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# AR / VR based Healthcare Digital Marketing Service Providers Market, 2020-2030

*Dissertation submitted in partial fulfillment of the requirement for the degree of*

**BACHELOR OF TECHNOLOGY**

**IN**

**BIOINFORMATICS**


By

**SUNIDHI THAKUR**

**161510**

UNDER THE GUIDANCE OF

**Mr. Gaurav Chaudhary**

**Ms. Shifali Gupta**

**(Roots Analysis Pvt. Ltd.)**

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

MAY 2020

# CERTIFICATE

This is to certify that the work reported in the B.Tech Academic report entitled '***AR / VR based Healthcare Digital Marketing Service Providers Market, 2020-2030'*** submitted by **Sunidhi Thakur** in partial fulfillment for the award of degree of B.Tech. Bioinformatics from **Jaypee University of Information & Technology, Waknaghat** has been carried out under my supervision. This report was not submitted to any other University or Institute in full or in part for the award of any other degree, certificate or other titles.

Ms. Shifali Gupta

Senior Business Analyst

Roots Analysis Pvt. Ltd.

**Date:**

Dr. Raj Kumar

# DECLARATION

I hence state that the work reported in the B.Tech. academic report entitled '***AR / VR based Healthcare Digital Marketing Service Providers Market, 2020-2030***' submitted at **Jaypee University of Information Technology, Waknaghat** is an authentic record of my work carried out under the guidance and direction of **Mr. Gaurav Chaudhary** and **Ms. Shifali Gupta**. I have not presented this work somewhere else for any other degree or qualification.

Sunidhi Thakur (161510)

Department of Biotechnology & Bioinformatics

JUIT, Waknaghat

Certified that the student 's statement above is accurate to the best of our knowledge and belief. Roots Analysis holds the copyright of the results reported in this article. In no circumstances will the information be exchanged with third parties without the company's prior consent.

Ms. Shifali Gupta

Senior Business Analyst

Roots Analysis Pvt. Ltd.

# ACKNOWLEDGEMENT

It is my pleasure to be indebted to various people, who are directly or indirectly contributing in the development of this work and who influence my thinking, behavior, and acts during the whole project as any knowledge is incomplete without the right guidance of a mentor.

I express my sincere gratitude to Mr. Gaurav Chaudhary for providing me the opportunity to work here at Roots Analysis Pvt. Ltd, Mohali (Punjab).

I am thankful to Ms. Shifali Gupta for providing her constant support, cooperation, and motivation during this period and other team members who provided their valuable suggestions. I would also like to acknowledge with great appreciation the key role played by my valued advisor Mrs. Rupali Chaudhary in her immensely useful observations and advice at crucial points during my project.

Last but not least, I am profoundly thankful to all the Roots Analysis members who have supported me throughout my internship period and to my parents for their inspiration, constant guidance and motivation at all stages of my life.

Sunidhi Thakur

(161510)

# ABSTRACT

The pace of digital transformation in the marketing industry is accelerating. Marketers are increasingly adopting disruptive technologies to redefine their operations and business models. In the pharmaceutical marketing domain, digital innovation has been stymied by various regulatory restrictions over the years. In the present scenario, physicians are seemingly more active across different digital platforms, and thus, have an open access to a plethora of medical information. However, consumers may find it difficult to understand the particulars related to a product, and choose a suitable treatment option. As a consequence, pharma marketers are obligated to provide innovative technical solutions that offer consumers greater visibility on their healthcare needs and drive better customer engagement.

In this context, augmented and virtual reality (AR / VR) based applications have emerged as impressive engagement tools that enable effective communication through highly immersive experiences. AR / VR technologies not only allow patients to have a deeper understanding of their condition, but also assess the impact of various treatment options, through the use of virtual clinics and product demonstrations.

The '***AR / VR based Healthcare Digital Marketing Service Providers Market, 2020-2030'*** report features an extensive study of the current market landscape and future opportunities associated with the AR / VR based digital marketing industry in the healthcare domain.

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# 1. COMPANY PROFILE

## 1.1 COMPANY OVERVIEW

Roots Analysis Pvt, Ltd. which was founded in 2013 is a market research and consulting company that specializes in offering in-depth business analysis and pharma industry consultancy services. Committed to providing an informed and impartial view of the industry's greatest issues, and other important elements the research is driven chiefly by an in-depth analysis attempting to cover the parameters shown in figure 1.1:

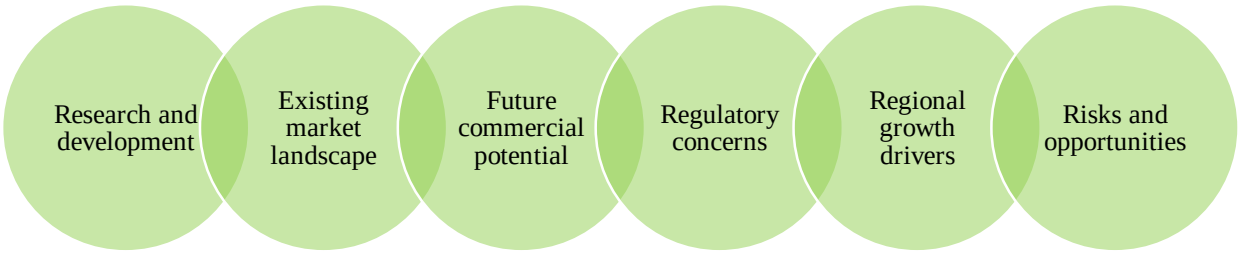



**Figure 1.1 Primary Parameters for In-depth Analysis**

The company specializes in the study of sectors which has so far been lacking in solid research or that need more centered understanding of the overall industry. The company also offers

bespoke data analysis / consulting services in addition to writing reports on specific areas, dedicated to serving the clients in the best possible way.

The company reports illustrate factors that range from market success / potential, technical advances and future projections centered around opportunities and challenges.

The company majorly focus on areas spanning the following domains:

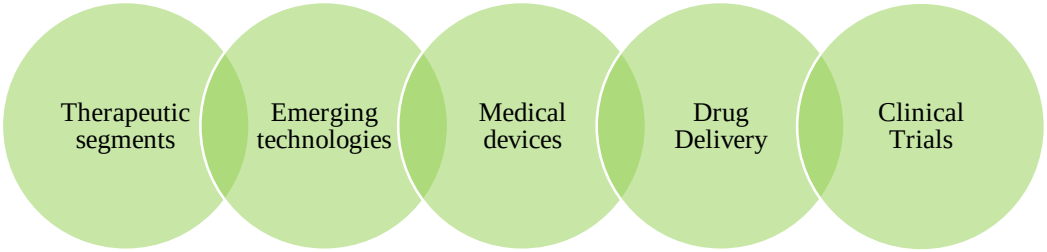



**Figure 1.2 Focus Areas for Reports**

## 1.2 RESEARCH METHODOLOGY

Much of the information contained in this study has been gathered through primary and secondary research. We have interviewed field experts (academia, industrial sector, medical practice, and other associations) to seek their view points on new growth opportunities in the market. It is mainly useful for us to draw our own conclusion about how the competition will develop through the different regions and segments of technology. Where appropriate, the data available from various sources of information were checked for accuracy. Figure 1.3 displays the secondary information sources:

**Figure 1.3 Secondary Sources Information**

## 1.3 WORK PROGRAM

My period of internship at Roots Analysis began on 6th February 2020. I was given an separate project on which I worked during my internship.

The main objectives of training program project are as follows:

- To build a comprehensive database of companies, funding information, services offerings, technologies used, their acquisition and partnerships by using available data of various companies on their websites, LinkedIn profiles and other freely accessible sources.
- An introductory chapter, highlighting the relevance and evolution of these new technologies and further the applications and key challenges being faced by them.
- Chapter on likely partner analysis
- Chapter on big pharma analysis, highlighting the collaboration and funding activity in this domain
- Detailed profiling of key stakeholders in this domain

- Current market landscape of AR / VR based healthcare digital marketing service providers

In order to achieve my goals, I have worked on majority of the modules / chapters outlined above.

# 2. INTRODUCTION

## 2.1 CHAPTER OVERVIEW

The pharma industry is ever-expanding. Given the magnitude of spending in this sector, stakeholders understand the significance of investing in robust marketing strategies. However, the innovation in the pharma domain has been moving at a slower pace than before, leading to less significant differentiation between the existing products, and thereby, a highly competitive landscape. Further, with higher number of patients taking charge of their own health, companies are required to demonstrate that their brand adds higher value and offers significant advantages over its counterparts.

In this context, pharma marketers must be prompt to integrate digital technologies in their existing marketing models, in order to expand their reach and build lasting brand loyalty. Further, digital technologies enable industries to track and monitor campaigns using various data analytics tools, and thus generate high conversion rates.

This chapter provides an overview of various challenges in the field of pharmaceutical marketing and the growing importance of digital marketing in this domain. It also presents information on different types of digital marketing strategies, with a focus on AR / VR based marketing tools. Further, the chapter includes an overview of the challenges in the AR / VR industry and its future perspectives.

## 2.2 CHALLENGES IN PHARMACEUTICAL MARKETING

The pharma industry is currently facing certain barriers when it comes to implementing effective marketing approaches.

Figure 2.1 highlights the marketing related challenges faced by the pharmaceutical companies.

