

Cooperative Education Report

Study on Data Analytics at Mero Lagani

Written by

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This Report Submitted in Partial Fulfillment of the Requirements for Cooperative Education, Faculty of Business Administration Academic Semester 2/2020 Siam University Project Title : Study on Data Analytics at Mero Lagani.
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Semester / Academic year : 2/2020

We have approved this cooperative report as a partial fulfillment of the cooperative education program semester 2/2020.

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Abstract

This cooperative report entitled "Study on Data Analytics at Mero Lagani" aims to examine the working culture and operational activities in a financial news portal. The objectives of the study includes: (1) How the company operates its news portal and software, (2) How the company applies different marketing strategies to improve sales and further grow in the competitive market (3) To know how listed companies financial report could have errors. With the company, I was assigned to work as an intern, in the department of Data Analytics. The main responsibilities were to enter and update data in the software as the reports come in, check for new announcements, verification of reports and data, and to assist in video making and marketing of the company.

Keywords: Data Analytics, Portfolio management, Data entry, Trading, Reports

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I would like to send my sincere gratitude to Siam University and Kathmandu College of Management (KCM) for including an internship program as a core part of the BBA degree. It has helped me work in the practical environment and gain knowledge about the company and how it operates. I am also grateful for having a chance to meet so many wonderful people and professionals who led me through this internship period.

I would also like to take this chance to express my gratitude towards my organization supervisors Mr. Abin Neupane, Mr. Deep Thapa, Mr.Prabin sir for the precious guidance during the period of my internship and helped me gain theoretical and practical knowledge. I will strive to use gained skills and knowledge in the best possible way in the near future.

Sincerely,

Prashanna Shrestha

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Chapter 1.Introduction

Mero Lagani is a financial news portal company which mostly specializes on the country's stock market and is based at Tripureshwor,Kathmandu,Nepal.

1.1 Company Profile

MeroLagani is a news portal company which provides financial news articles mostly related to the stock market. It started out as a portfolio software at the very beginning and after growth it started providing other services of which providing financial news being the core operation of the company. The website provides news and articles related to finance and stock market in particular such as announcement and notices like AGM notice, publishing quarterly report of the companies, adjustment of the price of company after issuing bonus/right share, announcement of dividend by companies and much more. Besides the news part merolagani is widely known for its software known as data analytics which provides live data of the market, fundamental analysis of companies, live chart which is used for technical analysis, data of mutual funds to track them and floor sheet analysis. Alongside other services provided by merolagani are portfolio software, SMS alert service for any notices, newsletter which provides daily and weekly analysis of the stock market providing customers with valuable insights about the market trend, podcast program named "Share Guff" where investors and traders are invited to the program to speak out their views and understanding and their insights about the stock market. Besides stock market the news portal also regularly posts about big issues of the county like political issues, national issues, issues related to the pandemic, etc. The website is in national language at default but there is an option to change the language to English as well where English user can go through it. Merolagani also recently started with a new venture during the pandemic period, targeting to students and launched a virtual class application which is named "MeroSchool". This application lets students access to prerecorded videos from grade 1 to engineering level. Merolagani is developed and run by Asterisk Technology Pvt. Ltd.

Asterisk technology is an IT company promoted to build systems for the Nepalese capital market. The company has been into operations since September 2011. We perform work like web application Development, System building. We work in full transparency and try to keep all the things very clear to client. We have a committed team that works to prove all these aspects. Our team always tries to find new innovative ideas so that we could give a better service to our customer. (Merolagani, 2021)

We realize that, for us to prosper, we need to be flexible and responsive, to delight clients by providing them with what they want, when they want it, and before the competition can offer it.

The company intends to achieve this through a solutions approach that is customer-centric, and in which the customer's business objectives enjoy top priority. It is important to recognize that make our intangible resources, such as our ability to relate to customers regarding their needs and wants, management style, corporate culture and commitment. These elements will differentiate us from our competitors and contribute towards the development of a sustainable competitive advantage.

