

**Dissertation**

In



**(March 7<sup>th</sup> 2022 to June 7th 2022)**

**Study on Digital marketing and Lead generation (based on the segregation criteria created) at Elucidata**

By

**Dr. Neha Rangi**

**PG/20/041**

**Dissertation submitted in partial fulfillment of the requirements of the degree PG  
Hospital and Healthcare Management (2020-2022)**

**International Institute of Health Management**

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Neha Rangi

PGDHM

IIHMR DELHI

**To Whomsoever It May Concern**

This is to certify that **Dr. Neha Rangi** student of PGDM (Hospital & Health Management) from International Institute of Health Management Research; New Delhi has undergone internship training at **Elucidata** from **March 7<sup>th</sup> 2022 to June 7th 2022.**

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavour.

**Dr. Sumesh Kumar**  
(Mentor)

Associate Dean  
(Academic and Student Affairs)

IIHMR, New Delhi

**Dr. Nikita Sabherwal**

Associate Professor &  
Associate Dean (Training)

IIHMR, New Delhi

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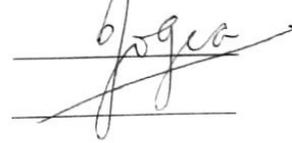
The following dissertation titled “**Study on Digital Marketing and Lead Generation in a Biotechnology Firm**” at “**Elucidata**” is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Dr. S.B. Gogia  
\_\_\_\_\_  
\_\_\_\_\_

Signature

  
\_\_\_\_\_  
\_\_\_\_\_

**Certificate from Dissertation Advisory Committee**

This is to certify that Dr. Neha Rangi a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. She is submitting this dissertation of titled, **Study on Digital marketing and Lead generation (based on the segregation criteria created) at Elucidata** in partial fulfilment of the requirements for the award of the PGDM (Hospital & Health Management).

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



**Dr. Nikita Sabherwal**

Associate Professor & Associate Dean (Training)

IIHMR, Delhi

**Mr. Ashwin**

Manager

Elucidata, New Delhi

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This is to certify that the dissertation titled **Study on Digital marketing and Lead generation (based on the segregation criteria created) at Elucidata** submitted by Dr. Neha Rangi Enrollment No. PG/20/041 under the supervision of Dr. Nikita Sabherwal for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 7<sup>th</sup> March to 7<sup>th</sup> August, 2021. Embodies of my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.



**Signature**

## **FEEDBACK FORM**

**Name of the Student: Dr. Neha Rangi**

**Dissertation Organization: Elucidata, New Delhi**

**Attendance: 100%**

**Objectives achieved: Yes. She has completed all her work with effectiveness & efficiency.**

**Deliverables: Yes**

**Strengths: She is a hard worker & keen observer.**

**Suggestions for Improvement: -**

**Suggestions for Institute (course curriculum, industry interaction, placement, alumni): -**



**Mr.Ashwin**  
Manager

Elucidata, New Delhi

**Date: 14/06/2022**

**Place: New Delhi**

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## Abbreviations & Acronyms

<b><u>Abbreviations</u></b>	<b><u>Full forms</u></b>
MQL	Marketing Qualified Lead
Ops	Operations
SQL	Sales Qualified Lead
CUS	Customer Success
IT	Information Technology
Q1	Quarter 1
CRM	Customer Relationship Management
AE	Account Executive
R&D	Research and Development
ML	Machine Learning
AI	Artificial Intelligence
NIH	National Institute of Health

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# Part 1- Organisation details- Elucidata

## 1.1 About Elucidata

Elucidata accelerates drug discovery by applying its AI-enabled platform, Polly on vast amounts of heterogeneous semi-structured biomedical molecular data. Our proprietary technology transforms publicly available biomedical molecular data into a ML ready form as data lakes on Polly using FAIR guidelines described by the NIH. R&D teams can build, publish, and host analytical workflows on the structured data and make better data-driven decisions to discover therapeutic assets that have high odds of success in the clinic. We are a 70-member multi-disciplinary team based across the US & India.

### **Key Highlights:**

- Our proprietary technology has enabled the discovery of 2 validated drug targets and identification of 7 drug targets across immunology, oncology, and metabolomic disorders.
- Currently, we have partnered with more than 35 R&D entities in large pharma companies, early-stage biotech companies as well as premier academic centers.
- Our scientific advisory board is chaired by Dr. Nick Pullen and includes Dr. Avi Ma'ayan (Professor at Mount Sinai) and Dr. Richard Kibbey (Associate Professor, Yale School of Medicine)

## 1.2 Elucidata - Teams and Roles

### **Product and Technology**

- **Design**

Interaction Design, Prototyping, Solving User Experience problems, User journeys, User research, Product design

- **Product Management**

Ideas to improve Polly,

- **Engineering**

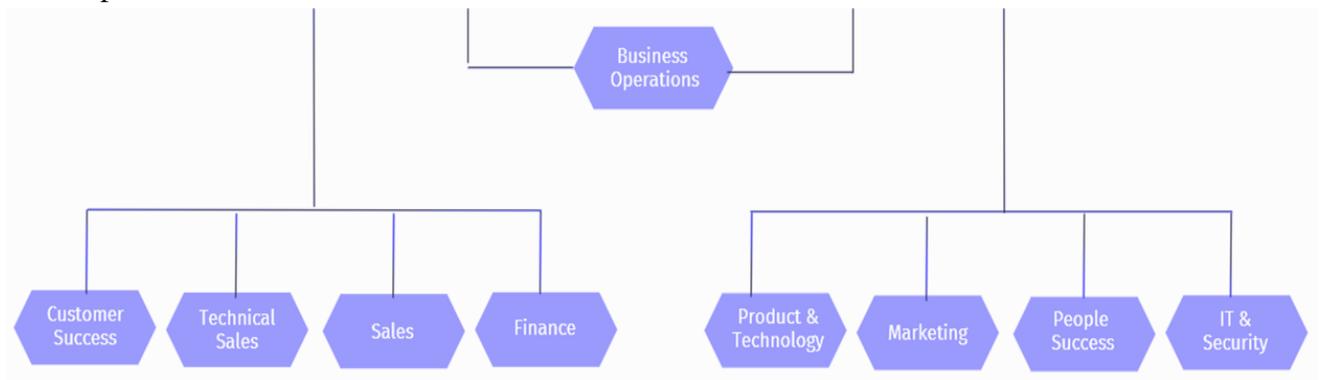
Product Engineering deliveries (Polly). Hiring/Team Building, General sounding board, Polly Manage/Workspaces, Dev setup, CI/CD, dev process, AWS/Azure and cloud related tech doubts, Studio visualizations, Coding or design paradigms related doubts Bitbucket permissions/configuration

- **Data Products**

Import, Pre Process and Curate Data into the Polly app

- **App Science**

Polly - growth and evolution, Research on what are we building next on Polly, New research that helps us understand health and disease.



*Figure 1- Organisation structure for Elucidata*

### **Marketing**

Translate the Company's essence into brand messaging guidelines that communicate the value you offer. Understanding our target market, as well as finding most effective ways to attract leads.

### **IT & Security**

In a time where we work remotely from various locations, it is important that we are connected and enabled with various IT tools to smoothly function as an entity, and the IT team ensures that. Also, since Polly's data involves cloud infrastructure, this teams also makes sure that our data is protected along with issues related to cloudware.