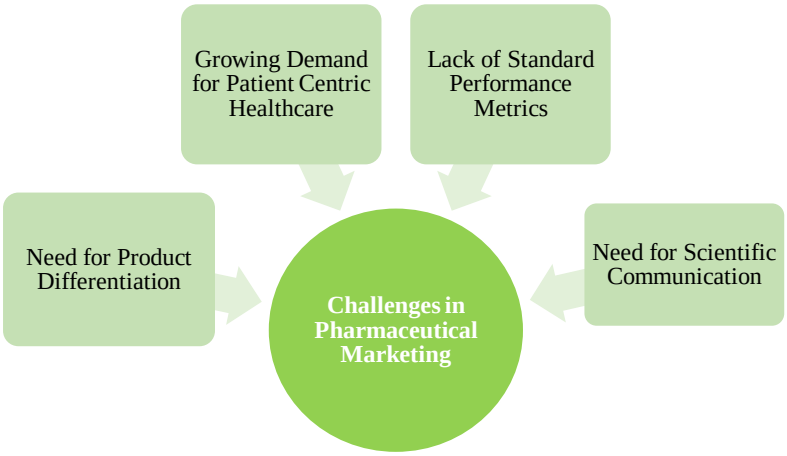



**Figure 2.1 Challenges in Pharmaceutical Marketing**

## 2.3 POPULAR DIGITAL MARKETING STRATEGIES

Before choosing a digital marketing strategy, companies must be aware of various needs related to their business, product and demographics. The digital marketing channel must align with the central idea, the brand intends to convey.

Figure 2.2 highlights some highly popular digital marketing strategies adopted by pharma marketers.

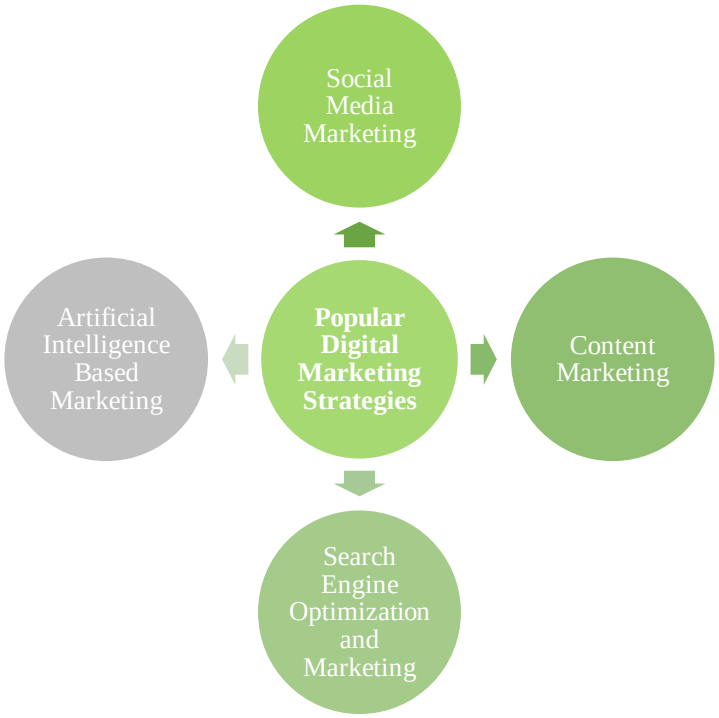



**Figure 2.2 Popular Digital Marketing Strategies**

## 2.4 APPLICATIONS OF VIRTUAL REALITY AND AUGMENTED REALITY TOOLS IN PHARMACEUTICAL INDUSTRY

This section explains some of the applications of VR / AR in the pharmaceutical marketing domain:

- **Video / Content Generation**: VR / AR has often been used to illustrate complex information with the help of animations and 360° videos. This helps pharma players drive effective communication of complex ideas, as well as train and educate their target audiences.
- **Website / App Development:** Various digital marketers have developed proprietary AR / VR based apps and websites specific for the pharma industry. Apps and websites based on AR / VR technologies allow customers to have real-life experiences in a virtual environment. The advantage of such apps and websites over the traditional

ones is that they enable communication with the consumers in an engaging and interactive way.

- **Data Analytics**: AR / VR technologies also find application in analyzing various types of datasets. Such tools are being widely used by analysts around the globe to manage big data more effectively. AR / VR are known to have a strong sensory effect on an individual, which fosters faster learning and comprehension. Therefore, by viewing the data in a 3D form, the customer would be able to discern and clearly interpret the key takeaways from the data faster and quicker.
- **Game Development**: AR / VR have become synonymous with gaming. Various industries are experimenting with different ways of building social gaming scenarios using AR / VR applications. However, in the gaming domain, AR is acquiring more popularity than VR as it serves as an excellent platform for delivering impressive engaging experiences to players via the use of smart devices. So far, Pokémon Go is considered to be the most powerful AR gaming experience.

# 3. MARKET OVERVIEW

## 3.1 CHAPTER OVERVIEW

Due to advancement in technology and internet more and more businesses are now depending on digital marketing to carry out business tasks. The pharma industry is no exception. Over the years the industry has adapted many digital marketing techniques to improve sales and earn profits. This is either done by in house expertise or by collaborating with digital market service providers. This chapter features a detailed analysis of companies providing AR / VR based digital marketing services to the healthcare and pharma sector, along with basic company information, geographical location, type of immersive technology solutions and digital marketing services offered.

## 3.2 OVERALL MARKET LANDSCAPE

Many players have set foot in this sector to provide digital marketing services. According to our primary research, close to XX players are driving projects activities in the digital marketing arena. The current market is characterized by presence of several small-sized, mid-sized firms and large-sized firms. These firms are set up in different geographical locations and have been classified on the basis of the type of immersive technology that they have provided. The companies mentioned in the chapter offer both digital marketing and AR / VR based solutions to healthcare industry.

## 3.3 DATABASE BUILDING

Database (in this case) is a list of companies and the type of services provided by these companies. The information about these services provided is usually taken from various

sources. These include public records, company websites and other secondary sources. It heads the organization of the report and hence acts as the most significant aspect in the course of enlisting the report comprehensions and insights. Hence, it must be vigorous, thorough and finely structured, which is the key to accurate analysis.

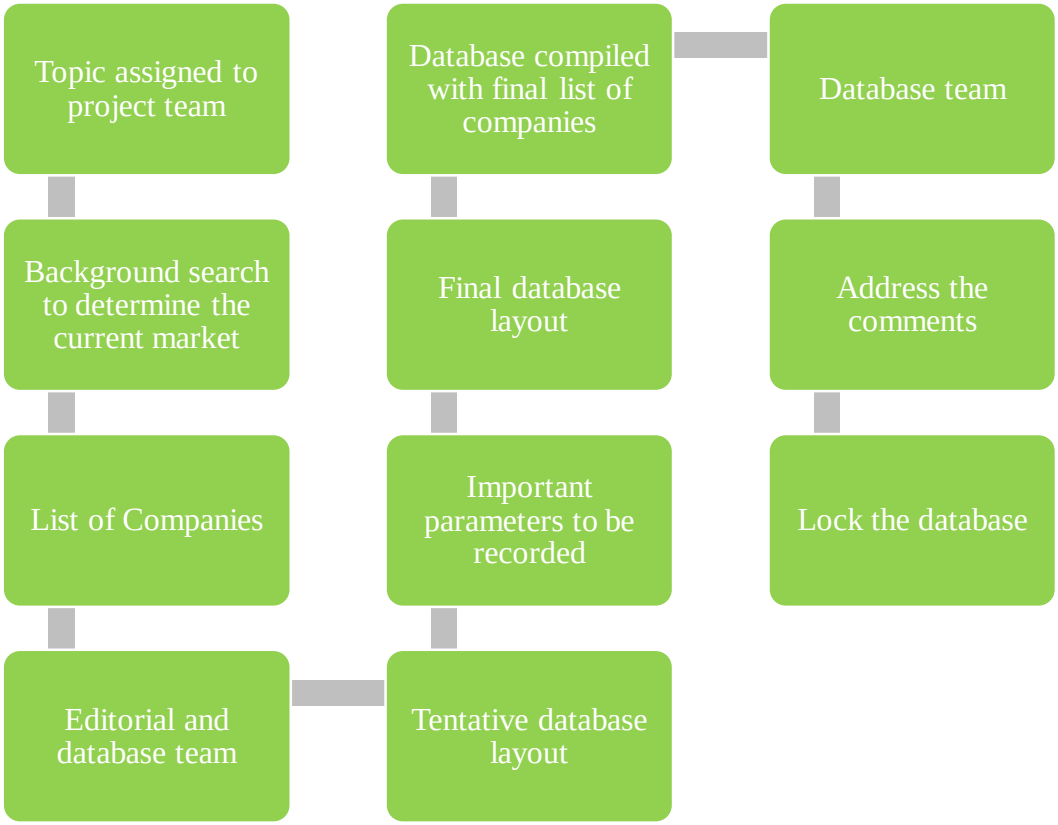



**Figure 3.1 Workflow: Database building**

Through this research, it came into picture, that different companies offer various digital marketing services. On the basis of this, our database has been classified and divided into various parameters that define these services. These include:

- AR / VR based services provided
- Digital marketing based primary services

- Digital marketing based secondary services
- Other services

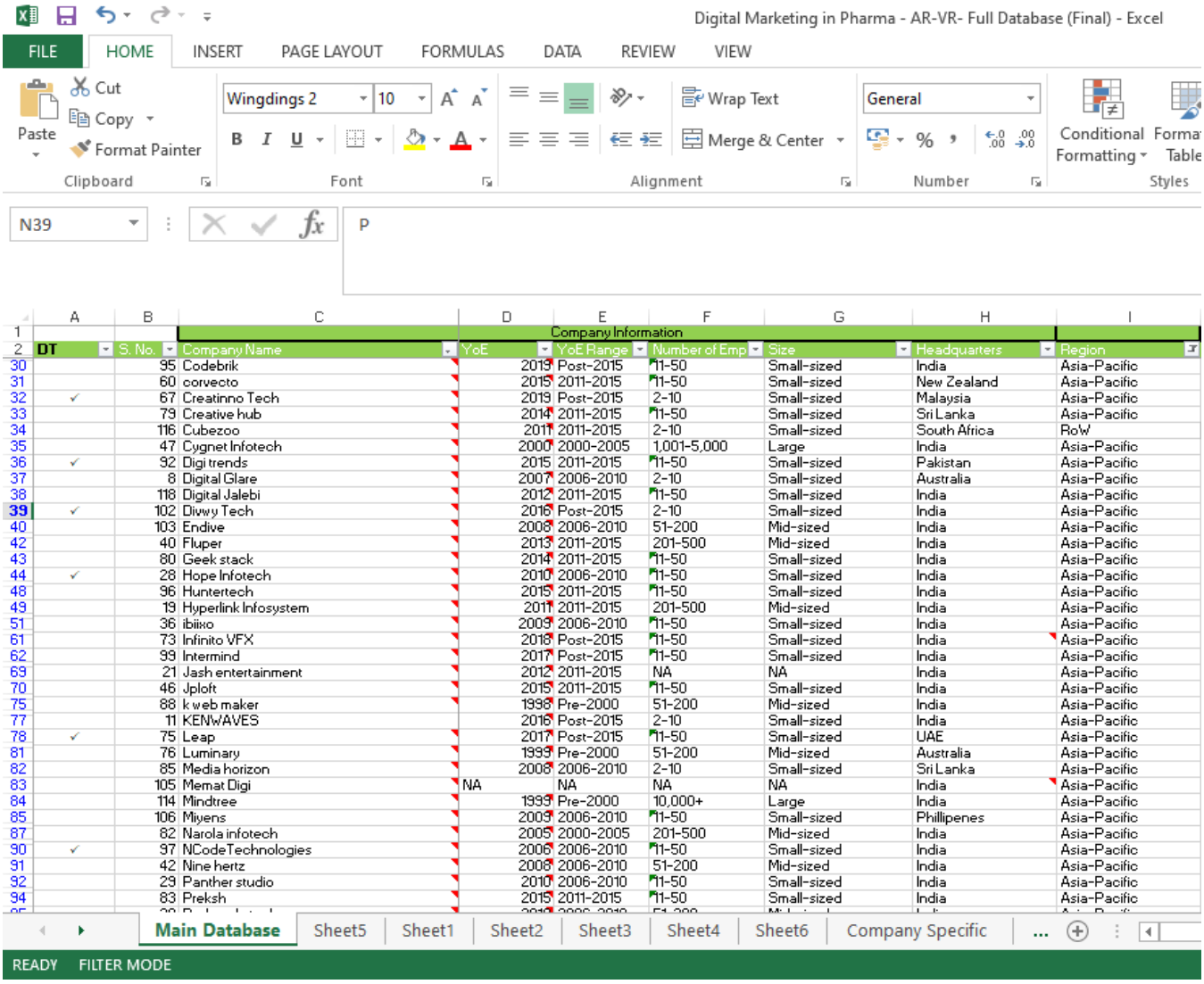



**Figure 3.2 Snippet of the database (1)**

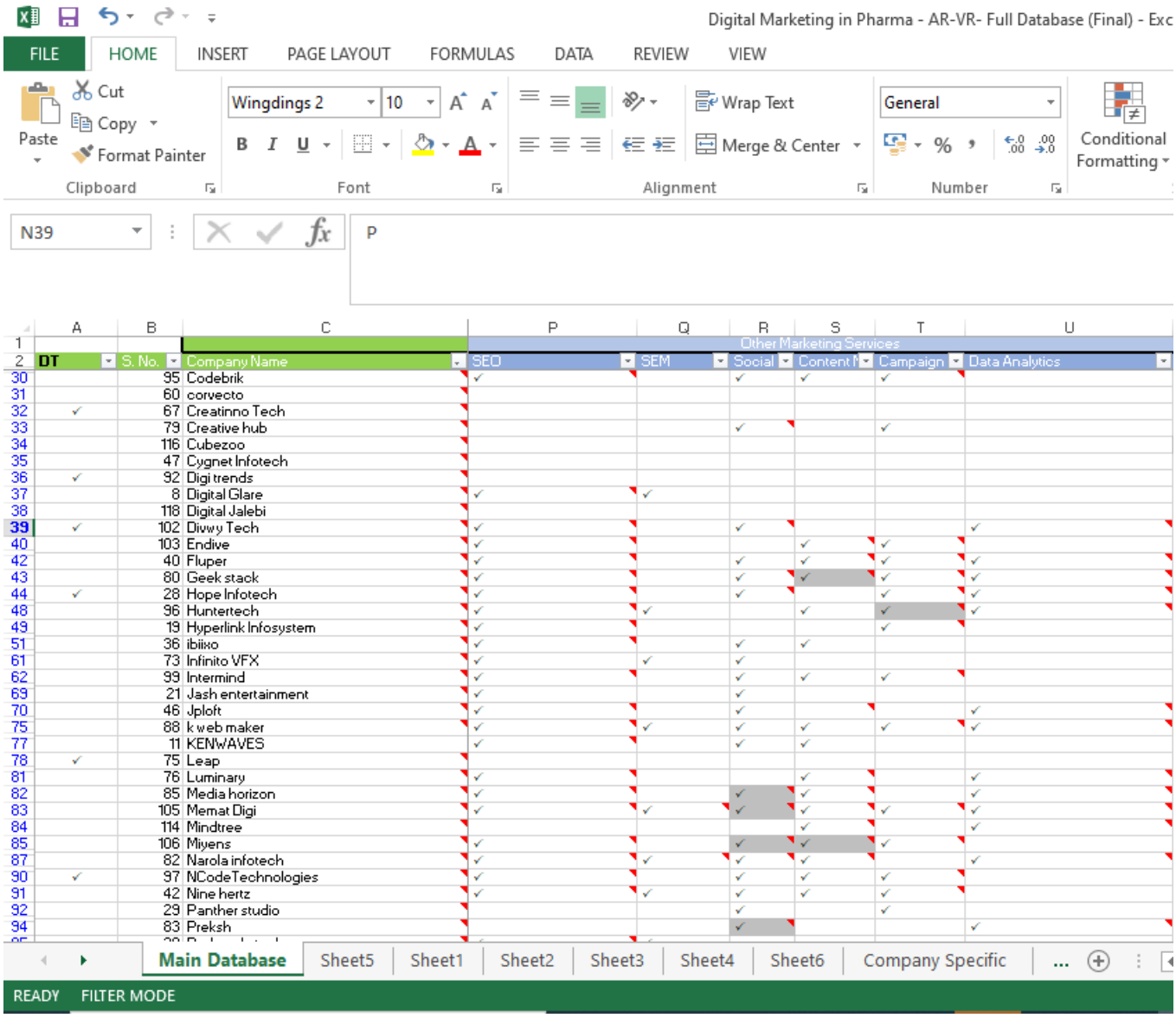



**Figure 3.3 Snippet of the database (2)**

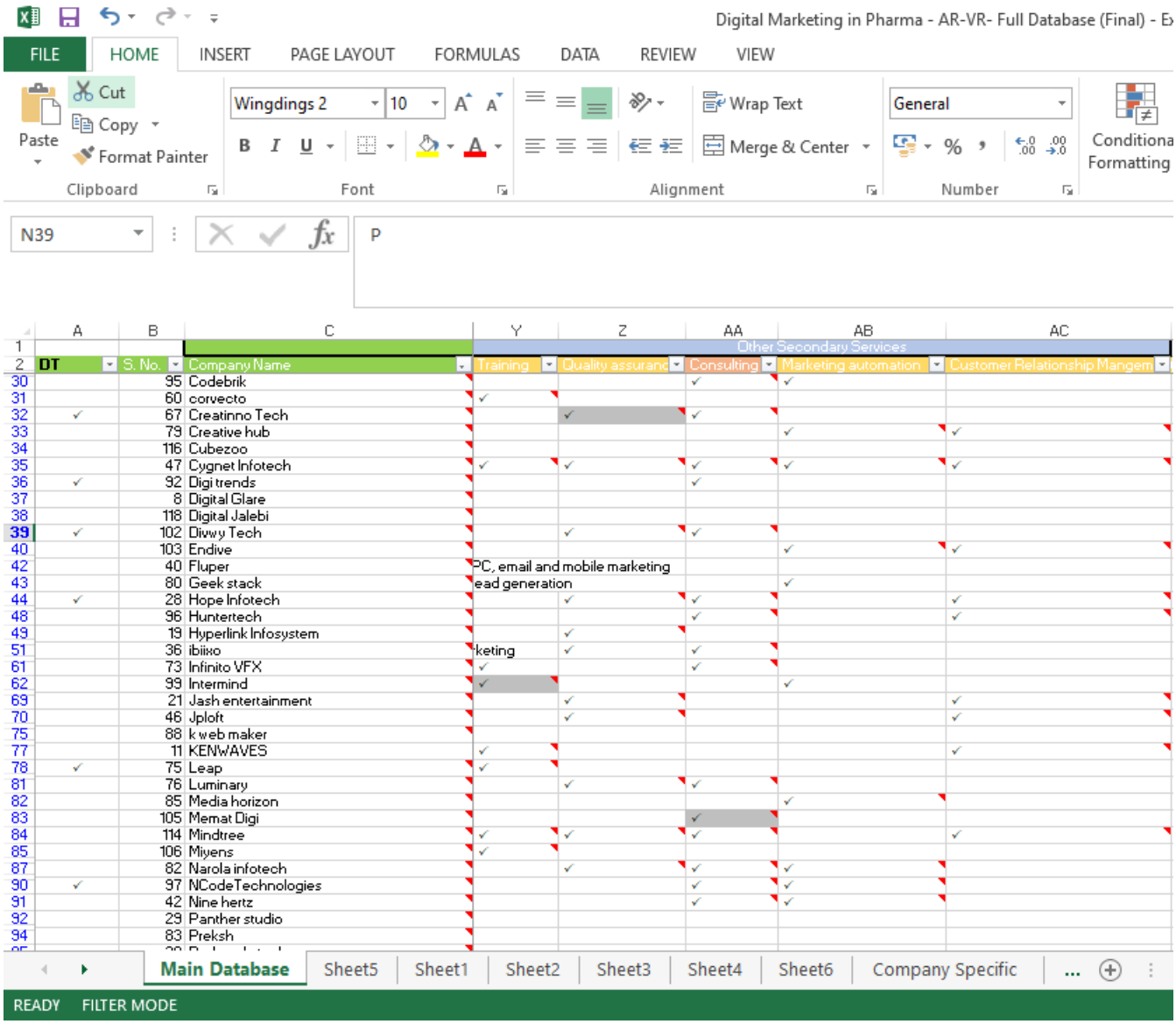



**Figure 3.4 Snippet of the database (3)**

For building a database, as can be seen, various key factors were selected with respect to the range of our project. For the digital marketing industry, all the industry players involved in development of these technologies were captured along with some of the basic information about the firms. Based on this, various analysis related to the company and the services provided by these companies were done which included analysis by geography, analysis by type of technology, analysis by company size and others. These analyses aimed to paint a clearer picture of the digital marketing industry within the healthcare and pharma domain.