Mission Statement

"Mero Lagani aims to create a flexible and responsive environment for its stock market investors in order to optimize their output and attain their goals, and making a name for itself as the leading financial news portal."

Mission: The mission of the company is to become a leading news agency by providing real time updates of the stock market, financial news of the country, providing sms service regarding stock market , providing best analytical software to its users to anticipate the trend of the stock market.

Vision: The vision of the company is to become a market leader in publishing online financial news along with leader in data application.

Objectives

The main objective of the company is to provide real time information to investors for making intellectual decisions while investing in the stock market. Besides the company has the following objective.

-To gather all the scattered announcements related to the stock market and publish all through one common platform.

-To provide reliable and investor centric News.

-To provide in detail knowledge about the stock market and its underlying factor to support in the decision making process for investors.

-To develop new innovative ideas for analysis of the stock market.

1.2 Organizational structure

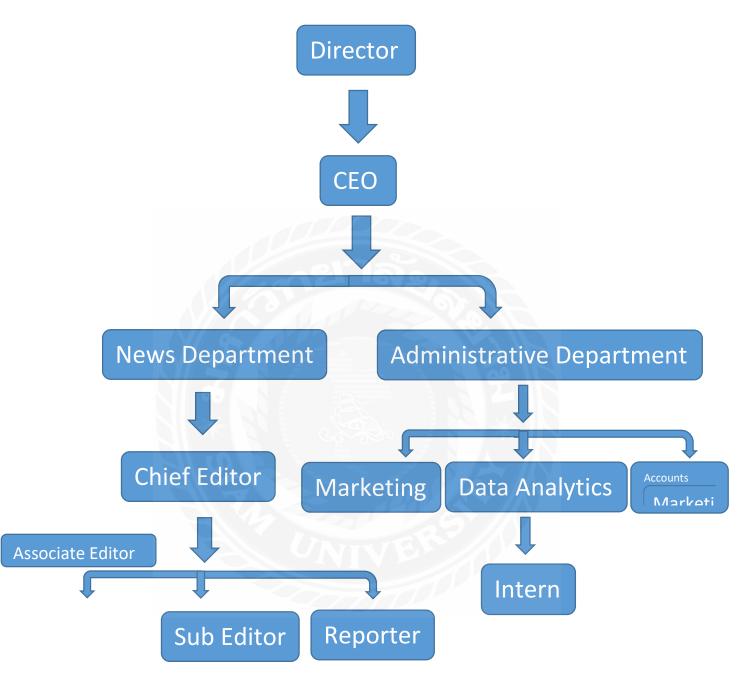


Figure 1: Organizational Structure

1.3 Intention to join the company

I, Prashanna Shrestha, hereby declare that the report entitled "Introduction to Data Analytics." is created uniquely and solely created by me after the completion of the Cooperative Education internship at MeroLagani, however some supervision and guidance has been taken from supervisors assigned to me from Siam University, Bangkok as well as Kathmandu College of Management (KCM), Nepal and also from my supervisor at Mero Lagani.

I also confirm that the report is only prepared for my academic requirement and not for any other purpose. It might not be used with the interest of the opposite party of the corporation.

As I was always fond of stock market and have been investing and trading since some time I was very excited to start my internship at MeroLagani as it is considered as one of the major online finance portal. I was very keen to look into the stock market of the country with all the news and data's available.

1.4 Objective of the study

The primary objective of the internship is to gain financial knowledge and to apply theoretical understanding into practice. The main objective of my internship is to understand the working environment and to know more in-depth about the country's stock market. So, during the period of my internship my objective of my report are as follows:

- 1. To describe roles and activities in data analytics department.
- 2. To know how data's are collected and updated into the software.
- 3. To understand how a financial news portal company operates.
- 4. To gain knowledge on fundamental and technical analysis through Data Analytics.
- 5. To analyze a company through data's
- 6. To explore about the Nepali financial market and trading

Chapter 2: Internship Activities

2.1: Job description and responsibility

As an intern, I was assigned multiple roles and responsibilities, which are given below:

1. Data entry

To enter and update any new reports that come in. The very main responsibility during the time of internship was to update datas in the system.