### **Business Operations**

Investor stuff (fundraising, quarterly business updates), Growth initiatives and projects, Business operations - gaps in processes in any team

### **Technical Sales**

They showcase the capabilities and possibilities with Polly aligned with their problem statement via product demos, introductory sessions etc. They are responsible to educating our clients about our platform and offerings in detail.

### **Sales**

They are the ones who bring in the clients who fit the customer profile and are responsible for bringing in the companies and clients where we can transform the problem statements using Polly, thereby accelerating their efforts.

## 1.3 About Polly- Product

Every year, vast amounts of biological multi-omics data are being generated in academic labs and organizations worldwide. This data holds tremendous potential for reuse but is scattered across multiple, disparate sources and lacks standardization. Thus, the availability of data does not equate to its easy usability, making the need for an efficient means of exploring molecular data an immediate necessity.

Polly is an AI-enabled cloud platform that provides access to FAIR multi-omics data from public and proprietary sources. Data from across repositories, databases, and proprietary datasets is curated using ML models, ensuring that it is machine-actionable and analysis-ready. Polly's cloud infrastructure enables seamless data analysis, visualization, and sharing by offering a toolbox of scalable, easy to customize, bioinformatics pipelines.

Polly creates a unique, centralized ecosystem that enables a diverse team of biologists, bioinformaticians, and scientific leaders to share and collaborate on workspaces, data, and insights.

Polly delivers ML-ready biomedical molecular data to accelerate drug discovery. Our proprietary technology transforms multi-omics data into a ML-ready form as data lakes on Polly using FAIR guidelines described by the NIH. R&D teams can build, publish, and host bespoke analytical workflows on the ML-ready data and make better data-driven decisions to discover therapeutic assets that have high odds of success in the clinic. We are a 70-member multi-disciplinary team based across the US & India.

## 1.4 What are we trying to achieve through content?

- **Generate Demand** - Creating awareness and interest for Elucidata offerings. This will happen through a variety of push and pull activities - push activities (ads, email outreach) & pull activities (SEO, webinars, speaker slots at conferences). We will need different kinds of content for each of these activities - lead magnets, guides, e-books, how-to articles etc
- **Increase brand authority** - Showcase our brand as the authority in our niche and industry. Especially in the eyes of the Influencer Persona and the Decision Maker Persona. By creating content that answers their day-to-day challenges we can get discovered and recognized by this user base.
- **Employer Branding** - Set up a positive perception about the company to attract and retain top talent. This would entail communicating about our company values and culture.

## 1.5 Who will we be writing for and why?

- The Decision Maker and the Tech Champion - Belong to the senior leadership and care about broad business outcomes. They also usually buy into the problem we're solving. Our communication to them needs to build trust and credibility around the ability and the extent to which we can help them achieve their business goals. Lead magnets which capture our expertise on their areas of interest (DataOps, Building ML agile teams) can be pushed to them via ads or emails
- The Influencers - Act as gatekeepers or even technical buyers for our offerings. They're somewhat early in their career and can be threatened by our presence. They're slightly unsure about what they should do and what we should do. We need to be able to communicate that we can help them do their job better and look good. In order to impress them we need to look like experts who know what their challenges are and how we can help them solve it. The influencer persona is an important user but who currently only finds out about us through his seniors when we are pitching to his organization.
- The Evangelist - They are directly impacted by our work although they don't necessarily make or break the buying decision. However our foot-in-the door is often the Evangelist and the beneficiary too can make a case for wanting access to Polly. It's important that they know who we are and what we can do.

	<b>Decision Maker &amp; Tech Champion</b>	<b>Influencer</b>	<b>Evangelists</b>
<b>What is our objective?</b>	How does Polly / Elucidata help them achieve Business Outcome	How does Polly / Elucidata help them do their job	Look here's what we do and you should know about us
<b>Where all to reach?</b>	Email blasts, Linkedin outreach, conferences, Paid ads	Data communities, Slack groups, Forums, etc	Email, Journals, Research Gate

<p><b>What are our formats?</b></p>	<p>Inmails, short copy email drip campaigns, newsletter, Lead Magnets</p>	<p>Short snacky content videos, tutorials, walkthroughs - where we completely highlight his pain point</p>	<p>Whitepapers, long copy testimonials, case studies, newsletters, weekly digest, data set detail page</p>
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## Part 2- Research Project

### 2.1 Project Title

**My project title is- Study on Digital marketing and Lead generation (based on the segregation criteria created) at Elucidata.**

#### **Structure of the dissertation-**

The structure of the dissertation has been divided into five main chapters: Introduction, Literature review, Results, Discussion and List of references.

### 2.2 Introduction

A lead is any person who indicates interest in a company's product or service in some way. Leads typically hear from an organization *after* opening communication (by submitting personal information for an offer, trial, or subscription), instead of getting a random cold call from someone who purchased their contact information.

From a business perspective, the information our company collects about someone from the survey responses helps the marketing team to personalize the method and message for opening communication to address the existing problems of the leads— and *not* waste time calling the leads who aren't at all interested in our product and services offered by us.

### 2.3 Background

Internet marketing is defined as the use of the Internet and related digital technologies to achieve marketing objectives and support the modern marketing concept. Internet marketing comprises advertising that is shown on websites and other kinds of online activities like email and social networking to acquire new customers and engage existing customers, towards developing the customer relationship (Hanafizadeh, 2012).

The idea for the dissertation came to the author during her business operations internship in the case company. By having a deep access to the company's activities, the author has found a potential area for its business development. The company wanted to improve its business growth potential, expand awareness of their product, and eventually increase the number of clients and as a result to generate more sales. The case company has not been having much online activities, which became a great opportunity for the author to explore digital marketing field and make relevant research. At the moment the company has only their official website and email marketing system facilitated by cloud-based CRM. The final goal of this research will be to enter the case company into the social media world, to create a high quality online presence, to compare effectiveness of two digital marketing channels, use potential of various digital marketing techniques and to formulate recommendations for overall medium to long-term digital marketing strategy. It is hoped that some of the findings may become relevant and applicable for other companies.

## Motivation for the research

The main purpose of this research is to find how the case company can optimize its multiple digital marketing channels in the market in order to increase lead generation and eventually increase revenue generation. In particular, the author will address the following generic digital marketing channels: social media (LinkedIn) and email marketing through cloud-based CRM. One of the objectives of this research is to help the case company to promote its product (Polly), to increase brand awareness and sales through different digital marketing techniques in the global market.

The author will therefore make an attempt to identify in the existing literature relevant best practices, core measures and possible recommendations for digital marketing strategy of immediate relevance to the company.

## 2.4 Research questions

To begin with the research process, the author will clarify research questions that flow from the research idea of this dissertation, in order to help achieve research objectives (Saunders, Lewis, & Thornhill 2009, 32-33).

RQ1 (research question): How does the running of targeted email campaigns affect lead generation?

RQ2 (research question): How does the running of social media campaigns affect lead generation?

RQ3 (research question): Which digital channel (email marketing, social media marketing) is the most effective online tactic for lead generation for the case company?

## 2.5 Aim

Most organizations find it extremely challenging to peg down their lead generation strategies. This impairs their ability to find high-quality leads quickly and at low cost, hence this is a very humble attempt at understanding how we can tap onto the leads.

