

# **Web development and Digital marketing**

## **An Internship Report**



**By**

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Anamnagar, Kathmandu

**Submitted to:**

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(SOMTU)

In partial fulfillment of the requirements of the Masters of Business Administration in  
Information Technology (MBA-IT) Program

Report of Internship: 20 December 2020 – 20 February 2021

Date submitted: February, 2021

## **Declaration**

This internship report entitled "*Web Development and Digital Marketing*" has been written by Prabin Mishra, MBA-IT Third Semester (2020) at School of Management and has not received any previous academic credit at this or any other institution.

(Signature)

Prabin Mishra

Date:

## **Endorsement**

This internship report entitled " *Web Development and Digital Marketing*" has been written by Prabin Mishra, MBA-IT Third Semester (2020) at School of Management and has been endorsed for evaluation to the Office of the Examination Control.

(Signature)

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Date:

## **Acknowledgement**

I would sincerely thank Tribhuvan University, Faculty of Management and School of Management for providing the opportunity to carry out the internship project that helps to enhance our knowledge, skills and capabilities. The internship opportunity I had with *Max Growth Investment Group Pvt. Ltd.* was a great chance for learning and professional development. I am grateful for having a chance to meet so many wonderful people and professionals who led me through this internship period.

During the period of my internship work I have received generous help from many quarters which I like to put on record here with deep gratitude and great pleasure. I am indebted to Mr. Subash Thapa, who taught me numerous things and guided me all through my internship period as my mentor. Mr. Kul Bahadur Thapa (Executive Chairman) for his effort to groom my organizational attitude.

I would like to thank SOMTU and its valuable faculty members who provided guidelines and suggestions for the internship as well as the report writing process.

I choose this moment to acknowledge everyone, who have helped me to get along this journey, for their contribution gratefully.

Prabin Mishra

MBA-IT, 4<sup>th</sup> Batch

## **Executive Summary**

Max Growth Investment Group Pvt. Ltd. is a one of the leading company in the sector of financial information service provider which enable people to make wise financial decisions. With the vision of being no. 1 financial information provider MGI group started a website "investopaper.com", a financial information sharing site that keeps a systematic data and information related to finance, business and economic sector. Investopaper.com, that is built with the

The report entitled “Web Development and Digital Marketing” is an outcome of internship program at MGI group technical department at its office premises Anamnagar, Kathmandu. The report has been prepared in the partial fulfillment of the requirement for the degree of Master of Business Administration in Information Technology at School of Management, Tribhuvan University. This report is the outline of the activities performed during the internship period.

The primary source of this report preparation is the observations, discussions and personal experiences in course of the involvement in MGI group as an intern. Apart from these, various tools and technologies used by the bank for an intern were studied.

## **LIST OF ABBREVIATIONS**

MBA-IT	Masters of Business Administration in Information Technology
IT	Information Technology
MGI	Max Growth Investment
HTTP	Hypertext Transfer Protocol
HTML	Hypertext Markup Language
CLI	Command Line Interface
CGI	Common Gateway Interface
PhP	Hypertext Preprocessor
CSS	Cascading Style Sheets
RDBMS	Relational Database Management System
GNU/GPL	General Public License

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# **CHAPTER 1: INTRODUCTION**

## **1.1 Background of the study**

Masters of Business Administration in Information Technology (MBA-IT) is the two-year combined course of IT and Management offered by Tribhuvan University. It is an integrated course which has blended management education with recent developments in IT. The mission of the Faculty of Management's MBA-IT program is to develop socially responsible, scientific approached, result oriented management with integrated information technology (IT) professionals.

Internship is mandatory for graduation program in the discipline of MBA-IT under School of Management, Tribhuvan University. The internship during the 3rd semester not only provides an opportunity to implement the conceptual knowledge in the practical situation in the areas of business and information technology but also helps the student to develop the soft skills including communication skills, personal effectiveness, presentation skills and problem solving.

## **1.2 Objectives of the Study**

Internship program is a requirement for graduates as part of partial fulfillment for Degree. This study is conducted with general objectives and specific purposes. The general and specific objectives are:

### **General Objective:**

- To learn about the practical implementations of the theoretical knowledge from academic courses.

### **Specific Objective:**

- To familiar oneself with the various aspects of the organizational characters and develop an understanding about the working systems, processes and environment.
- To gain experience in the work culture and working professionalism.



- To develop the various soft skills including communication, interpersonal, public relation, presentations skills through direct interaction with various level employees.

### **1.3 Significance of the Study**

The significance of this internship program in the actual work place is to enhance professional aptitude, strengthen personal character and broadening the degree of knowledge of the student.