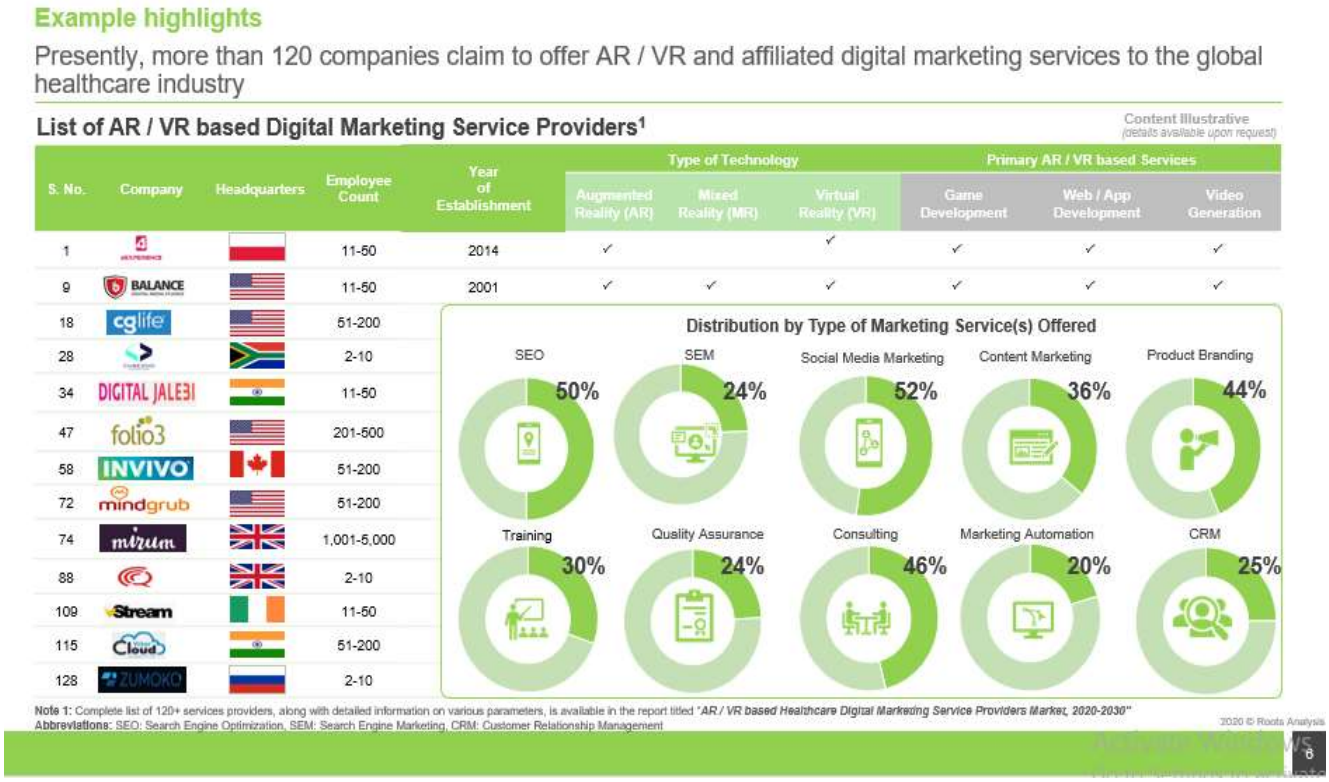



**Figure 3.4 Example highlight: AR/ VR based Digital Marketing Service Providers**

# 4. BIG PHARMA ANALYSIS

## 4.1 CHAPTER OVERVIEW

In some previous years, pharma marketers have started to actively look out for opportunities to expand their digital footprint. This has resulted in significant increase in the number of patients and physicians, who have started relying on online resources for accessing medical information. Many big pharma players have marked their presence in the field of digital marketing; specifically, AR / VR based solutions are being adopted widely since past few years. These companies have attempted to advance their existing capabilities either by collaborating / partnering with digital marketing firms or through their in-house expertise. This chapter contains analysis of these big pharma players and identified those with marked activity in this field. Figure 4.1 represents the workflow followed.

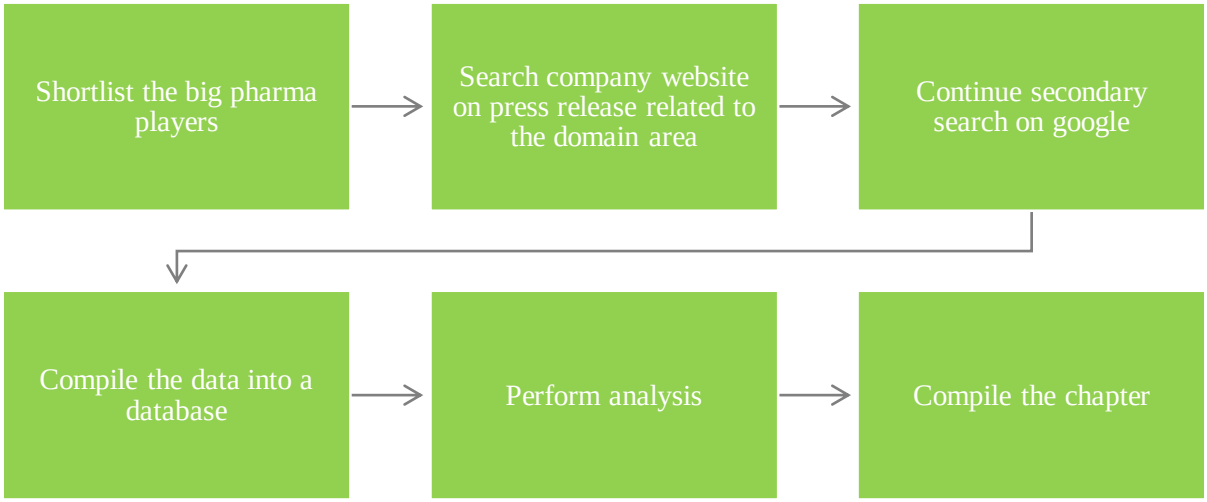



**Figure 4.1 Workflow followed**

## 4.2 DATA COLLECTION

For this analysis, the data on the key players of the industry were taken from secondary sources as well as company websites and press releases. It was made sure that all the instances of top 10 big pharma players (on the bases of revenue generated) were noted.

| S.no | Name of the company | Partners (Product/Software) | Year | VR/AR | Digital Marketi | Training and Educati | pp / Game / Website developm |
|---|---|---|---|---|---|---|---|
| 1 | Johnson & Johnson / Janssen Pharmaceutical | In-house | 2018 | ✓ | | ✓ | |
| 2 | Johnson & Johnson / Janssen Pharmaceutical | Nano pixel | NA | ✓ | | ✓ | |
| 3 | Johnson & Johnson / Janssen Pharmaceutical | Genuine | NA | | ✓ | | ✓ |
| 4 | Johnson & Johnson / Janssen Pharmaceutical | HTC (hardware) | 2018 | ✓ | | ✓ | |
| 5 | Novartis | Invivo | 2013 | ✓ | ✓ | ✓ | ✓ |
| 6 | Novartis | Invivo | 2016 | ✓ | ✓ | ✓ | ✓ |
| 7 | Novartis | Invivo | 2013 | ✓ | ✓ | ✓ | |
| 8 | Novartis | Invivo | 2015 | ✓ | ✓ | ✓ | |
| 9 | Novartis | Invivo | 2014 | ✓ | ✓ | ✓ | |
| 10 | Novartis | Invivo | 2013 | ✓ | ✓ | | ✓ |
| 11 | Novartis | AR works | 2015 | ✓ | ✓ | ✓ | ✓ |
| 12 | Novartis | Swiss Tomato | NA | ✓ | | ✓ | |
| 13 | Novartis | Random 42 | NA | ✓ | ✓ | | |
| 14 | Novartis | Digitrends | NA | | ✓ | | |
| 15 | Novartis | AR Works | 2014 | ✓ | ✓ | ✓ | ✓ |
| 16 | Novartis | Digitrends | 2019 | | ✓ | | |
| 17 | Novartis | In-house | 2018 | ✓ | | ✓ | |
| 18 | Sanofi | Invivo | 2016 | | ✓ | ✓ | |
| 19 | Sanofi | Random 42 | NA | ✓ | ✓ | | |
| 20 | Sanofi | Teads | 2019 | ✓ | ✓ | | |
| 21 | Sanofi | ADSMN | 2017 | ✓ | | | |
| 22 | Sanofi | Cramer | NA | ✓ | ✓ | | |
| 23 | Sanofi | iObeya | 2017 | ✓ | ✓ | | |
| 24 | Sanofi | Digitrends | NA | | ✓ | | |
| 25 | Gilead | Invivo | 2012 | ✓ | ✓ | ✓ | ✓ |
| 26 | Glaxo Smith Kline | Weber Shandwick | 2018 | ✓ | ✓ | ✓ | |
| 27 | Glaxo Smith Kline | Talking tree creative | 2017 | ✓ | | | |
| 28 | Glaxo Smith Kline | McCan Health | 2019 | | ✓ | | ✓ |
| 29 | Glaxo Smith Kline | Impact XM | 2018 | ✓ | ✓ | ✓ | ✓ |
| 30 | Glaxo Smith Kline | Mindtree | 2016 | | ✓ | | |