To understand and analyze the process of qualifying the leads (which we receive from the company's various marketing strategies/campaigns) and how effectively it increases the clientele base at a Elucidata.

## 2.6 Objectives

The objective of the study was to explore particular digital marketing channels' real effect on lead generation.

The project is carried out to fulfil the following objectives-

### General Objectives-

1.To review the processes of digital marketing & understand it's importance.

### Specific Objectives-

1.To review the lead generation process of Elucidata.

2.To assess the effectiveness of various digital marketing strategies in the case company.

## 2.7 Literature Review

### 2.7.1 Introduction

Marketing as a strategy entails the understanding of the micro and macro environment the business is operating in; customers, competitors, laws and regulation. Planning marketing strategy is critical in ensuring that the business is a success (Whalley, 2010). In this regard, internet marketing has become a significant part of marketers' lead generation strategy, and businesses that employ internet-marketing strategies increase their chances of reaching to their target market effectively. This chapter looks at the theoretical foundations, internet marketing and lead generation, benefits of adopting internet marketing strategies for lead generation.

## 2.7.2 Theoretical Foundation

Several theories have been put forward to explain the concept of marketing. These theories express the adoption of innovative technologies like internet marketing, its importance and ease of use. This study reviewed three theories that express the adoption to new marketing changes and the importance in generating leads to businesses.

### 2.7.2.1 Network Theory

Coined by (Barnes, 1954), network theory is the study of how people, organizations or groups interact with others inside their network. Network theory studies relationships of all sorts, whether between people, animals or things. Social are useful in this regard, as they allow marketers to accept feedback from the customers, and they allow marketers to leverage the power of internet marketing strategies to double up on the sales marketing efforts. Drucker (2012) describes the economy of the future as a network society, which marketing outcomes are highly decided by competition between networks of firms rather than by competition among firms.

### 2.7.2.2 Dynamic Capability Theory

Dynamic capabilities theory is defined as learned, path-dependent, and stable patterns that govern the change of organization's ordinary capabilities (Nonaka, 1994). Dynamic capability deals with the fundamental questions of strategy in changing environments. Strategic marketing literature has employed dynamic capability as atheoretical answer to the problem of how businesses can attain a competitive advantage in an unstable environment.

### 2.7.2.3 Technology Acceptance Model

Theory of Acceptance assists decision makers in efforts to adopt new technology based on perceived usefulness and ease of use (Davis, 2003). Theory of acceptance explains how to measure and predict business actions that are using internet marketing for lead generation. The technology acceptance model has been a theory that is most widely used to explain an individual's acceptance of an information system as it takes into account a casual model that begins with attitudes towards new technology, beliefs, usefulness and ease of use; theory of acceptance takes into account the sequence that factors that determine how a new technology will be used.

## 2.7.3 Digital marketing

Digital media landscape has never been as complex as today. Rapid introduction of new tools, data sources and different platforms on daily basis makes it challenging for marketers to assess

and identify which innovations are most relevant to the company in order to achieve digital goals and objectives. (Hemann & Burbary 2013, 1.)

## Internet Marketing Strategies

Internet marketing strategy is the process by which a business adopts a web-based approach to marketing and engaging its customers through a proprietary website. Internet marketing strategies include tactical web-based applications for increasing its competitive advantage, improving customer and employee communications and increasing marketing efficiencies. Internet marketing incorporates website, search engine marketing, social media marketing, content marketing, email marketing, mobile marketing and banner advertising (Eida, 2013). A good strategy is one that achieves specific objectives to ensure that a business has the best chance of being successful.

### 2.7.4 Lead generation

A lead as a qualified prospect that is starting to exhibit buying behavior (Miller, 2014). The first important step to getting started with lead generation for any company is to identify the company's leads and not just leads, but good leads. In order to define leads, companies need to understand who their buyers are. By using demographics (gender, title, age etc.) and firmographics (company size, company location, industry etc.) segmentation. Companies can identify and create a profile of what sort of individual (group) buyers and organizations are interested in their product or service thus they can define who their best leads are. The second step is to define the company's sales process. In fact, most of the companies define it as a sales funnel which consists typically of three main buyer stages: early, mid and later. Depending on sales process, every company has a different sales funnel. It is important to track where buyers are in their purchasing decision, thus every company has to have some form of a lead generation program. The third important step is to define the key metrics, because they will be one of the driving forces behind the company's lead generation plan. The next step is the most important for any strategy or plan to work – establishing goals. What is the company trying to achieve? Get more leads, more social media activity or increase brand awareness etc.? After establishing concrete goals, companies can start choosing which digital marketing channels to exploit. Based on what makes more sense to the company's marketing mix. (ibid., 20-34.)

### Internet Marketing Strategies for Lead Generation

According to Rana (2009) internet marketing provides businesses a huge opportunity to expand their reach, but most of these businesses still lag behind in implementing internet marketing. There is considerable number of business creating websites but with limited knowledge on how to

use it for marketing. Further, Yannopoulos (2011) states that businesses that adopt internet marketing without strategic goals or objectives are unable to determine how social media can work for them to generate leads. It is therefore imperative, that companies have a strategic plan on using internet marketing.

As argued by Marc J. Epstein (2007), the wide range of internet marketing options benefits businesses by enabling them to have a steady flow of customers at a cost-effective and easy way. According to Roberts, M. and Zahay, D. (2012), Internet marketing is a complex environment in which marketers attempt to involve the three main activities to achieve their goals: customer acquisition, customer conversion and customer retention. Traditional marketing channels have been profoundly affected by the internet (Williams, 2011). For example, contact activity that was done by mail is now done by email. Customer acquisition is the first level of marketing, which is lead generation. Marketers understand that lead generation is essential to continued survival of any business.

Chaffey (2016, 3) provides several recommendations on how to boost online lead generation by using inbound marketing communications, such as social media and search marketing. These are some of the techniques, which can help companies improve their lead generation:

1. Personas. Using personas is a great way to determine what content a company's audience really need.
2. Content formats. Below presented content marketing matrix tool, which was structured to help B2B companies to identify what types of content they should create (see Figure 2). Depending on what company as a business is trying to achieve, the company can use this tool as a starting point for generating content marketing ideas.

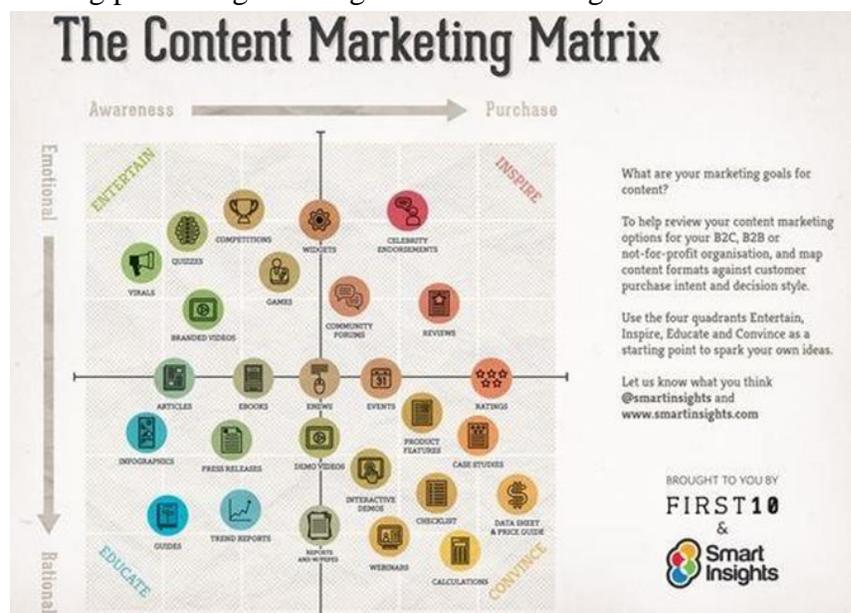


Figure 2: Content marketing matrix tool (Chaffey 2016)