The internship in MGI Group has been of high significance to me for the following reasons:

- **Application of education and career exploration.**  
Learning is one thing, but taking those skills into the workforce and applying them is a great way to explore different career paths.
- **Gain of experience and professional feedback.**  
It provided opportunity to be with long-serving and experienced employees of organization and learn from their experience.
- **Learn how a professional workplace operates.**  
The greatest learning from the internship comes from understanding the organizational activities and being able to adjust with the organizational environment.

### **1.4 Limitation of the study**

There was less restriction to study the entire process but as per organization's rule and regulation, intern was not allowed to know all the information. Every report has certain limitations. Some of them are:

- Time limitation due to the covid-19 pandemic. The internship period was suffered by the nationwide lockdown.
- Much confidential data was not disclosed by respective personnel of the department.

## **CHAPTER 2: BRIEF PROFILE OF THE COMPANY / DEPARTMENT**

### **2.1 Introduction to the Company**

Max Growth Investment group is a company established and run by passionate marketing and financial scholars, doing research; specialization in investment analysis, marketing & financial information sharing through its own website [www.investopaper.com](http://www.investopaper.com). With the aim to work in the core area of investing, and financial news portal, it was started in 2018 as a lean startup, with idea testing and developing a business model of the company. The initial idea testing and understanding the viability and feasibility of the business, the company was formally started in late 2018, registration with the office of company register under ministry of industry of Nepal.

### **2.2 Mission**

Enable people to make wise financial decisions so they can live a better life.

### **2.3 Vision**

To be the number one financial information provider of Nepal. Creating [www.investopaper.com](http://www.investopaper.com) a central database by keeping systematic data and information related to finance, business and economic sector.

To provide investment decision-making platform through up-to-date and easily accessible data and information, research based analysis, financial chart and news, and real-time news.

### **2.4 Core Values**

- Trusted contents.
- Research based information sharing.
- Team work.
- Honesty, integrity and professionalism.

## 2.5 Organizational Structure

MGI group adopts the top-down approach for breakdown and distribution of works in the organization for offering the various types of services. In order to perform and handle issues related to the services and products, they are specifically handled by separate teams and units. For e.g., the News Sourcing and Content Writing are handled by content creator team, site maintenance and digital marketing by IT unit. Similarly, issues and problems related to editorial are handled by editorial team.

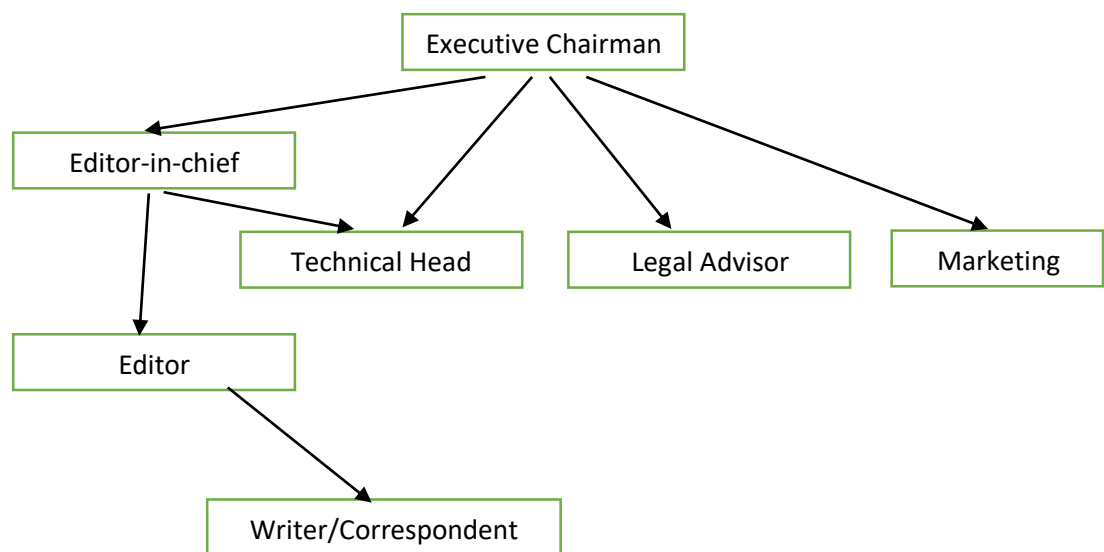


Figure 1: Organization Chart of MGI group

The internship was done in the **technical department of the organization** as a technical head. This department in the organization is responsible for all the works related to web technology and digital marketing in the organization. The major responsibilities of the department are as follows:

- Maintain the website (Frontend and backend).
- Monitor the existing technologies (web services, Digital marketing, web server systems)
- Publish the financial information (news) / updates.
- Provide suggestions to upgrade the systems in the organization.

- Provide suggestions regarding the emerging technologies that should be implemented in the organization.