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	(Pietds * are required)					
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		Number of Share *		Value of Share *		
	Company *					
	Company Name or Symbol	Number of Share		Value of Share		· + Add
	Holding Companies				•	
	# Company Name	Symbol	No. of Share	Value of Share		
	1. Citizen Bank International Limited	CZBIL	37,771	0.989,498.00	c ñ	
	2. Everest Bank Limited	EBL	35,378	23,384,858.00	6 Î	
	3. Global IME Bank Limited	GBIME	28,550	8,422,250.00	6 Ö	
	4. Himalayan Bank Limited	HBL	28,158	18,866,642.00	c î	
	5. Kumari Bank Limited	KBL	16,004	3,840,960.00	6 Î	
	6. Machhapuchhre Bank Limited	MBL	55,246	13.038.056.00	c î	
	7. Nabil Bank Limited	NABIL	25,859	22.036.933.00	c fi	
	8. Nepal Bangladesh Bank Limited	NBB	28,352	6.549,312.00	G ñ	
	9. Nepal Investment Bank Limited	NIB	48,517	10.242,392.00	c i	
	10. Nepal SBI Bank Limited	SB	24,782		C II	
	11. Siddhartha Bank Umlted	SBL	36,479	12,475,818.00	c î	
	12. Sunrise Bank Limited	Figures 2:	Adn	nin panel	°of	Merolagani's website
	13. Sanima Bank Limited	SANIMA	45,838		g î	Ger 15 Seitings to Bolivale Withdows
	14. Prabhu Bank Limited	PRVU	37,120	10.467.840.00	c îi	🕲 🚺 对

2. Data verification

To verify the entered data in Data Analytics.

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MARKET SUMMARY +	FINANCIAL ANALYSIS				
UNDAMENTAL ANALYSIS -	COMPANY COM	SEARCH			
FINANCIAL ANALYSIS					
BALANCE SHEET ANALYSIS	FINANCIAL ANALYSIS BAL	ANCE SHEET PROFIT & LOSS			
PROFIT & LOSS ANALYSIS		AGRICUL	URE DEVELOPMENT BANK	LIMITED	
GROWTH CHART TOOL					
STOCK SCREENING TOOL	SECTOR	SECTOR Commercial Banks Fea		eed Meter	Now Ext. Greed
ADVANCED SCREENING TOOL	SHARES OUTSTANDING	109,899,297.90	10	60	Previous Close Ext. Greed
STOCK SENSITIVITY	CLOSING PRICE	472.00	20 80.		1 Week Ago Greed
COMPARATIVE ANALYSIS	180 DAY AVERAGE	463.48	Extreme 0	100 Extreme	1 Month Ago
INTRINSIC VALUATION ("BETA)	DAY CHANGE	1.07%	550	Greed	Greed
TECHNICAL ANALYSIS +	SHARES TRADED	117,240.00	500		
LOORSHEET ANALYSIS +	52 WEEKS HIGH	554.00	450	+ + 	╺═ [╤] ╴╶┈ <mark>╞</mark> ┯┼┿╎┼┷
	52 WEEKS LOW	329.00		+*****	Activate Windows
MUTUAL FUNDS TRACKER +	AVERAGE NO. OF TRADE	151.00	350		

Figure 3: Fundamental analysis option inside data analytics

3. Checking News and Announcements

To check whether there has been any information about news and announcements in the market.