3. PEO combination. PEO stands for Paid, Earned and Owned types of media. (see Figure 3).

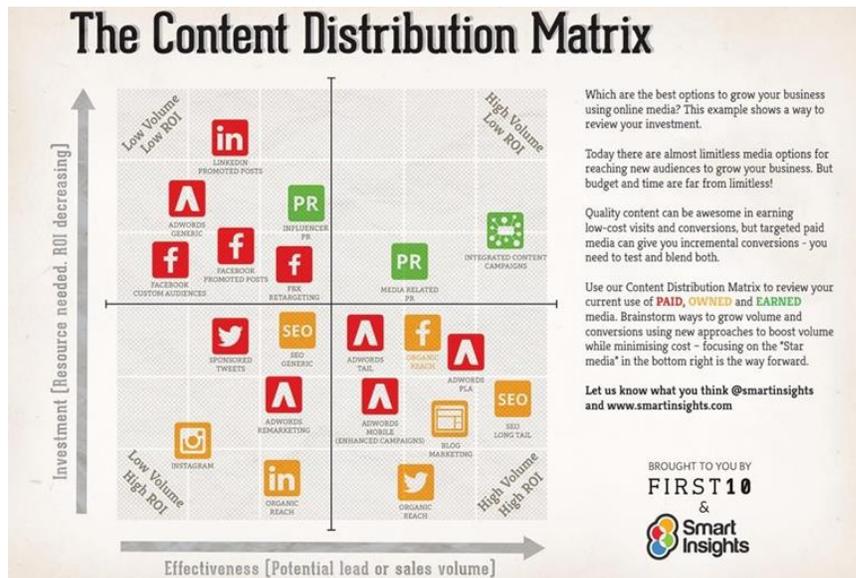


Figure 3: The content distribution matrix (Chaffey 2016)

8. Social network advertisement. As paid search ads were created for reaching more people through organic search results, paid social ads were created for the same purpose, but only for operating through social networks. Twitter and LinkedIn provide many options for companies to reach their targeted online audience.

Website (63%), email marketing (52%), social media marketing (49%) and organic search (31%) have been rated by marketers as the most effective channels for a digital marketing plan to include in 2017 (2017 Digital Marketing Plans; Survey Summery Report 2017, 9).

### Email marketing

Email marketing is a very important part of any company's digital marketing plan. It is a great way to communicate with existing and new potential customers online. (Miller 2012, 180.)

According to the report conducted by Ascend2 (2017 State of B2B Digital Marketing. 2016, 9), email marketing has been the most effective lead generation channel in 2016, followed by content marketing and social media marketing (see Figure 4).



**Ascend2** State of Lead Generation Survey, Ascend2 and Research Partners, August 2016

*Figure 4: The most effective online tactics used for lead generation. (State of Lead Generation Survey, Ascend2 and Research Partners 2016)*

Miller (2012, 187) suggests companies to follow some best practices when using email in reach phase for lead solicitation:

1. Send email from someone important.
2. Work the subject.
3. Make it short with a point.
4. Value is important.

By following these recommendations, the company can tailor their email marketing campaigns in order to reach potential leads.

## LinkedIn

It is the most popular social media platform for professional networking. LinkedIn offers to people an opportunity to connect with other professionals in the same or similar industry from all over the world. (Maina 2016.) In addition, LinkedIn dominates as well as being the number one social media network for lead generation (2017 State of Digital Marketing, 2016, 17. Besides, making it an information hub, source of news, a place where companies can offer help and customers can ask for help, as well as a place for sharing experience, showcasing expertise, and for market research (Power 2016, 167).

## 2.7.5 Pillars of a Successful Marketing Strategy

Marketers have a task to categorize leads according to where they came from to effectively target them. To ensure that a business picks the right option, the key is to understand the target market and test each of the lead generation tactics to understand which ones brings in more leads with a cost that fits within the budget (Esfidani, 2007).

Specifying the target market should be the core of any marketing strategy. Businesses need to clearly define the target group to ensure that resources are not wasted in attracting the unqualified leads. Having an in-depth understanding of the ideal customer goes a long way in assisting marketers to determine which internet-marketing tactic to employ in order to reach the customers. The biggest benefit with internet marketing is that it allows the businesses to become much targeted towards the desired customers (Hanafizadeh, 2012).

Determining the base of lead scoring is the first stage to understanding which key indicators to attach to each lead. Leads that do not meet the business criteria are transferred to the appropriate area (Roberts and Zahay, 2012). Leads that are not ready to make a purchase are sent back to the marketing funnel for nurturing. Pursuing qualified leads can increase sales performance and guarantee an improved business turnover.

Finally, marketers have to define the success metrics by setting clear goals that can be tracked. Measuring and reporting on internet marketing activities is critical for resource allocation and performance evaluation. Continuous monitoring of lead performance is essential in refining internet marketing tactics to assist in attributing success to things that worked to drive business (Epstein and Yuthas, 2007)

## 2.7.6 Summary of Literature

The internet is a powerful tool for lead generation if used strategically and effectively as part of the overall marketing plan, it can be a cost saving alternative to traditional marketing approaches. Internet marketing like all other types of any marketing campaigns requires clear goals and objectives. Marketers need to unlock the potential of the Internet to enable businesses to expand customer reach. To ensure business growth, marketing is one of the issues that have to be addressed with urgency.

Industry players need to come up with new ways to enable businesses overcome challenges to harness the potential of internet marketing. As opportunities for internet marketing expand, businesses allocating more resources to understand marketing on the web have to ensure that measuring tools are put in place to monitor the payoffs of Internet marketing.

Internet marketing in itself is more data-driven enabling marketers to meet business goals. Using metrics that match the business objectives enables marketers to rate the success of internet marketing efforts.

The author (researcher) will follow, listed above, best practices and recommendations for social media and email campaigns, measure performance and impact of digital marketing activity on the case company.

## 2.8 Research Problem

Every business organization is using internet marketing in one way or the other. Marketing managers who fail to use the internet in formulating their companies marketing strategy will be at a disadvantage of missing customers (Yannopoulos, 2011). This new era of marketing has shifted marketing from its traditional roots of television, print and radio marketing to online focus. In the ever-competitive world of Internet communications, it can be difficult to construct workable promotional opportunities to ensure that customers keep walking into the door.

Participation is a crucial component of action research, which means that without it this approach simply will not be viable. Action research requires the researcher to collaborate with members of the organization and perform as a teacher or facilitator, in order to improve organizational practices. (Saunders et al. 2012, 184).

All in all, action research strategy was selected as the best suited research strategy to conduct in the dissertation. In this study the researcher (the author of this dissertation) was involved in planning, developing, implementing (running the real life experiment) and learning (measuring impact and drawing conclusions) from a complete cycle of the action research process within the case company.