## **CHAPTER 3: ANALYSIS OF WORKS AND ACTIVITIES PERFORMED**

### **3.1 Internship Detail**

Being an MBA-IT student at School of Management Tribhuvan University (SOMTU), Internee was assigned to do an internship for 8-10 weeks. The internship program offers experimental learning opportunity and aimed at providing students with an opportunity to learn & experience the real working environment. The internship program equipped me with practical knowledge via exposure that cannot be acquired theoretically.

#### **Placement Details**

**Name of the organization:** Max Growth Investment Group PVT. LTD.

**Address:** Anamnagar-29, Kathmandu

**Department:** Information Technology (Technical Head)

**Tenure:** 7 Weeks

**Working Hours:** 10:00 A.M – 5:00 P.M

**Name and Designation of the Internship Supervisor:** Mr. Subash Thapa, Manager (Editor-in-chief)

### **3.2 Study of existing system and technology**

#### **3.2.1 Web Development**

Web development is the work involved in developing a Web site for the Internet (World Wide Web) or an intranet (a private network). Web development can range from developing a simple single static page of plain text to complex Web-based Internet applications (Web apps), electronic businesses, and social network services. A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side / server-side scripting, Web server and network security configuration, and e-commerce development.

Among Web professionals, "Web development" usually refers to the main non-design aspects of building Web sites: writing markup and coding. Web development may use content management systems (CMS) to make content changes easier and available with basic technical skills.

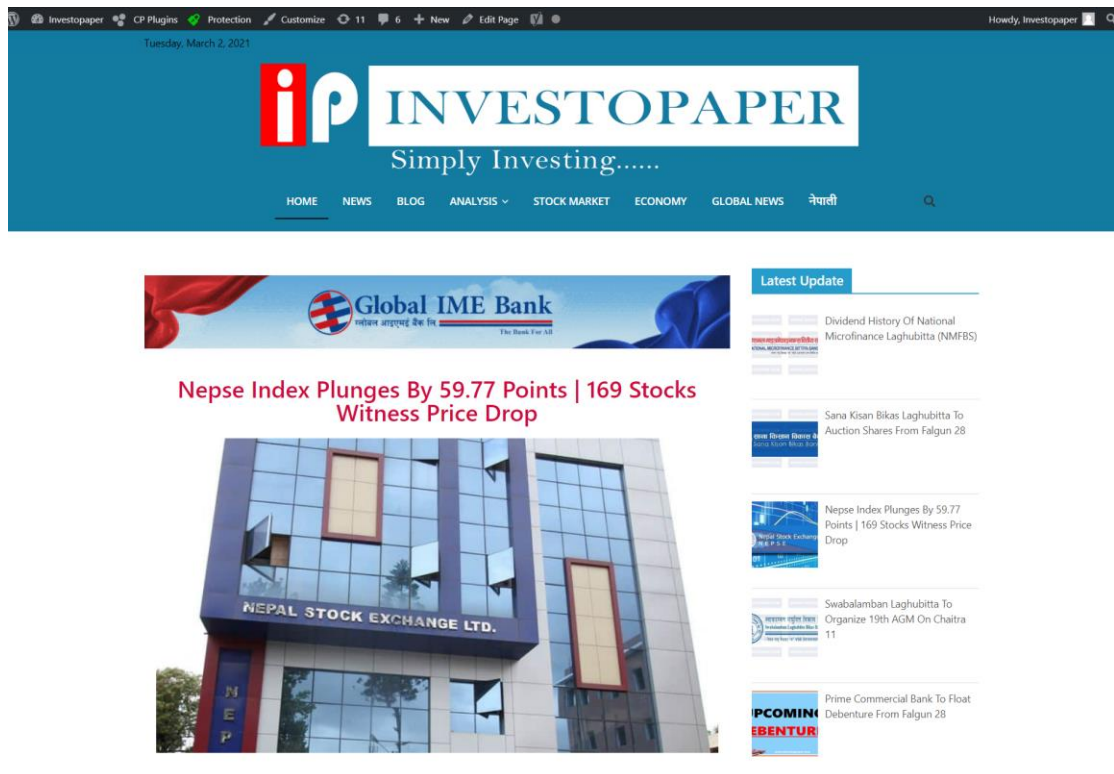


Figure 2: Investopaper Web Page (Front-End)

### 3.2.2 PHP

PHP is a general-purpose scripting language especially suited to web development. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1994. The PHP reference implementation is now produced by The PHP Group. PHP originally stood for *Personal Home Page*, but it now stands for the recursive initialism *PHP: Hypertext Preprocessor*.

PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside of the web context, such as standalone graphical

applications and robotic drone control. Arbitrary PHP code can also be interpreted and executed via command-line interface (CLI).