**Figure 4.2 Data Collection**

## 4.3 DATA ANALYSIS

The following analysis were done:

- Analysis by Type of Initiative
- Analysis by Application Area
- Analysis by Type of Solution
- Leading Players: Analysis by Number of Initiatives

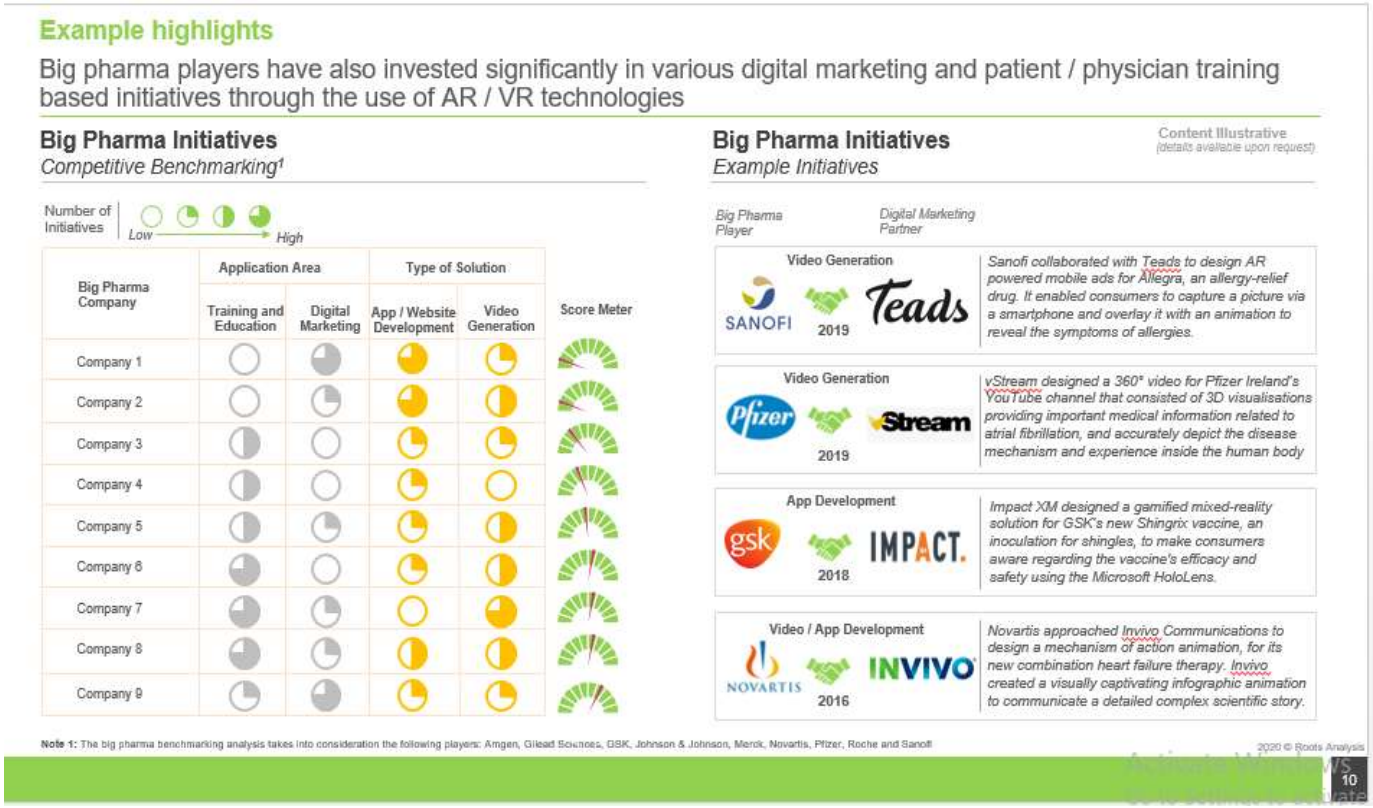



**Figure 4.3 Big Pharma Analysis: Example Highlights**

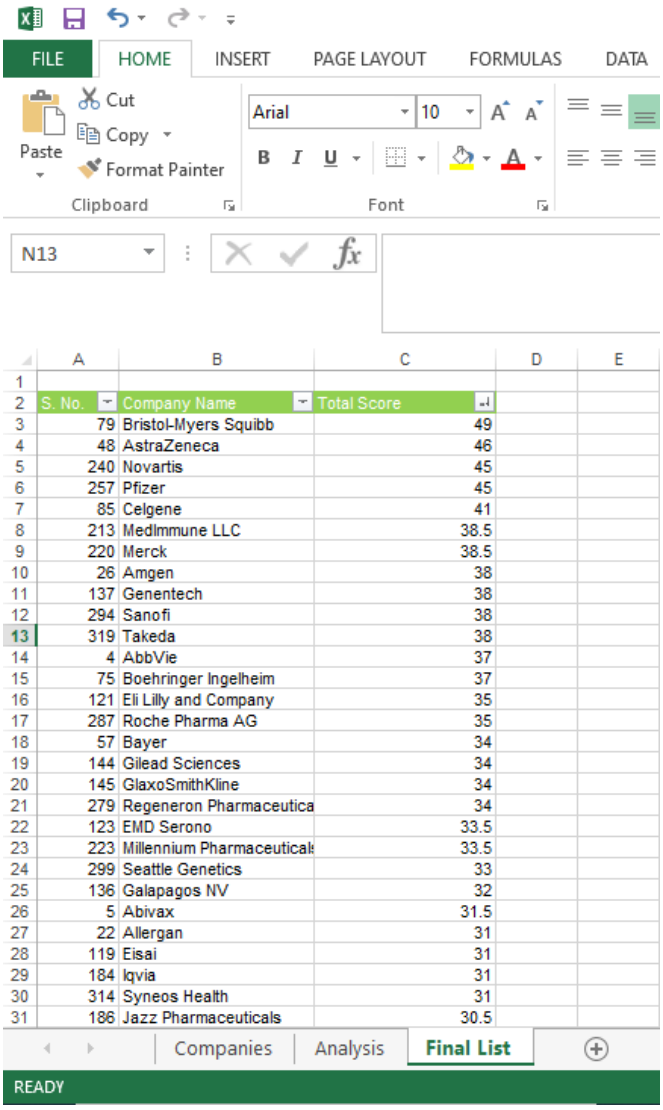
# 5. POTENTIAL STRATEGIC PARTNERS

## 5.1 CHAPTER OVERVIEW

Presently, several drug developers across the world are in the process of conducting various clinical trials across different phases of development. The pharma players having their proprietary products in phase I / II, phase II and phase II / III of development, actively seek to collaborate with digital marketing companies. The primary purpose of this analysis is to provide the necessary inputs to industry stakeholders, to enable the selection of the right partners and thereby, to support advanced digital marketing and advertising based initiatives.

## 5.2 DATA COLLECTION

To move ahead with the following analysis, we collated information on more than 4,500 industry sponsored phase I / II, phase II and phase II / III trials, across the globe.



| S. No. | Company Name | Total Score |
|---|---|---|
| 79 | Bristol-Myers Squibb | 49 |
| 48 | AstraZeneca | 46 |
| 240 | Novartis | 45 |
| 257 | Pfizer | 45 |
| 85 | Celgene | 41 |
| 213 | MedImmune LLC | 38.5 |
| 220 | Merck | 38.5 |
| 26 | Amgen | 38 |
| 137 | Genentech | 38 |
| 294 | Sanofi | 38 |
| 319 | Takeda | 38 |
| 4 | AbbVie | 37 |
| 75 | Boehringer Ingelheim | 37 |
| 121 | Eli Lilly and Company | 35 |
| 287 | Roche Pharma AG | 35 |
| 57 | Bayer | 34 |
| 144 | Gilead Sciences | 34 |
| 145 | GlaxoSmithKline | 34 |
| 279 | Regeneron Pharmaceutica | 34 |
| 123 | EMD Serono | 33.5 |
| 223 | Millennium Pharmaceuticals | 33.5 |
| 299 | Seattle Genetics | 33 |
| 136 | Galapagos NV | 32 |
| 5 | Abivax | 31.5 |
| 22 | Allergan | 31 |
| 119 | Eisai | 31 |
| 184 | Iqvia | 31 |
| 314 | Syneos Health | 31 |
| 186 | Jazz Pharmaceuticals | 30.5 |

**Figure 5.1 List of Industry Players: Likely Partners**

## 5.3 DATA ANALYSIS

As a starting point, we identified important parameters that may be used to rank the industry players sponsoring these trials, which are likely to collaborate with AR / VR based digital marketing service providers. The parameters that were taken into consideration in this part of the analysis are briefly described below:

- Company size

- Number of trials
- Therapeutic area
- Geographical footprint

The scores of each of the aforementioned parameters were added for each industry player, based on which, we segregated the companies into the following categories (in decreasing order of the total score):

- Most Likely Candidates
- Likely Candidates
- Less Likely Candidates
- Least Likely Candidates