## 2.9 Research methodology

During my research, I'll adopt the following research design and methods-

- Research Design: Observational Study
- Data Type: Secondary Data
- Data Collection Method: Tracking social media, observation, Analysis using CRM
- Data Sources: Internet, Published articles, Data from Organization

## 2.10 Data collection

The approach has been facilitated by computer technologies. Today internet provides many opportunities to conduct complex structured observations. However, it does not mean that structured observation itself is just fact-findings. It is much more than that, because it enables to transform activities into valuable research results. There is specifically a term called 'indirect observation' for tracking and analyzing online users' behavior (Hewson et al. 2003, 46). Every organization is trying now to find the best digital solutions to invest in, in order to get detailed online data of the observation and analysis of its online buyers' behavior. Hence, it provides to the researcher advantage of unobtrusiveness and bias avoidance when using internet for the structured observation. (Saunders et al. 356.) For that purpose, Outreach CRM system, described below, have been utilized for data collection through structured observation in the research.

### Outreach CRM

Outreach CRM is an alternative to Salesforce open source customer relationship management (CRM) platform that can be downloaded for free online (Product Tour. OutReachCRM - The world's favorite open source CRM application). Outreach CRM includes many functions, which can benefit organization and its sales. In the context of the Case company, it uses this platform mainly to facilitate its email marketing and track its performance.

There was a specific process discussed and established by the case company for email marketing strategy. This is a short description of the procedure the researcher (the author) was following in order to collect data and make conclusions of the email marketing effectiveness on lead generation of the case company:

1. Creation of a personal email template in Outreach CRM for the reach phase.
2. Internet research on the potential clients (targets).
3. Recording a target in Outreach CRM.
4. Tailoring the email for the particular person (target) to be sent.
5. Sending the email.
6. Waiting for the person (target) to respond.
7. Respondent who showed the particular interest in learning more about the product was converted from target to company's lead.
8. Follow up emailing to assist the lead towards a buying decision.
9. Tracking results.

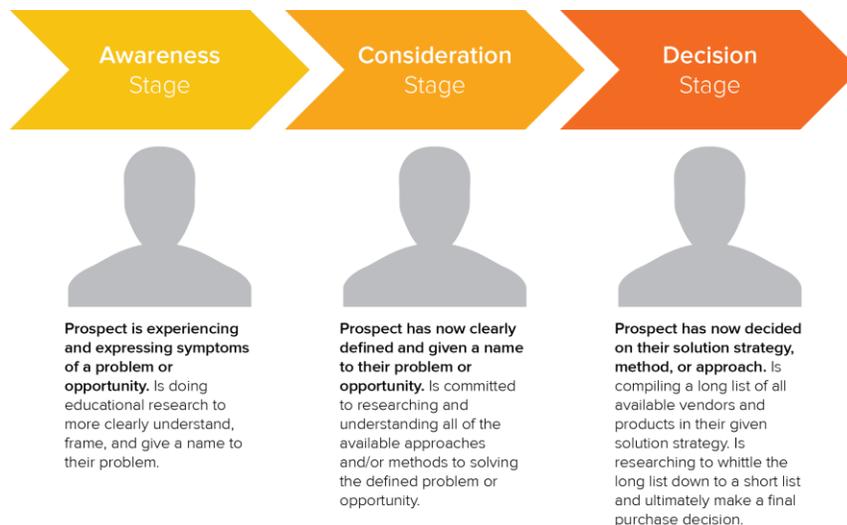
The case company has defined their leads from email marketing as all the respondents, who expressed any kind of interest in the product. The company has been having Zoom sessions (product tutorials) with every generated lead in order to establish closer bonds with their customers, to build trust and lasting relationships. Hence, the number of all generated leads out of all generated targets were chosen as appropriate to the research metrics, and will be presented in the results part of this dissertation.

The researcher (the author) in order to observe and collect data utilized the platform. The researcher was involved (responsible) in every online campaign creation, testing, planning publishing schedules, collaboration with other employees, developing, implementing and in the end learning from the performance.

## Buyer Journey

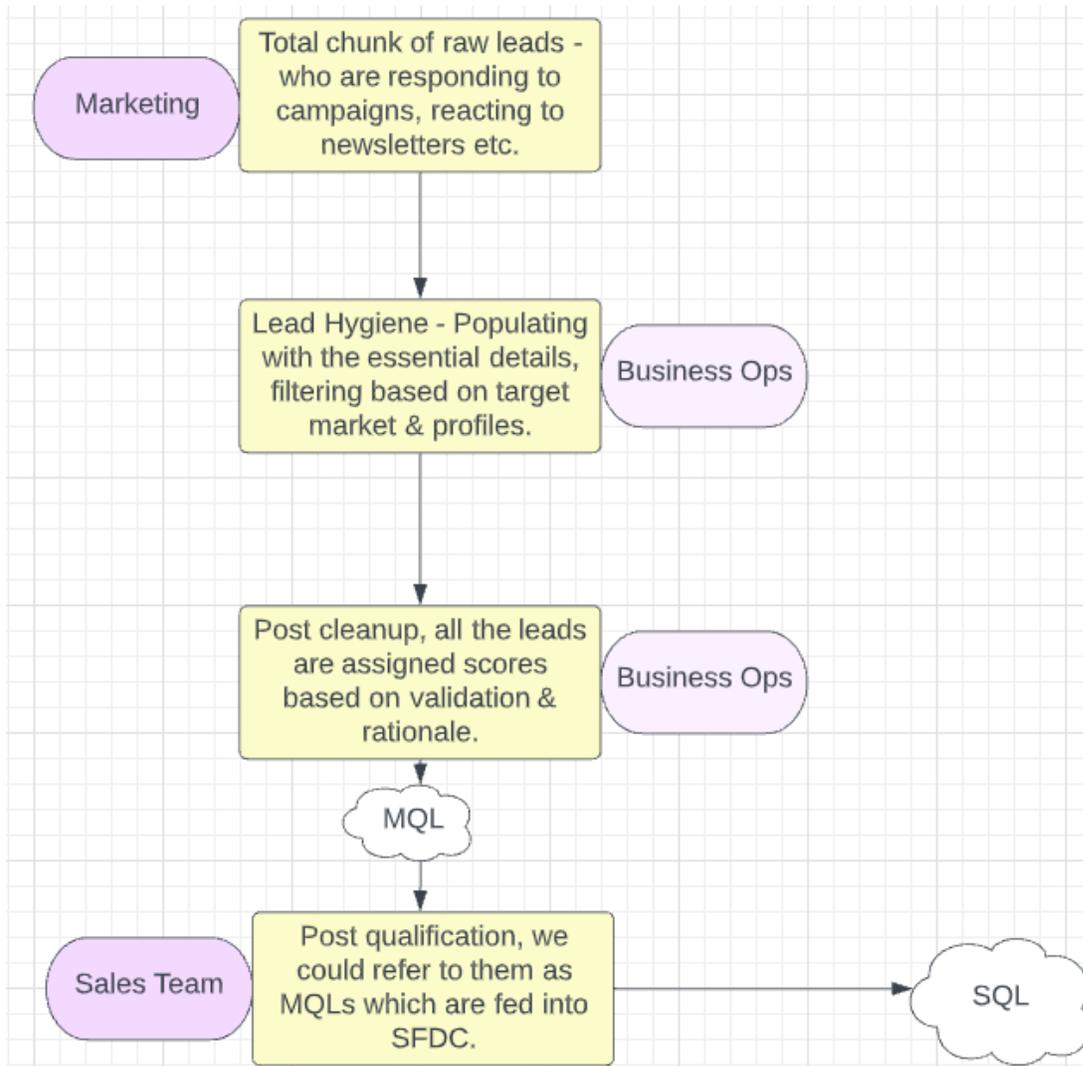
The journey consists of a three-step process:

- Awareness Stage: The buyer realizes they have a problem.
- Consideration Stage: The buyer defines their problem and researches options to solve it.
- Decision Stage: The buyer chooses a solution.