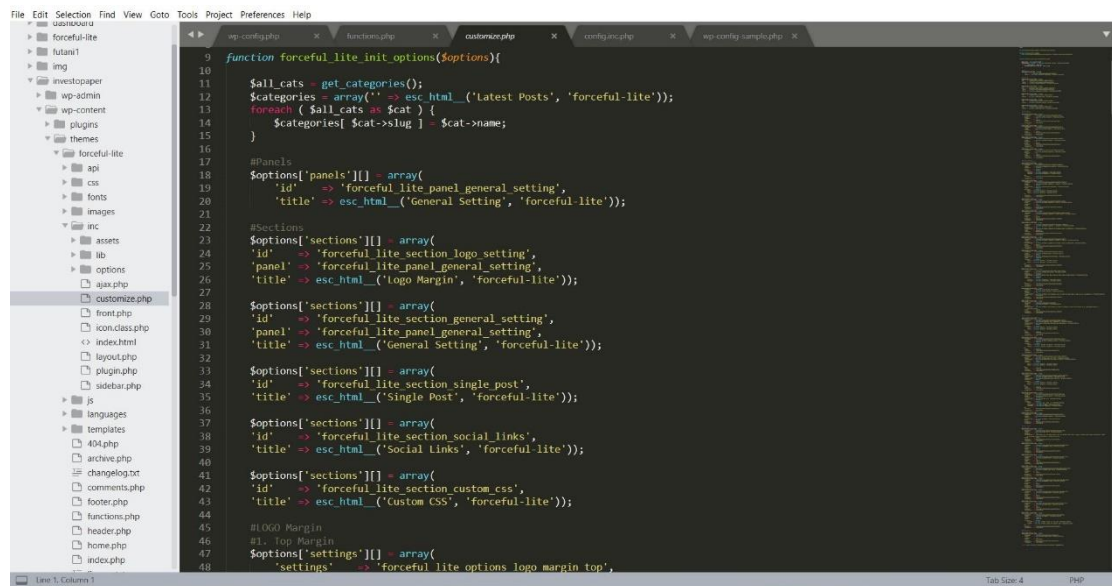


Figure 3: PHP coding (investopaper.com)

### 3.2.3 Wordpress

WordPress is a free, open-source website creation platform. On a more technical level, WordPress is a content management system (CMS) written in PHP that uses a MySQL database. In non-geek speak, WordPress is the easiest and most powerful blogging and website builder in existence today.

WordPress is an excellent website platform for a variety of websites. From blogging to e-commerce to business and portfolio websites, WordPress is a versatile CMS. Designed with usability and flexibility in mind, WordPress is a great solution for both large and small websites.

A WordPress website is any website that uses WordPress as its content management system (CMS). WordPress powers both the *backend* of the website (the interface where a user logs in to make changes or add new content) and the *frontend* (the visible part of the website that your visitors see on the web).

Here are just a few examples of the types of websites you can build with WordPress:

- **Blog** – A blog is a special type of website devoted to sharing thoughts, photos, reviews, tutorials, recipes and so much more. Blogs usually display the most recently-published content first.
- **E-commerce website** – An e-commerce website allows you to sell goods or services online and collect payment via an online payment system. You can download and install a WordPress e-commerce plugin to extend the default functionality of WordPress so you can have an online store on your website.
- **Business website** – Many businesses will benefit from having an online presence in the form of their own website. If your business needs a website for customers to learn about your company and what you have to offer, WordPress is an excellent option. Customers can contact you, ask for a quote, schedule an appointment and much more.
- **Membership website** – A membership website allows you to put content behind a paywall or an account login. To access pages or posts, users must login or pay for the content. WordPress can also handle membership websites with additional plugins.
- **Portfolio website** – Show off your artwork, design skills and more with a portfolio website built on WordPress.
- **Forum website** – A forum website can be a helpful place for users to ask questions or share advice. Believe it or not, many forum websites run on WordPress.
- **Event website** – Hosting an event? WordPress makes it easy for you to share your event details and sell tickets.
- **E-learning website** – Students can take online courses, track their progress, download resources and much more from an e-learning website. With a special kind of plugin called a WordPress LMS plugin, you can offer online courses from a WordPress website.
- **Wedding website** – Share the details of your big day with a wedding website built on WordPress. With an array of WordPress wedding themes, you can get a website up quickly and easily.