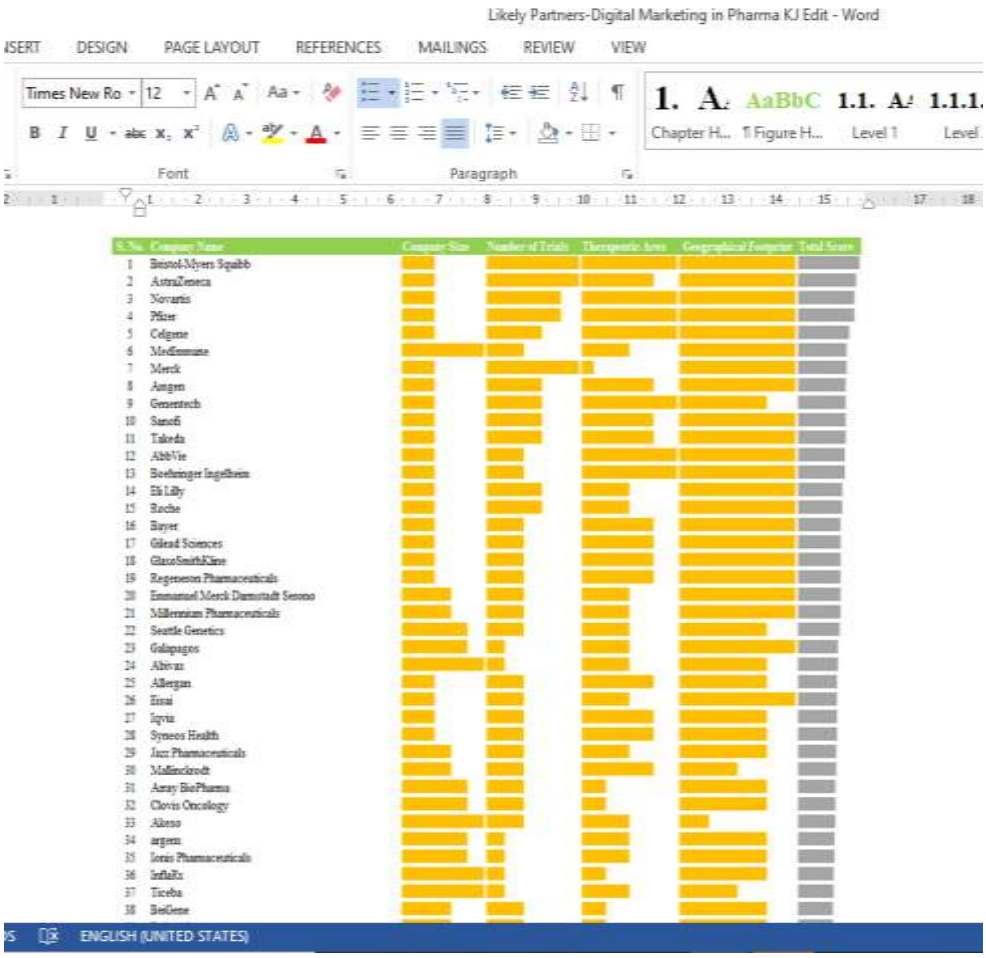



**Figure 5.2 Most Likely Strategic Partners**

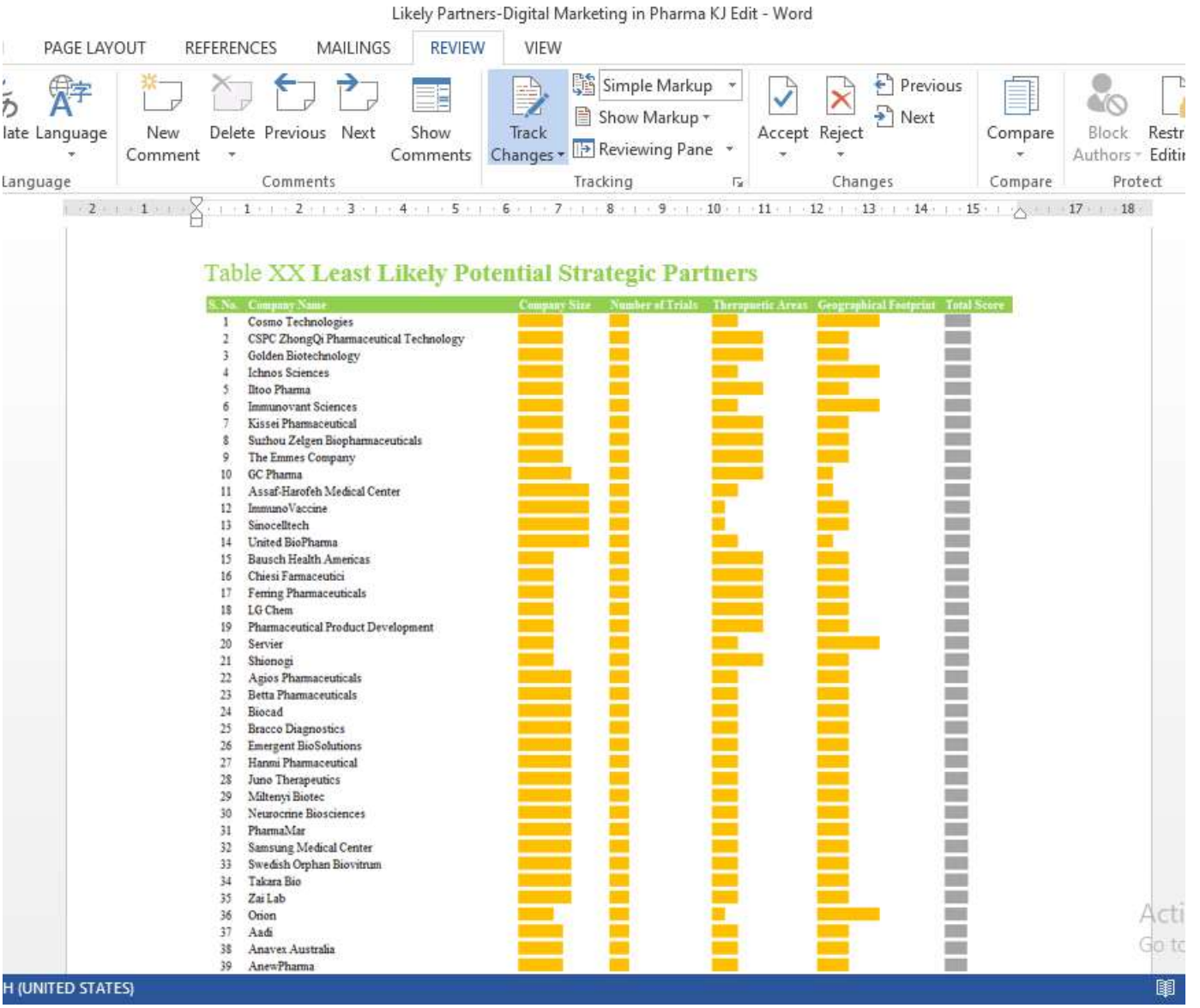



**Figure 5.3 Least Likely Strategic Partners**

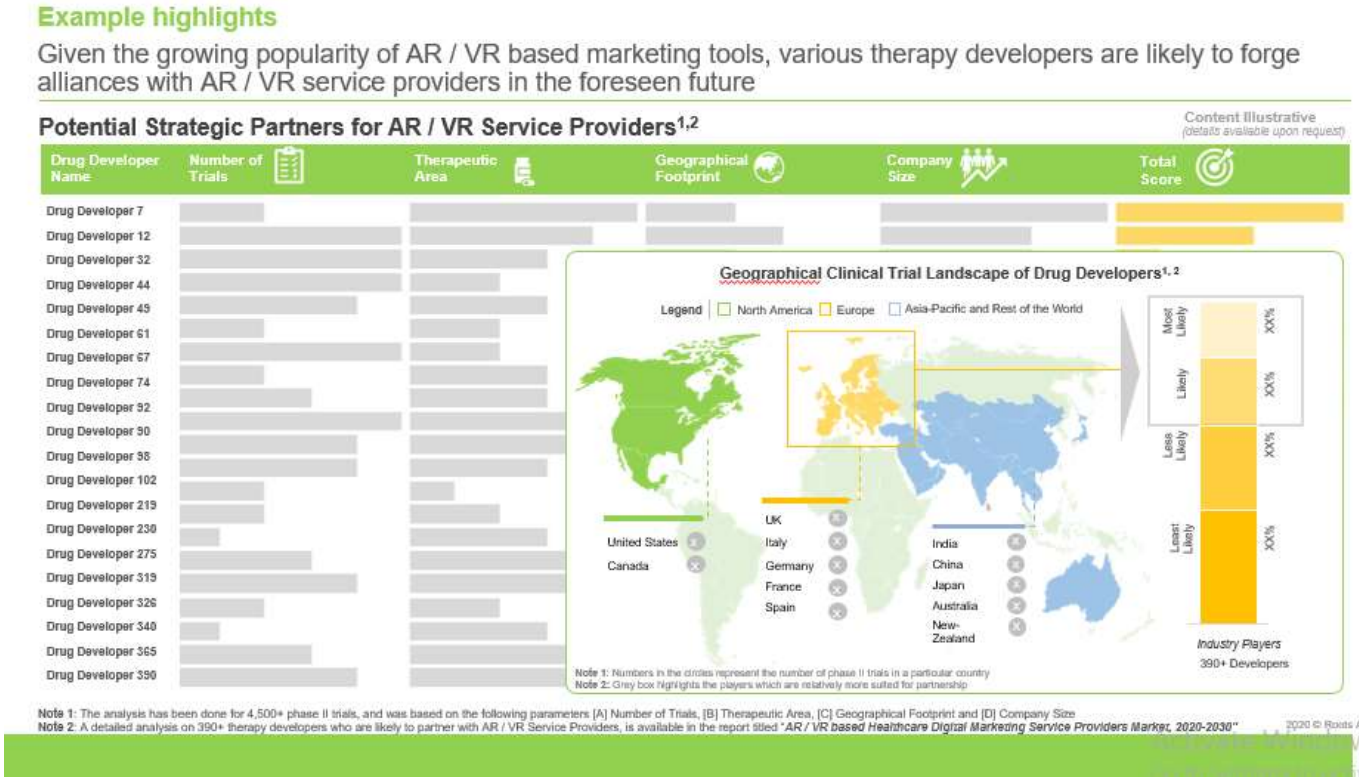



**Figure 5.4 Example Highlight: Potential Strategic Partners**

# 6. COMPANY PROFILES

## 6.1 CHAPTER OVERVIEW

This chapter focuses on leading, large, mid-sized and small companies that offer digital marketing services and technologies to pharmaceutical, biotechnological and healthcare industry. Hence, contributing to the overall growth of the genome sequencing market. It includes detailed profiles of the key service providers, which, according to our research offer a comprehensive set of related services. Each detailed profile includes information on the following:

- **Company Snapshot:** This provides basic information about the company, including details on the where the headquarters are located, year of establishment, number of employee and the executive team.
- **Recent Developments and Future Outlook:** This section presents information on recent developments and future plans of the company. The section highlights the strategies that we believe, based on the latest press releases / interviews of the company's representatives, which the company may adopt in the future.
- **We profiled 13 key players in this domain, however, here we have only included profile of CG Life.**

Figure 6.1 and 6.2 represent the sample profile.

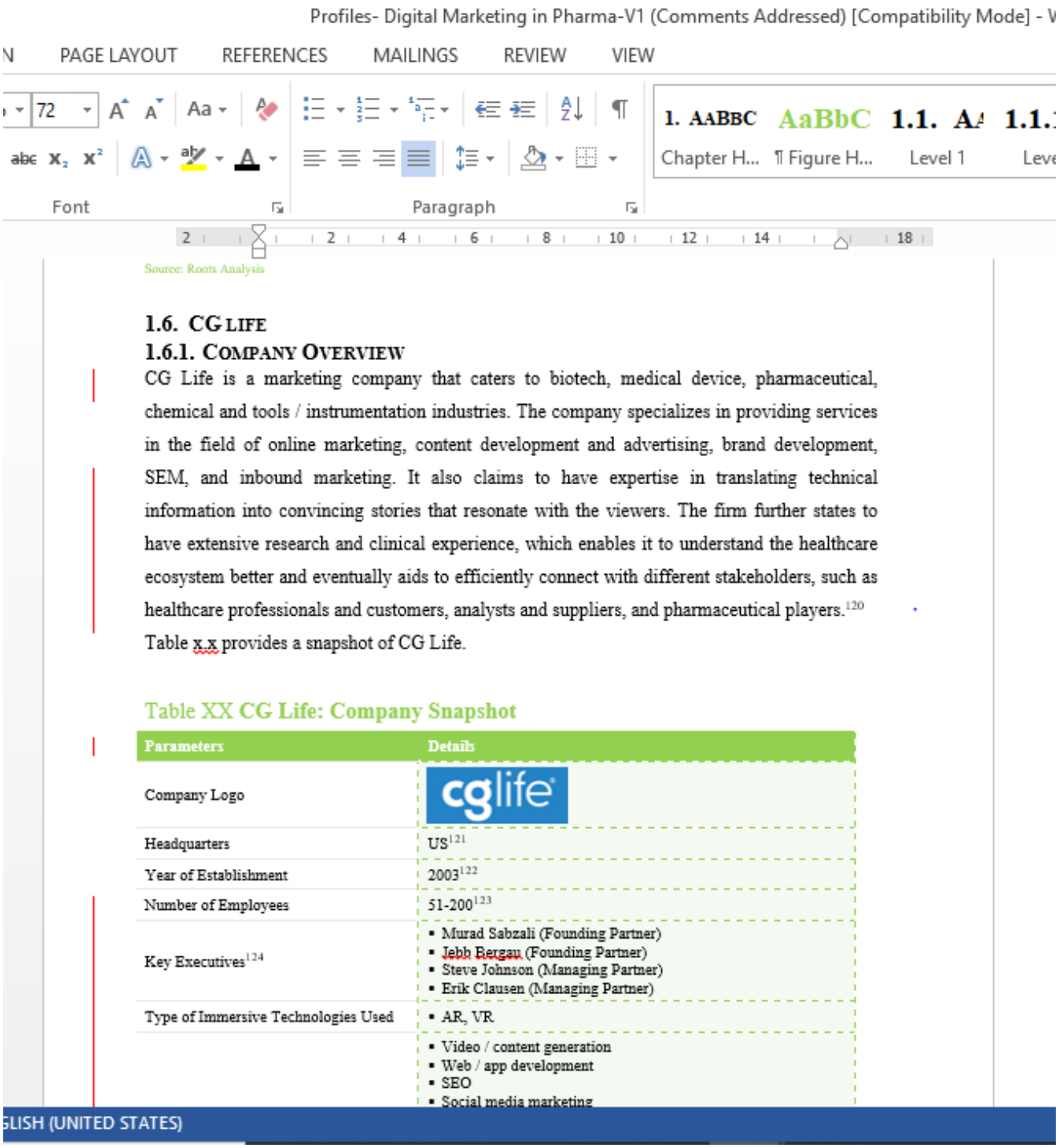



**Figure 6.1 Company Snapshot**

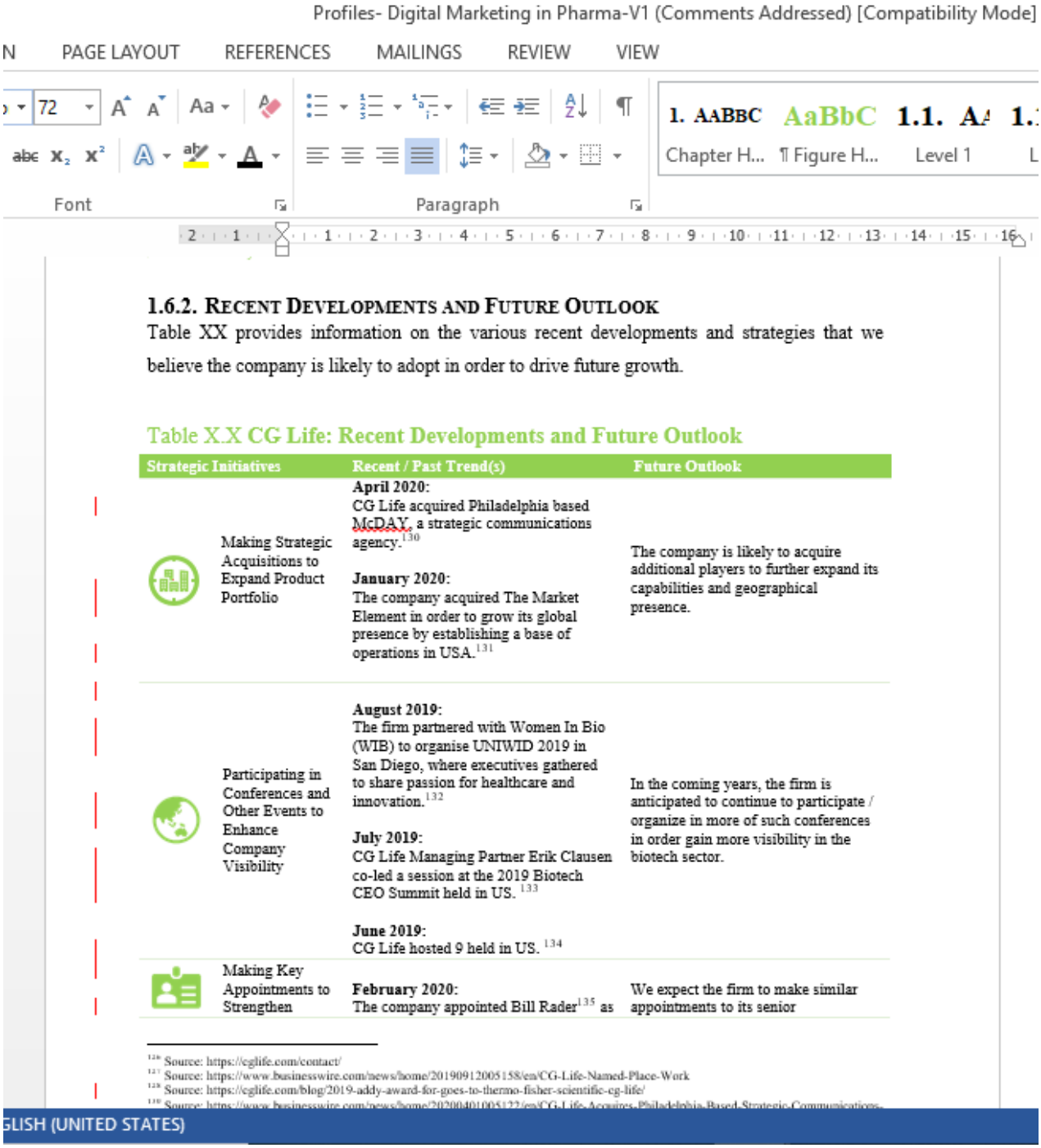



**Figure 6.2 Recent Developments and Future Outlook**

# 7. USE CASES

## 7.1 CHAPTER OVERVIEW

This section offers detailed use cases of partnerships inked over the last few years, between different pharma companies and digital marketing agencies, for successful launch of various digital marketing solutions / platforms. Each case study includes a brief overview of the companies involved, the business needs of the client and an overview of the solution provided by the digital agency. Each use case also presents key takeaways of the strategic project and the digital marketing solution offered in the process.