*Figure 5: Stages of Buyer Journey*

## Journey of a lead In Elucidata



*Figure 6- Journey of a lead in the case company*

*MQL- Marketing Qualified Leads*

*SQL- Sales Qualified Leads*

*Business Ops- Business Operations*

## Definition of an MQL

The Meanings & Definitions of MQL will evolve over time as we grow as an organization.

Currently for Q2 of 2022, we are defining Leads & MQL as the following:

Definition of a Lead: A person who has indicated interest in Elucidata's product and/or content by engaging either with posts on Elucidata's/ Founders posts on LinkedIn and also have voluntarily shared their email by submitting a form either on the website, have download a content piece, engaged on the newsletter or registered to join a webinar.

Do all people users who engage on linkedIn or submit a form become an MQL?

No. Not all leads are MQL's.

MQL's will be defined as prospects/ users who fall in to most of the categories listed below.

Location: USA, Canada & European Countries.

Industries that they work in: Biopharma / Pharma / Biotech / CRO and other relevant sectors.

The company that the lead works at has at least 25+ employees.

If the users falls under any of our existing buyer personas - Isha, Ted, Dan, Ethan

## Buyer Persona

Buyer personas are outlines of the different types of customers that are involved in the buying process.

We can use these models of our ideal customers to build targeted strategies.

Buyer personas help ensure that all activities involved in acquiring and serving our customers are tailored to the targeted buyer's needs.

When used correctly, buyer personas can help us better understand who we are writing content for and how to develop particular campaigns. Their detailed profiles will also be useful in guiding where (platforms/mediums/channels) to reach them.

What are the Buyer Personas for Elucidata?

	Dan the Decision Maker	Isha the Influencer	Ted : Tech Champion	Ethan the Evangelist
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<p>Characteristics</p>	<ul style="list-style-type: none"> <li>● Age Group : 40-50s</li> <li>● Background : Masters / PhD in Comp Bio</li> <li>● Titles : VP,SVP, Head or Director of Data Science / Computational Biology</li> <li>● Accountability : Responsible for technological and computational outcome</li> <li>● Welcoming of Elucidata in the team, understands that not everything can be done by a small team in their companies</li> <li>● Understand challenges in retaining talent</li> <li>● Is among the senior leaders in the org and has very high</li> </ul>	<ul style="list-style-type: none"> <li>● Age Group : Late 20s-30s</li> <li>● Background : Masters / PhD in Comp Bio</li> <li>● Titles : Associate Data Scientist, Computational Biologist etc</li> <li>● Accountability : Responsible for serving the biologists on the program assigned</li> <li>● Acts as a technical buyer or gatekeeper and asks very granular details about the product</li> <li>● They themselves use R, Python etc - they get the job done but they're not great coders</li> <li>● Typically a junior-mid internal employee and has been asked to look for available solutions in the</li> </ul>	<ul style="list-style-type: none"> <li>● Age Group : 30s - 40s</li> <li>● Background : Technology</li> <li>● Titles : VP of IT or Platform Operations, CTO</li> <li>● They may not necessarily have domain experience in biology or computational biology</li> <li>● They would have spent multiple years leading technology verticals</li> <li>● They manage end-to-end IT ops for companies</li> <li>● Often responsible hardware, cloud infrastructure etc over and above data ops</li> </ul>	<ul style="list-style-type: none"> <li>● Age group : 40s / 50s</li> <li>● Background : Masters, PhD in Biology</li> <li>● Titles - VP, Head or Director of Biology</li> <li>● Accountability : Insight discovery</li> <li>● They understand that they can't be served by their bio-informatics teams</li> <li>● They are sold on the opportunities can computational biology enable</li> <li>● Belong to the senior leadership in the org</li> <li>● Their influence on the C-suite is very high - they can get us a foot in</li> </ul>
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- influence on the C-suite
- Nods head at data management, metadata management, data integration, data lineage-- all of this makes them look good

- market
- They can feel threatened by us, wonders if they should be doing it themselves - and how it makes them look

- the door by saying that they want their data science team to look at us
- They don't understand technology specifics - hence will not be able to contest too much

Where will they look for us?

- Conferences
- Peers
- Social Media - LinkedIn
- Email blast

- Google
- Forums - Biostars, Reddit, Twitter
- Blogs
- Tutorials - Youtube, Medium
- Conferences

- Conferences
- Peers
- Social Media

Conferences, Peers, Articles etc

Challenges & Pain Points

- Managing CROs
- Managing public data
- Resourcing
- Hiring
- CloudOps
- DataOps
- Communicate cross-functional agenda/initiative to the scientific team and executive management

- Using and need for clean data
- Perform statistical analysis and develop analytical tools
- Statistical consulting in experiment design and data interpretation
- Analyzing proprietary omics datasets to advance understanding of drug targets
- Devising new models and algorithms
- Exploring and developing novel data visualization tools
- Guide downstream data analysis
- Communicating and presenting results to biologists, computational biologists, etc

- Data processing at scale
- Data standardisation
- Reproducibility
- Data Warehousing
- Data Management Infrastructure
- Build v/s Buy - figuring out which parts to build and which parts to buy, choosing vendors
- Manage Cloud infrastructure
- Incorporating external tools and technologies
- Implement ad-hoc band-aid solutions

- They experience a crunch for bio-informatics resources
- They want to move faster to discover insights
- Their reliance on opinions / intuition in the absence of data

<p>What are they looking for?</p>	<ol style="list-style-type: none"> <li>1. What can I take off my plate and outsource to a reliable vendor</li> <li>2. What's out there?</li> <li>3. My team is not able to serve biologists as much or as well - how can we scale</li> </ol>	<ul style="list-style-type: none"> <li>● Troubleshooting,</li> <li>● Quick hacks to do 'X'</li> <li>● How to use specific data repos</li> </ul>	<p>Data management for biological, chemical, translational data</p>	<ul style="list-style-type: none"> <li>● Tools to enhance their understanding of the target</li> <li>● ways to speed up computational outcomes - replacing or complimenting their teams</li> </ul>
<p>Why will they consider Polly</p>	<ul style="list-style-type: none"> <li>● Usable components (eg. EHR data, structured messy data, cloud infrastructure, pieces of the data infrastructure they don't want to build - like curated data, app development, maintenance of apps,</li> <li>● Speed to enable</li> </ul>	<ul style="list-style-type: none"> <li>● Reputation &amp; reliability</li> <li>● Get rid of their annoying executional ad hoc tasks</li> <li>● We will make them look better</li> <li>● Do their job better</li> <li>● Polly is a good abstraction layer over AWS - helps them code better</li> <li>● Elucidata folks are data experts</li> </ul>	<ul style="list-style-type: none"> <li>● Buy &gt; Build,</li> <li>● We bring scientific context,</li> <li>● Polly infrastructure can support large scale data processing</li> </ul>	<ul style="list-style-type: none"> <li>● we complement their bio-informatics team by lend expertise as well as bandwidth</li> <li>● We work with other companies and bring high level data understanding</li> </ul>