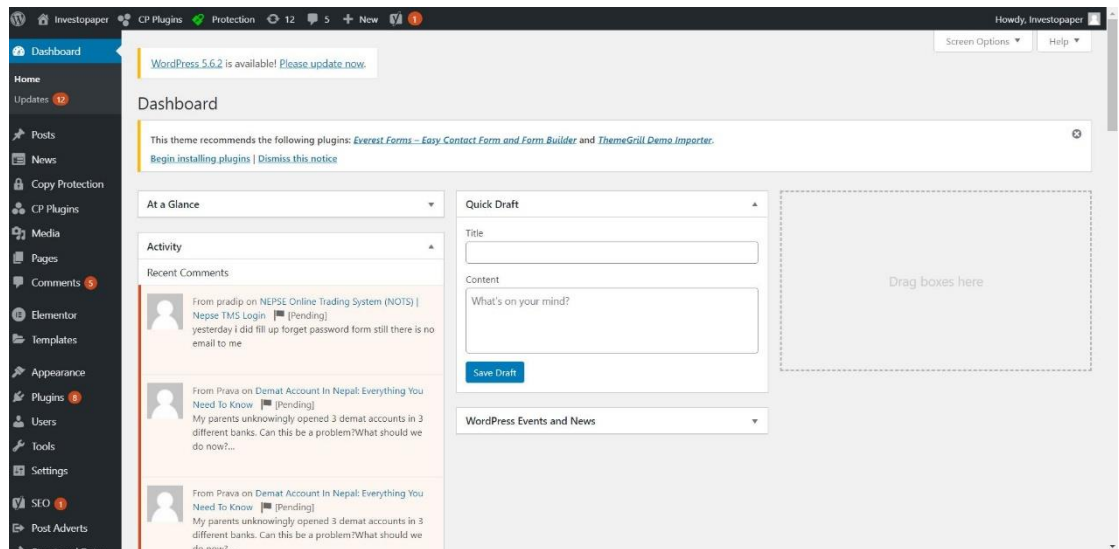


Figure 4: Investopaper Backend (Wordpress Dashboard)

### 3.2.4 Database (MySQL)

MySQL is an open-source relational database management system (RDBMS). A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses.

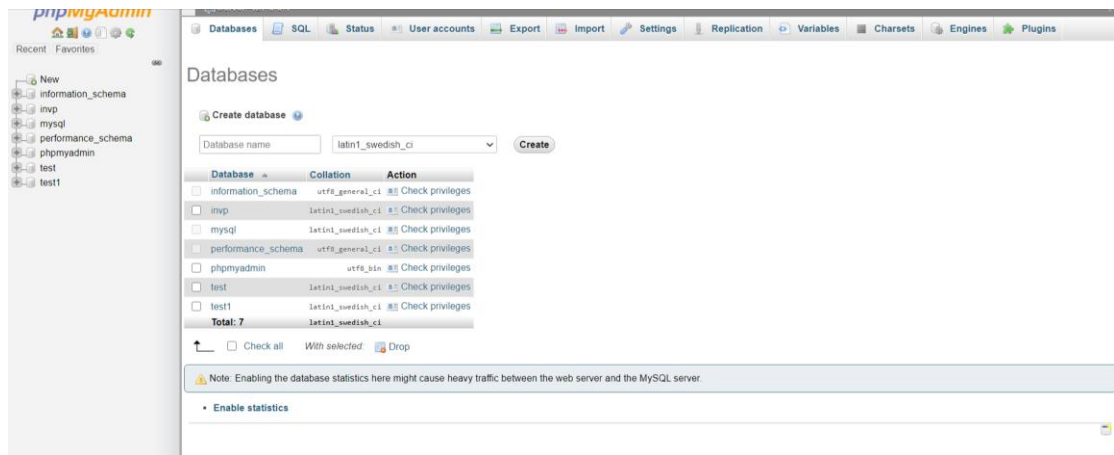


Figure 5: Investopaper Database Handling

### 3.2.5 Digital Marketing

#### Tools and Techniques:

Marketing tools are tools that companies use to develop and promote their products and services. In this context, the word "tools" refers to techniques, strategies, and materials.

The vast majority of businesses use several different marketing tools, such as advertising, direct mail, and market research to boost their sales.

Businesses use various marketing tools to communicate company information, stimulate customer interest and motivate action. An integrated marketing approach applies several tactics to engage customers and build business.

Below are some marketing tools with an explanation of what they are and why our businesses use them.

#### Classified adverts

Classified adverts or classified ads are useful for generating leads. In this context, the word "leads" means potential customers.

Classified ads can direct people to a specific website. They can also attract people who seek further information.

## **Social media**

In the world of Internet marketing, social media is a marketing tool where we try to develop an interactive online relationship with consumers. Our aim is not, for example, to surreptitiously mine customer data.

Blogging, posting, sharing and tweeting are popular social media marketing tools. Media sharing, pinning, bookmarking, and commenting on social media websites are also popular.

## **Internet marketing**

It refers to marketing that only occurs online. **Search engine optimization** (SEO) and online advertising are examples of Internet marketing. There are several ways to increase our SEO. One of the first steps is to secure a reliable and simple domain name that is relevant to our site, industry, or keywords we want to match for.

