount in BDT (Tk.)</i>		
Initial Cost of SD Module of SAP	(15,000,000)		
Annual Expenses:			
Annual Maintenance Expense of SAP		(1,000,000)	(1,100,000)
Annual Subscription Expense of BillQuick		(595,806)	(595,806)
Annual Internet Expense		(91,500)	(91,500)
Annual Expenditure for using Izitru		(\$252,000)	(\$252,000)
Total Expenditure		(1,939,306)	(2,039,306)
Annual Savings/Income:			
Annual Additional Income for Additional Sales		12,000,000	13,000,000
Annual Recovery of Cost (Using BillQuick)		5,000,000	5,000,000
Annual Savings for using Izitru		412,800	412,800
Total Income/Savings		17,412,800	18,412,800
Net Cash Flow	(15,000,000)	15,473,494	16,373,494
Discounted Cash Flow	(15,000,000)	14,195,866	13,781,242
Net Present Value		(804,134)	12,977,108

Appendix D: Business Cards of the Interviewees:

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