## Description of Leads

Term	Description	Where will the data come from?
Date	The date when the lead was added to the lead management sheet. Also could be the date when the lead was generated for reporting	Marketing
First name	First name of the lead	Marketing
Last name	Last name of the lead	Marketing
Email address	Email address of the lead	Marketing
Company	Company where the lead is working	Marketing/Ops
Company type	Type of company (Biotech, Pharma, Educational, etc.)	Ops
Company LinkedIn URL	URL of the LinkedIn Profile of the company	Ops
Job Title	Job title of the lead	Marketing/Ops
LinkedIn profile URL	URL of the linkedin Profile of the Lead	Marketing/Ops

Campaign	Name of the marketing campaign of the associated lead	Marketing
Source	Source of the lead - LinkedIn ads, linkedin engagement, newsletter, webinars etc.	Marketing
City	City of the lead	Marketing/Ops
Country	Country of the lead	Marketing/Ops
Is company qualified? (1/0)	Is the company a biotech, pharma or any other company of interest? 1 if Yes, 0 if No (usually educational institutions would be 0)	Auto-populated based on the information from the company type list
Is country qualified?(1/0)	Is the country US, Canada or EU? 1 if YES, 0 if NO	Auto-populated based on list which gives countries - US, Canada & EU - YES (1) score
Is lead qualified((1/0)	If both of the above are 1 then 1 else 0	Auto-populated from the above scores - company, country.

### Post Lead Qualification Process

- After the lead is qualified from the above filters and validation, they would be pushed into our CRM - Salesforce where it could be consumed by the AEs.

## 2.11 Results

### 2.11.1 Q1'22 MQL Lead Report Analysis

In the first quarter of 2022, we have generated a total of **213 qualified leads** from our four sources out of a total of **335 raw unqualified leads**. The key pointers from this quarter were:

- The best conversion ratios are from the LinkedIn Advertisements followed by Outbound Email Campaigns (although, we need to remember that the outbound email campaigns reach is to ~4K members who have subscribed to our newsletters). The graph below shows the numbers and conversion ratios between qualified & unqualified leads.

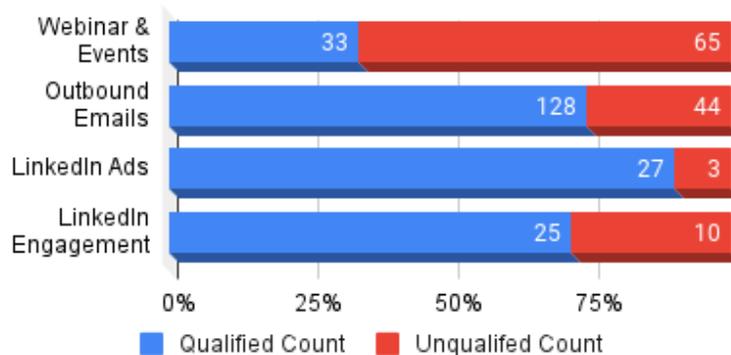


Figure 7: Conversion rate from LinkedIn Ads

- In the below graph, we can visualize the trend of lead generation over the entire quarter from the various sources and as we can see there is an increasing trend with the number of leads which we have generated with a considerable dip in March.

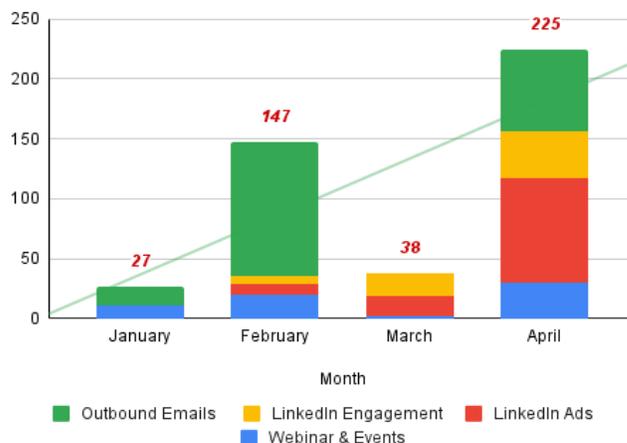


Figure 8: Trend of Lead generation over Q1

• And, as we have consistently witnessed that the majority of the audience who fulfill our qualified lead criteria belong to the biotechnology industry, as depicted by the chart below:

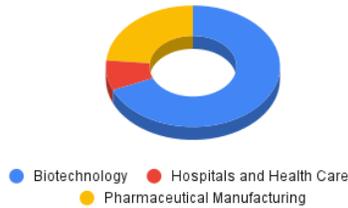


Figure 9: Industry division of Qualified Leads

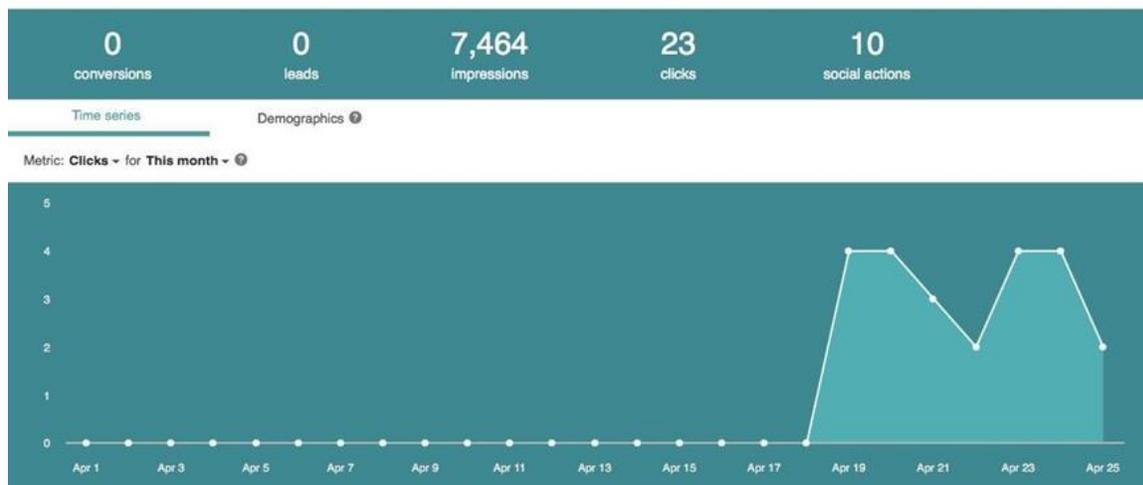


Figure 10: LinkedIn Insights on the results of clicks in April 2022

Based on the research results, email marketing should be considered as the most effective digital channel for lead generation. Social media delivered zero results. Hence, supposed to be considered as ineffective. The author is, however, in the opinion that all the channels are effective and need to be exploited by the company. There have been many factors affecting the research, which the author describes in the conclusion part.