Search engine optimization refers to techniques to increase our website's appearance on search engines.

## **Surveys**

Surveys are useful for determining which products to create and also for improving or upgrading existing goods. The word goods in this context means products.

Surveys are also useful when we want to rate our and your rival's products. A survey can ask a representative sample of consumers what they like about your and your competitor's products.

## **Google Analytics**

Google analytics gives us an overview of where our visitors are coming from. It also tells us what type of people are visiting, and which content on our website performs best.

We can also use Google Analytics to work out visitor conversions. This data will help us set up conversion goals.

Organic CTR (organic click-through rate) is a way we can utilize Google Analytics to improve our website traffic. We can optimize page titles and descriptions and see how they perform by implementing A/B testing.

## Media monitoring tools

These marketing tools scan the web and inform us of conversations that are relevant to our company, product, or brand. These tools scan, for example, social media sites, forums, blogs, and videos.

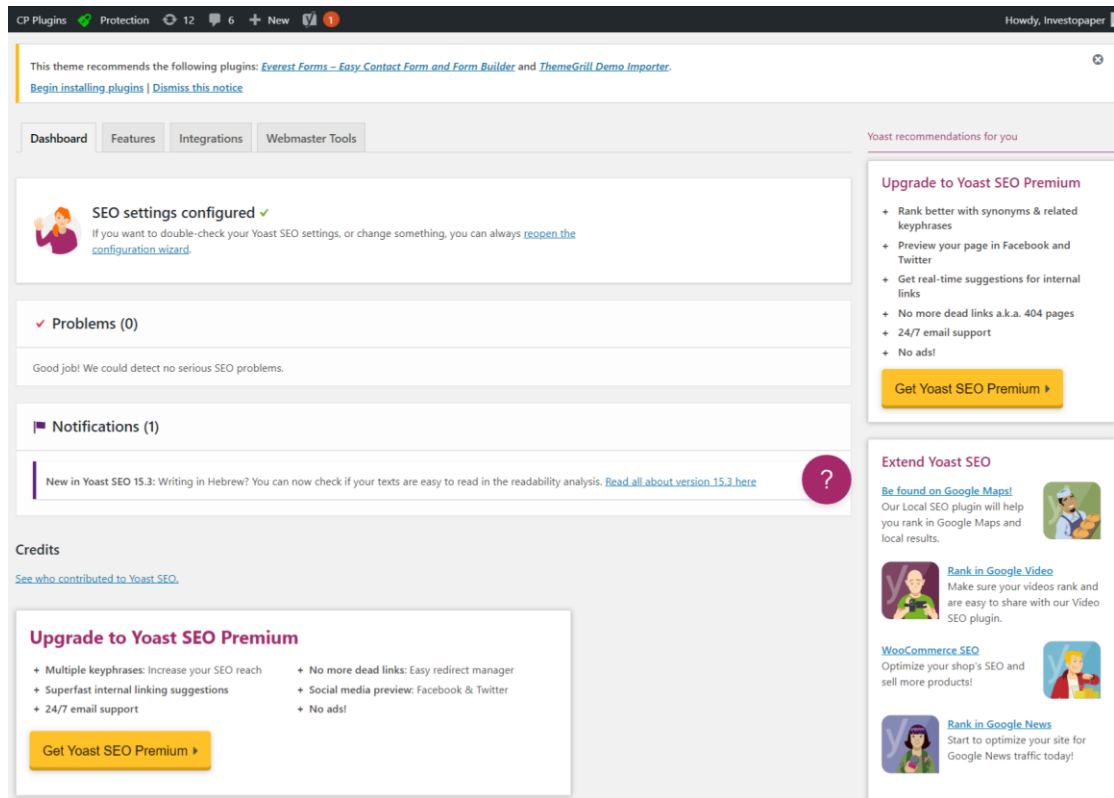


Figure 6: Yoast SEO

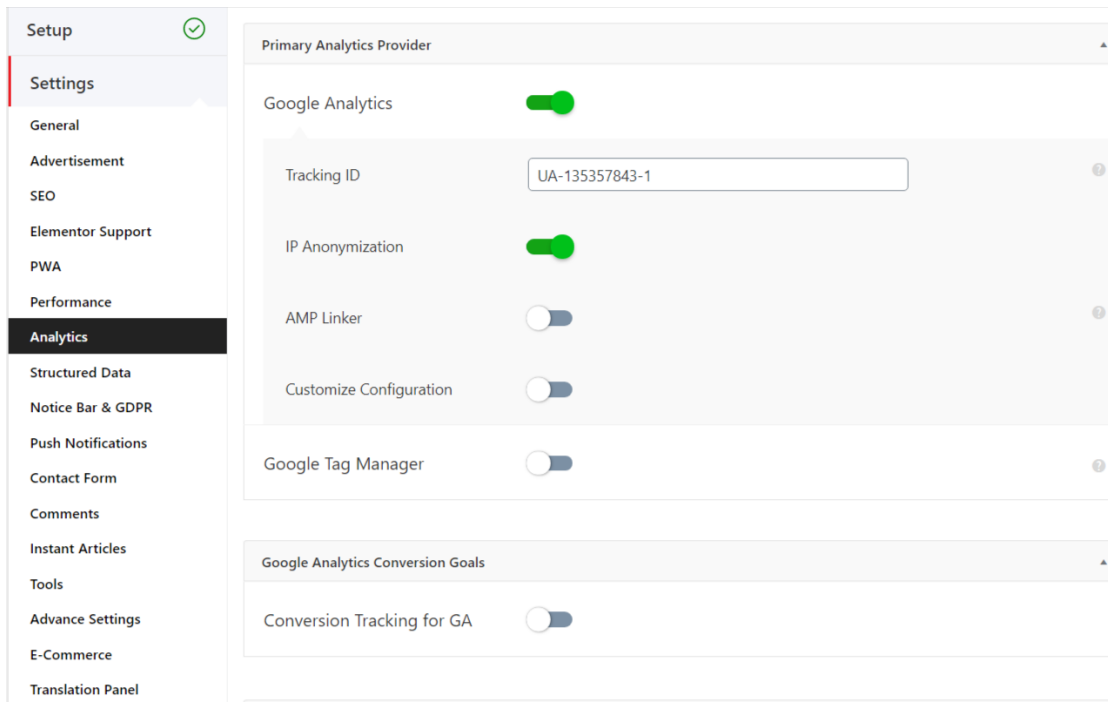


Figure 7: AMP Google Analytics Setting

### 3.3 List of Activities Performed

During the internship period, various tasks were assigned to be done under the guidance by the mentor Mr.Sushil Thapa. These activities were duly carried out and it served well to gain the experience on how official activities are carried out.

Following activities were performed during the internship period:

- New theme design (HTML, CSS), development (PHP) and deployment (deploy to the server) of [www.investopaper.com](http://www.investopaper.com).
- Maintenance of the whole website and domain requirements.
- Database update and maintenance.
- Site upgradation to the latest version framework and plugin upgradation.
- Daily news update.
- Keyword search and SEO analysis (Daily basis).
- Site Monitoring (Security alerts).
- Content creation.
- Google adverts management (Google Adsense).

The main task performed during the internship was the setup and implementation of new theme setup for website, database update, server handling and digital marketing.

## **CHAPTER 4: OBSERVATIONS, EXPERIENCES AND PROFESSIONAL SKILLS LEARNED**

### **4.1 Key observation**

Internship is an opportunity to learn the real life work procedure and implement the theoretical knowledge acquired during the academic period into the real life work settings. During the internship period, internee worked in IT departments of the company, and get exposure of how organization actually works while performing different assigned works.

- The organization follows a chain of command in its operational jobs.