**9 such use cases were studied and a detailed chapter was made. However, here we have only included the use case of Narola Infotech.**

## 7.2 NAROLA INFOTECH FOR ZOCULAR

### 7.2.1 NAROLA INFOTECH

Narola Infotech is an information technology focused organization that provides technical solutions for specific business issues. The company offers a broad range of services such as enterprise development, web creation and, mobile app and game development. It also claims to provide expert services in the field of custom software development, blogging website development, CMS development and others. The case study is a detailed description of a website development project undertaken by Narola Infotech for Zocular .

### 7.2.2 ZOCULAR

Zocular is an advanced eye and skincare product, containing healing properties of okra. The company formulated an okra-based link between the eye and skin, known as Zokrex. Dr. Peter

Pham, the founder and CEO of Zocular, recognized that eyelid margin acne is a result of dry eye condition. The Zocular eyelid lotion and disinfectant contains certain particles, called Zocusome micelles, which lift the wax and oil gently at the eyelid margins. The approach uses natural remedies instead of harmful substances, to contribute to the essential needs, as well as rejuvenate the eye and skin.

### 7.2.3 BUSINESS NEEDS

The client approached the digital marketing company with the following business needs:

- The market needs of both B2B and B2C should be well satisfied.
- The solution must feature commission-based payments for doctors.
- In order to increase the number of engagements, the solution must be user friendly.
- The admin should have access to monitor everything from products, stocks, email orders, and website content through an 'Admin Panel'.
- The doctors should be provided with an arrangement of bulk purchase with payment features, such as PayPal, Stripe, and Invoice.
- There should be a feature of tracking the order for both user and admin from purchase to delivery.
- It should include a formal permission-based hierarchy in order to allow access to users when and where required.
- The physicians must be provided with automatically generated calculations for commissions.

### 7.2.4 OBJECTIVES ACHIEVED AND SOLUTIONS PROVIDED

A reliable, engaging and user-friendly solution was developed based on the business requirements of the client. Narola Infotech conducted extensive market analysis and carried

out several strict checks to ensure streamlined operations. The company suggested the use of the Code-Igniter framework in PHP for development. The entire project was successfully executed, with the website having the following features:

- MySQL was used for data processing.
- For setting up a professional hierarchy and job scheduling, Cron Job was used.
- For the in-built payment system, Stripe and PayPal API were recommended.
- Similarly, for the SMS and email, the use of Twilio and Send-In-Blue API was proposed.
- The Shippo API was suggested for the management of shipping and inventory monitoring.
- With the use of one panel, Narola Infotech managed to build a supportive interface for product, user, order and content management system.
- In addition to precise order monitoring features, both technical and organizational constraints were addressed efficiently.

# 8. DIGITAL MARKETING IN PHARMA: INTERVIEW LIST

## 8.1 CHAPTER OVERVIEW

Conducting an interview is being used increasingly as a tool for collecting the necessary information on a particular topic or about a particular person in order to gain valuable business insights. They form an integral component of an evolving study process that is receptive to emerging insights and therefore contribute to a comprehensive study. Therefore, while compiling the list of conferences, a list of eminent delegates who are directly or indirectly involved in the field of "genome sequencing" is also prepared side by side. In addition, as is our practice while collating data for every market research report, we familiarize ourselves with all stakeholders of a particular market (at least those that have functional company websites, wherein they have mentioned being affiliated to the specific field that we are researching). Then using advanced research formulas, email IDs of the aforementioned stakeholders from various professional portals (such as LinkedIn) and other public information websites are gathered.

# 9. TRANSCRIPT

## 9.1 TRANSCRIPT

A transcript is prepared from the on call interview which taken as primary source of information. These interviews are usually organized with multiple investors in the domain. Further, the report highlights detailed transcripts of these interviews held with the below mentioned individuals (in alphabetical order of company names):

Pritam Sahu (Director, Unanimity)

Dhananjay Arora (Founder and Chief Executive Officer, Kwebmaker)

Following figure presents a step wise workflow for preparing a transcript:

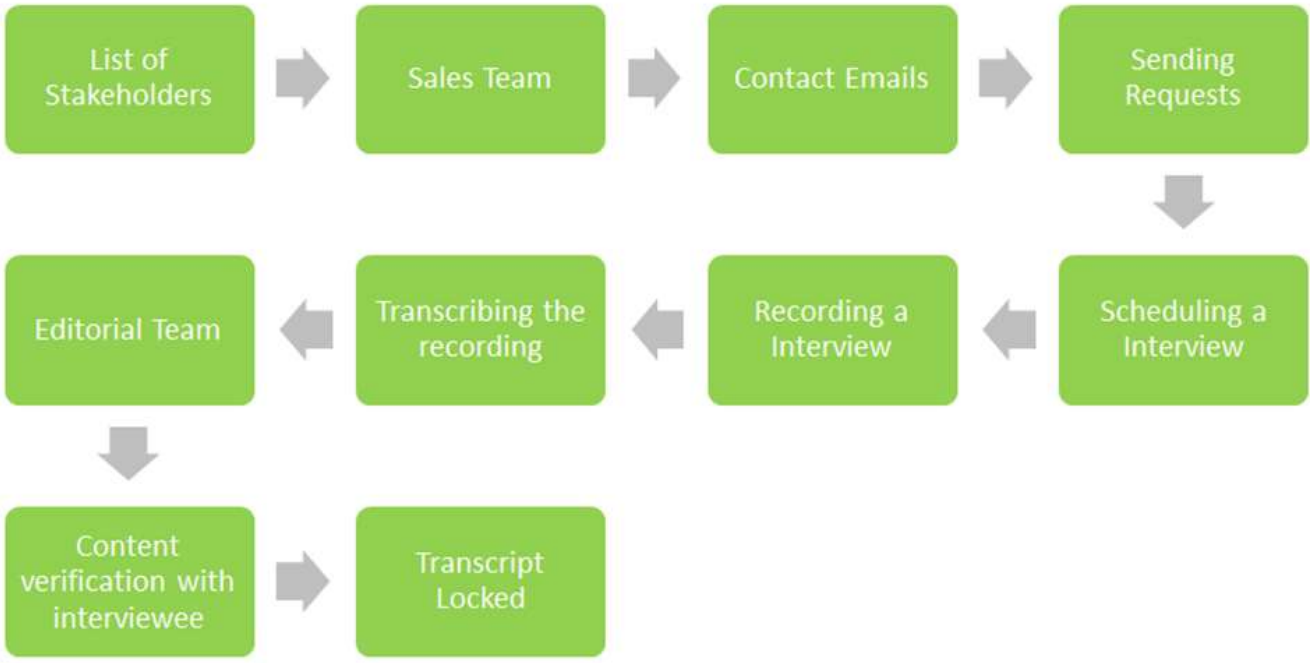



**Figure 8.1 Workflow for a transcript**

# 10. **CONCLUSION**

Although large pharmaceutical companies have begun to embrace AR / VR and several positive use cases have occurred, the simple availability of these technologies, smaller pharmaceutical companies will now continue to use these. These technologies minimize costs for different processes as well as improve performance providing a fairly good competitive advantage. Wide scale adoption of these technologies is the need of the hour, for they have stood the test of time and proved that they are not a passing fad, but for now, only time can tell if they are pharma's next reality. Just as the internet and social media have transformed everyday lives and businesses, so, too, can VRs. With access to superior, consistent, immersive training, GPs will reduce the time currently spent showing patients how to use medicines. Training apps will replace leaflets and presentations, helping healthcare professionals better understand conditions and thereby provide better care advice, while patients themselves will be able to use the technology to assist with their own treatment. Later, the possibilities will expand as VR is combined with artificial intelligence, big data analytics and more computer capabilities. Ultimately, this new way of training, education and treatment will develop what started as a gaming trend into a new world of improved healthcare. In the coming years, these technologies will be used more and more. Although it will be advantageous as they can improve the accuracy & effectiveness of current procedures. To put into simple words, it is a large prospective industry which can cater very well to the needs of the healthcare sector, limited only by the creativity & ingenuity of those creating and applying the technology.

# 11. **PROJECT LEARNING OUTCOMES**

During the course of this project, the foremost thing I learned is to work in disciplined work environment and set short-term and long-term goals to complete the assigned tasks. In addition, with weekly / daily project goals to complete various modules, I acquired the skill of working in an organized and structured manner. The project progress was discussed regularly in weekly project meetings. In addition, plans for the coming week were also outlined. This is in turn, cultivated and created a mindset where I was able to focus my mind and energies on the goal and persevere until they were accomplished.

The in-depth research I have done here and the exposure to various potential topics in the healthcare industry has resulted in an increase in my subject knowledge. I can analyze and interpret data in a more productive and meaningful manner now. In addition, I learned the evaluation criteria and the methodology to conduct extensive secondary research for the selection of potential project topics. This in turn has enhanced my research skills a lot and will certainly help me during the upcoming capstone project as well as my college semester. In addition, I got an opportunity to assist my manger in various other project topics, which helped me to enhance my subject knowledge and understand the challenges that vary on project-to-project basis.

The various detailed / extensive analysis we have conducted on the collected data to highlight market trends, leading industry players, existing market landscape and its growing nature has enhanced my analytical skills a lot. With this skill, I will be able to detect patterns, brainstorm, observe, interpret data, and make decisions based on multiple factors available in everyday work.

Moreover, the exposure to industry stakeholders during project calls and interviews has also to enhance my skills and confidence. Therefore, by using these skills and an improved way of presenting data in terms of insightful and structural output, I will be able to present my points in a more effective and constructive manner wherever needed. In addition, I have learned the art of professional writing along with a hands-on experience with Microsoft tools such as (excel, power point and word) which will for certainly serve as key skill sets and assist me in my future endeavors.

# 12. **REFERENCES**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