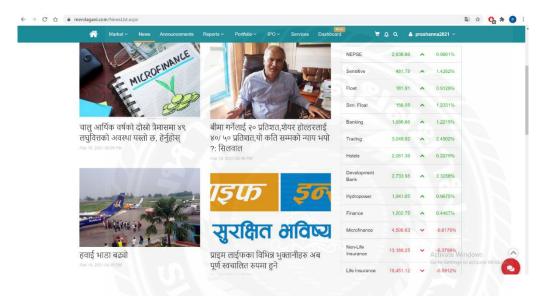


Figure 4: News and announcement section at Merolagani.com

4. Video making and ads.



Figure 5: Making video at doodly application.

2.2 Contribution of the student in details

My contribution as an intern to the company that I most accurately checked the data that were uploaded with very less errors. As the data were watched by the customers quickly, I was very quick to verify all the data that were uploaded quickly so that the organization will not receive any complaint regarding the error in uploaded data. The verification part was very thorough as the data were cross verified by me and my colleague. During the task I found miscalculation on the monthly published NAV of sunrise mutual fund which my supervisor thought was not possible and while again going through the verification with the supervisor, my supervisor confirmed that there was indeed a miscalculation on the mutual fund report.

Besides the major task, I had minor other contributions on the office's operational activities. I made bank account and PAN card of the helper sister at the office. I went to banks in order to get the statement and deposit office's cash at times.

I had my contribution on the marketing side as well where I made a advertisement poster of mega offer package on the occasion of dashain and tihar and also made videos on doodly which was use for promotional purpose by the company. I also had input on the office interior to which décor stickers were attached on office glasses.

So, these were the contribution made by me to the company during my internship period.

Chapter 3: Learning Process

There weren't any major problems that I encountered during my internship but only had few minor problems while working at Mero Lagani.. There was a situation where a company's data was to be updated and the report was not there. It was hard finding the report for the verification to be done.

The reports that came in were sometimes wrong when calculating, in which we had to call the company itself to rectify the mistake. The internet speed here in Nepal is quite slow, which has halted the work in various ways. Not being able to complete the given task in time and being slow to update the data in the system which resulted in poor information flow to the investors.

3.1 Indicate how you successfully solved the problem

There weren't many problems as such, but the few problems I faced were successfully solved with the help of my job supervisor and my colleague. Whenever there was a problem, I used to message my supervisor through Viber and he would send in solutions. Even after the solution given, there were issues in which my supervisor taught me personally on solving the problem. Whenever there were calculation problems while verifying the data which were from the company's side, I was to inform my supervisor about the error and call the company to know about the calculation error. I used to cross verify the reports of my colleague and vice versa which helped reduce errors and made the data reliable and accurate.



(e-research.siam.edu, 2017) (https://www.slideshare.net/, n.d.) (careers.uct.ac.za, n.d.) (Merolagani, 2021)

3.2 Examples of problem solved

The following are few examples:

- There were many reports to be updated and verified and I wasn't able to complete the given task in a timely manner. However, my supervisor taught me how to check data quickly and precisely which gave me a boost in my working speed.
- Restarting the router whenever the internet went slow, or calling the ISP provider to complain about the internet speed.
- There were some reports written in Nepali in which the words were difficult to understand, in such a situation I asked my supervisor and also used google translate to translate the difficult words to make it easier.
- As there are huge numbers of reports to be updated, there always used to be cross verification of data so that errors were less and make it reliable and accurate for the traders and investors.
- There were times when the data provided were wrong and we have contacted to the company itself notifying them that the data was incorrect.

3.3 What are the things you have learned during the internship?

During the initial days I was made to watch the introductory video of the data analytics software which guided me through the platform. The video explained about all the tools and features and uses of it thoroughly. I being a technical analysis enthusiast was getting along very quickly with it. The software also had fundamental analysis section which made financial analysis of the companies based on the financial reports and ratios which was interesting as I was not very good at fundamental analysis and was keen to improve my fundamental knowledge too. Merolagani being a one of the major financial portal of the country, I got to understand how vital news article, announcements, monetary policy and other factors play on the volatility of the stock market. As a typical student or say investor we do have an idea of about how to make decisions whether to buy a stock or sell it on the basis of fundamental analysis, whether the stock is undervalued or overvalued which is actually true in the long run but many of the ordinary people

don't really know about other factors that can take place during the volatility of the stock market or a certain stock price.