- Due to covid-19, online platform was used for meetings and conferences.
- The use of project management tools and techniques are poor.
- All the senior and junior staffs have a nice and friendly relation with one another. They were often seen communicating openly and helping one another.
- The office supplies are made readily available for the smooth operation in the organization.
- The use of Information Technology in daily operation is demanding. IT has been used for the staff attendance, revenue works, registration works.
- The staffs are good with the time discipline in the organization.

### **4.2 Skill Learned**

Acquiring knowledge of management theories and its application is crucial at the same time going to a college or university is a critical step towards learning management, corporate and leadership skills. Working as intern in MGI Group has provided platform to acquire the practical knowledge and abilities offered by the professional world. The sole concentration of the organization in marketing components along with the management skills required in managing the organization enable me with the exposure of realistic technical and behavioral practices and application of management theories in managing organizations. The skills and attitudes I have learnt while working as intern are as follows:

### **Hard Skills:**

- **Technical Skills:** During internship, internee carried out tasks using programs such as Wordpress and PhP, Database Management, Digital Marketing, Google Analytics, which helped to enhance the practical skills.
- **Problem Solving:** Problem solving is the act of defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution.
- **Scheduling:** Scheduling in project management is the listing of activities, deliverables, and milestones within a project. A schedule also usually includes the planned start and finish date, duration, and resources assigned to each activity. Effective project scheduling is a critical component of successful time management. In fact, when people discuss the processes for building a schedule, they are usually referring to the first six processes of time management:
  - Plan schedule management.
  - Define project activities.
  - Sequence activities.
  - Estimate resources.
  - Estimate durations.
  - Develop the project schedule
- **Performance and Risk Management:** As I worked through the intricacies of user flow, mail notifications, etc., it became apparent that I required a level of control that was beyond a managed hosting environment. So, I learned some ideas along the way to harden the site against disaster and prepare for future growth. They are:
  - Caching
  - Compression
  - Image optimization
  - Failure point mitigation
  - Off-site backup
  - Use of Google Drive for off-site backups, and use plugin to manage the backup process.
  - Plugin / core updates