During my internship period the foremost thing I have understood is that on must differentiate if one is a trader or an investor. Trading and investing is very different even though both 's objective is to earn profit. Trader uses strategies to earn profit in the short run which is about days, weeks or a months' time period focusing on demand and supply mostly, technical analysis and other factors that can influence the price or the market in the short run whereas investor uses strategies to make profit in years' time period using fundamental analysis more often an knowing the intrinsic value of the company rather than factors that influence the price in the short run. Investing is less risky whereas trading is highly risky. Therefore, I have realized that one must differentiate is one is a trader or an investor at first otherwise one would get confused and have not much of a clear vision to where he/she is heading in the stock market.

During the internship period, data entry of reports and verification were the major tasks that were given to me, I must say I have developed so much understanding about the financial reports. Being a finance major I do have a knowledge of financial reports, but during my internship period I had a chance of understanding financial reports in real. During the verification of financial reports I found out miscalculations and manipulations on the report of different company and mutual funds.

Besides all the operational part I got to know how the organization is fully automated without the CEO of the company giving full time to the company. I was amazed to see how all the departments were run in order to run the company smoothly. And most importantly I got to know understand the working culture inside a company where employees respect each other no matter the position one belongs to.

3.4 Details of the related learning process and new knowledge student has received

During the initial days of the program I was given the task to watch the introductory video of the data analytics software and online technical analysis class which made me aware about the things I was getting into. After it was completed I was given task to check and verify the data on the software. Here I came to know that the most authentic report data is available on the report published by the company on the website or on the newspaper. Since data on the financial portals are updated manually by human force so there might be errors. After that I was assigned to input data of monthly published NAV report of mutual funds. During this process I got to understand that all the data that were uploaded into the website were entered through admin panel which was extremely new to me. This admin panel was used by all the other departments, admin, marketing and news department. From the admin panel I was taught how to edit errors during data entry, make necessary correction, delete data when necessary by my supervisor.

Apart from data entry task I used to trade along with my co-worker and our supervisor during trading time. As my supervisor was an experienced trader I was very lucky to get guidance by him. I learned to analyze the floorsheet, market depth in depth from my supervisor. My supervisor always had an interesting logic to why he choose a particular stock. During my internship period hydropower stock prices were skyrocketing and according to my supervisor this was due to low interest rate of the banks on hydropower loans, lockdown caused by the pandemic had no impact on the hydropower project, hydropower generating income consistently comparing to financial institutions which were hit by the pandemic. I also got to understand how big traders manipulate a certain stock by cornering a particular script, making its supply low and dumping it when the price sky rockets. So, these things were very important for any one who trades on the stock market and all this things could not have been learned and understood and college. During this time period I gained much experience and knowledge of trading and also earned good amount of profit while trading which kept me more passionate towards the stock market.

Besides these tasks. I was also assigned to work for promotional activities of the software. I had my input in the design of the poster announcing mega discount offer on the software package during dashain and tihar period which is the biggest festival of the country. I used canva to make the promotional poster. With this I was also assigned to make videos about the stock market on doodly which was very knew to me. With no experience at all, with the guidance of my supervisor I made quite some amount of videos on doodly, of which good as it was beyond my area of expertise.

Alongside all these I worked on the office interior as well where I designed, printed and fitted big stickers on the office glasses so as to make the office better looking. The stickers contained a logo of the company, services that the company provides and a warren buffet quote. The main intention of the stickers was to make customers who visit the office physically be informed about the services we provide just by looking at the stickers.

Chapter 4: Conclusion

4.1 Self-assessment as a professional

Internship at MeroLagani has been a wonderful experience for me. For someone like me who is very interested about stock market since earlier days, it is a workplace where you can watch and analyze the market in-depth. Besides from the fundamental and technical analysis which most of the traders and investors are familiar with, I got introduction to analysis of data and got to know more about the market sentiment.