- Email deliverability

### **Soft Skills:**

- **Communication Skills:** Interaction with supervisor and client has helped to increase the communication skills. It has helped in the development of skill related to presenting problems to a supervisor and communicating the results of a given task.
- **Data Analysis and Reporting Skills:** Internee learned about the various tools and metrics used to review the engagement and reach of the ads. Internee also learned to report the results obtained from those data.
- **Flexibility/Adaptability:** Since the professional setting teaches to adopt a situational approach towards work, it was frequent event for internee where a great deal of adaptability was required. Getting on with the environment and working accordingly, remaining within organizational culture and team has enriched the adaptability.
- **Self-Confidence:** Self-confidence is one of the most important attitude, which help us develop our career. This skill of asking question without any hesitation and good communication with different client has developed self-confidence.
- **Professionalism:** The internship experience has also helped the internee to develop a professional attitude at workplace. The internee learned how to conduct oneself at workplace, to be punctual, to have positive attitude towards work and to offer assistance to colleagues when they face challenges at work.
- **Organizational Culture:** Organizational culture has implication on employee performance and have impact on organizational effectiveness. During the formal operationalization of the company, there is lack of organizational trend, such as lunch time, tea break, holidays, and ways of communication, delegation of authority & responsibilities, reporting chain and organizational working hours. Internee provide feedback to the executive officer to set the trend and set the benchmark, there formalization of each and every work starts, which sets the organizational culture.

## **CHAPTER 5: SUMMARY AND CONCLUSION**

### **5.1 Summary**

The main objective of internship was to acquire the practical knowledge and to utilize and enhance the theoretical knowledge gained by the students in the class. The period of internship was for 7 weeks and intern got an opportunity to work in different sector of investment company. Internee get to learn about the development of digital marketing and web development projects practices in Nepal, while observing the shift of communication means and marketing practices from conventional means to social media and leads in the web pages.

Since the intern period was affected by national lockdown due to **COVID-19** pandemic, internee learned the way of using different code-of-conducts, ethics and technologies to avoid physical contacts in order to maintain working and physical securities.

During the internship period, internee initially worked in Research section of Client Servicing Department. This department has helped internee to gain knowledge about research basics, the methodology used and the use of various tools and techniques to find out the best data as possible. The internee was taught various skills related to research. Similarly, internee also worked in Information Technology Department. In this department internee learned about scanning and documentation of previous web development and digital marketing, its competitors and tracing the news and media coverage of clients as well as competitors. Although, this department is related to dealing with clients and media people indirectly, internee didn't get an opportunity to directly interact with the clients as well as media representatives.

## **5.2 Conclusion**

From the report prepared above, it can be concluded that the internship program that is conducted as a partial fulfillment of the requirement for MBA-IT program has been praiseworthy in achieving its objectives of providing the practical application of the theoretical knowledge. As such, internee had chosen MGI group for pursuing internship that helped internee to extend my knowledge about understanding different department of company and services offered by it.

Working at the investment company's IT department as a technical head, it gave me an opportunity to gain valuable insights into the working of a real organization. The experience will surely guide the internee in future career path. The internee is grateful and proud to have had worked in an organization like MGI Group. During the course of internship, the internee has learnt a lot of other aspects other than normal chores such as to socialize with the people, to deal with the senior staffs to make the working environment cozier and friendlier, and has also learnt that the behavioral issues are most important inside the organization.

During that period, internee found that Clients are the key focus and greatest asset of the company. Thus, the company always focused on maintaining a long-term relationship with the client and retaining them by providing better services. Employees are not directly linked with these clients so the employee must behave in the decent and peaceful way digitally. Similarly, proper coordination and cooperation among the entire department is needed for growth of the organization.

## References / Bibliography

- Wordpress detailed information, retrieved from <https://wordpress.org/about/>
- PHP detailed information, retrieved from <https://en.wikipedia.org/wiki/PHP>
- MySQL detailed information, retrieved from <https://en.wikipedia.org/wiki/MySQL>
- Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation  
February 2009  
Publisher: Kogan Page  
ISBN: 0749453893  
Authors: Damian Ryan, Calvin Jones
- MGI Group Pvt. Ltd. *Page Info*, retrieved from <https://www.investopaper.com/our-team/>
- MGI Group Pvt. Ltd. *Mission, Vision, Objectives*, retrieved from <https://www.investopaper.com/about-us/>