MeroLagani's main operation is its news portal merolagani.com which is the country's leading financial website. The news article and analysis in merolagani is followed and trusted by most of the financial enthusiast and stock market investors and traders. It is the country's one of the most visited website too. Although being a finance student and with not much of interest and idea about journalism, it was interesting to know the process that takes inside the news room. There are chief editor, associate editor, sub editor and reporter in the news department team. The reporter brings in the hot topic from government websites or from other sources and then sub editor and associate editor works on the topic. No article gets published without the verification of the chief editor at the end. I have realized that news article can be very sensitive and can really make an impact, specially stock market of Nepal, majority of people invest/trade on the basis of news articles which can have negative impact when the news article is not authentic and is used to manipulate people. I personally have come across many small financial news portals who try to manipulate investors and traders by publishing non-authentic news article in order to manipulate a certain stock price which may be bought and hold by them in order to profit from the price increment. From this I have realized with many competitors and with such a bad image of financial media among the investors and traders mass it is very difficult to keep up with the trust and belief among investors and traders and hold that top position. As I have witnessed in firsthand the process for writing a news article it is interesting to see how much of effort is kept for a news article considering its impact.

Apart from the core operation of financial news article in nepali language, the company has realized that it needs to run along with time and catchup with the trend. Therefore, MeroLagani has started language option in the website where users can also opt for English language. Along with this new operation the news team started a podcast program where investors and traders share their view towards the market and experiences. The program is named "share guff" which literally means share market talks. It was a wonderful experience for me as I have participated in some of the share guff podcast session and got to know thoughts and understanding of some very experienced investors and traders. This initiative of coming up with a podcast program which is really trending during today's time is really interesting and admirable. With this I realized that along with the core business any company should think of new ways, strategies for growth continuously and move along with today's time.

During my internship I was lucky enough to witness a new startup too. The company was working on a new subsidiary company known as MeroSchool which was a e-learning platform focusing on current pandemic situation. Due to pandemic most of the students are isolated at their home so this was the opportunity where a e-learning platform to tap into the market. This platform provided courses from class 1 to far as engineering classes. The idea of this new venture was really intriguing for me as this was a completely different sector for the company to work on as it included nothing about stock market or finance. The company saw an opportunity, a market with possibilities and just went for it of which I was really amazed. Seeing the subsidiary company grow from 2 staffs to about 20 staffs during my period, I witnessed firsthand how much of effort needed for a startup.

Now coming to data analytics department, apart from the news, Merolagni is widely known for its data analytics software and weekly published newsletter apart from the regular news article in the website. I personally used the data analytics software prior to joining the internship program and was pretty familiar with the features it included. So, I was pretty curious to how all the data were handled/managed and how it all worked as a whole. The major task of uploading quarterly report to the software seems to be tiring at first but as I got along with it, I understood how the balance sheet and profit and loss statement all really works. After the data entry came the most entry part and that would be verifying the uploaded data and I would say this was the most fruitful part of the internship program. As I got to know how company can make errors, manipulate the report to keep up with the image and also analyze the report, say how has the company performed during the quarter. From my understanding during this task, I have realized that financial reports of hydropower are mostly manipulated as they don't adjust their paid-up capital in order to show good eps, and have irregular or say inconsistent report published as this sector does not have any regulatory bodies such as in banking or insurance sector. Being a finance major this was the things I have heard in theory, but from this experience I had witnessed all this in real which was very fruitful.

Apart from all this I have learned how a organization really works. Admin department controls all the other departments i.e. data analytics department, news department and mero school department. Admin department deals with the accounts of the whole company, deals with the clients and customers and supervises how all other departments are operating and reports to the CEO.

Annexures

Pictures of Workplace



Figure 6: WORK DESK



Figure 7: With supervisor Deep Thapa



Figure 8: With supervisor abin neupane



Figure 9: Futsal match among MeroLagani Family

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