All leads expressed interest in the company’s product and wanted to learn more about it. Even if the number of generated leads was small compared to the generated targets, email marketing campaigns still were considered as an effective tactic in generating leads for the startup company.

All leads expressed interest in the company’s product and wanted to learn more about it. Even if the number of generated leads was small compared to the generated targets, email marketing campaigns still were considered as an effective tactic in generating leads for the case company.

## 2.11.2 Moving Forward

<p>Current sales process</p>	<ul style="list-style-type: none"> <li>● Current sales process is driven primarily by reach-outs done through CEO's network.</li> <li>● The account executive's role is to help scale up the sales process without involving the CEO, i.e. by doing cold email reach-outs to prospects.</li> <li>● A database of prospects is collated and personalised reach-outs are done. At present, a customised video is embedded in the email (AE holds up a white board with the person's name and company logo)</li> <li>● The main bottleneck now is the low email open rate.</li> <li>● Once the email is opened, the process moves swiftly and the success rate is high (success rate here being the scheduling of a discovery call).</li> <li>● Role of marketing in Q2: Reduce sales friction from the prospecting/cold reach-out to discovery call stage.</li> </ul>
<p>Adopting approaches for Q2</p>	<ul style="list-style-type: none"> <li>● Since our target market is relatively small, adopting an account based marketing approach will be feasible.</li> <li>● This entails understanding the pain points and interests of the prospect and tailoring content to meet their needs.</li> <li>● Our hypothesis is that this will help personalize the sales process and reduce sales friction.</li> <li>● The marketing team will use social media channels, company website, press releases, interviews with company leaders and every other imaginable resource available to gain this level of understanding.</li> <li>● They will use this information to identify content catering to each of these targets (at an individual level) and share it with the commercial team.</li> <li>● Content to be shared does not always have to be generated in-house. Existing content such as white papers, podcasts, articles, research publications etc. can be shared as per the need.</li> <li>● One channel to be explored is LinkedIn ads; we run that as an experiment in parallel, where we run ads targeted to very specific personas (such as data scientists working at one specific company etc.).</li> </ul>

### 2.11.3 Content Development Priorities Going Forward

1. The Influencer - This target persona has not been the primary focus of past efforts. Going forward, our priority is to produce a steady throughput of content aimed at this group. These will be short, easy-to-consume tutorials and educational content about various tools and techniques in a bioinformatician's toolbox (videos and written content).
2. The Decision Maker - In Q3 2021, we launched our revamped newsletter, Polly Bytes. In keeping with newsletter requirements (themed educational and thought leadership content), we started building a body of content pieces that will be of interest to this persona on a monthly basis.
3. The Evangelist - A majority of the content written in Q1 and Q2 of 2021 were blogs catered towards the Evangelist persona. We wrote about new and exciting research breakthroughs, new techniques etc. This persona will be given least priority over the next quarter.

## 2.12 Ethical consideration

As the research is secondary in nature, there are no ethical concerns involved. Patient data is not collected, so no consent was obtained.

The researcher needs to keep in mind ethical concerns and access when conducting a research. The researcher (the author) of this study was open-minded, truthful, and respectful while working in the case company. Any harm to the participants was strictly avoided, including mental or social pressure causing stress, anxiety, and discomfort. Since the research was internet-mediated nature, general ethical issues associated with that were explored and considered.

## 2.13 Discussion

The purpose of the research was to help Elucidata company to find how it can optimize its multiple digital marketing channels in the market in order to increase lead generation and eventually increase sales. Email marketing and social media marketing (LinkedIn) were chosen as digital marketing channels to utilize and explore within the company.

The study has shown that implementation of particular digital channels increased the number of the online visitors coming to the website. Hence, establishment of the social media

networks increased the company's brand awareness online. Social media, in particular, LinkedIn became an extra online source for driving potential customers to the website.

The research revealed that email marketing performed the best regarding lead generation. Meanwhile, social media has not generated the actual leads. However, they had a significant effect on the improvements of the company's digital marketing activities.

After creation by the researcher (the author) the social media networks for the company, there was a very slow process of getting people to engage with the page through organic posts. Most of the fans who started following the company's LinkedIn page were co-workers, their friends, but not potential customers. After running and testing organic posts, there was a realization that there is a need of something else to boost the buzz.

Based on the research results, email marketing should be considered as the most effective digital channel for lead generation. Social media delivered zero results. Hence, supposed to be considered as ineffective. The author is, however, in the opinion that all three channels are effective and need to be exploited by the company. There have been many factors affecting the research, which the author describes in the conclusion part.

The key concepts of the research form an emerging theoretical framework that explains the research problem under study in the exploratory phase.

Both the digital marketing channels are designed to be effective tactics for lead generation and considered to be essential for all companies as depicted in below figure 6.



Figure 11: Key concepts of Lead Generation

### 2.13.1 Conclusion

In the beginning of the research process, there were expectations of getting more results in terms of leads and revenue generation. However, the reality was correcting them. The research had a concept of “learning by doing”, the author of this study was for the first time exploring such field as digital marketing, planning, testing, evaluating what works for the case company online and what does not. As in all businesses, there has been many factors affecting the process and of course, many challenges have been faced. The author’s opinion is that the main goal, which was established in the beginning regarding improvement of digital marketing activities, has been achieved.

According to this study, email marketing based on the research results was the best online tactic for lead generation. Meanwhile, when social media has not generated any leads. The author analyzed the results and created a hypothesis why this happened. Firstly, social media compared to the email marketing is a much longer process. Nothing is happening overnight, especially when it comes to business. Every company needs time to find their own way of doing digital marketing and making social media work for them.

### 2.13.2 Answers to the research questions

Even with all the challenges faced, the author has an opinion that objectives of this research have been achieved and research questions have been answered.

Implementation of digital marketing channels helped the company to promote its product (Polly) and increased brand awareness. According to the study, every digital channel had its own effect on lead generation. Email marketing has been considered by the researcher as the best digital marketing channel in generating leads for the case company. It was a great tactic to communicate directly with the company’s potential and existing customers in market, send them relevant content, inform about new products, events, as well as to send follow ups in order to remind about the company or to assist leads to the buying decision stage. Email campaigns were working at their best when communicating with existing customers. Even if email marketing was working in the initial phase to contact potential leads, it was not as effective as was hoped.

Compare to all generated targets, the amount of leads generated was anyway small, which possibly means that many potential prospects were considering emails from the case company as a spam or unwanted email. The company should possibly move a little bit from this strategy in the future and, instead, use email marketing only with people who gave permission to receive emails from the company. Even if social media marketing did not generate a concrete number of leads, it influenced the overall digital activities of the company. Social media networks such as LinkedIn generated online buzz, gave opportunity for followers and online users to learn more about the company and its product (Polly). Within 3 months, the

researcher has been experimenting with the company's social media, in order to find the best way of using this digital channel. Every social network required its own approach and plan. The researcher was making sure that every social media campaign had high quality, relevant and interesting content.

The author has the opinion that all the digital marketing channels are effective online tactics and work the best when they combined and reinforce each other at the same time. In fact, it is important for the company to consider also other digital channels such as website marketing, content marketing, blog marketing, display advertisement etc. They all are the part of the big world of digital marketing. If the company wants to be successful and stay competitive in this digital era, it should include all of those digital channels in the digital marketing plan in one way or another.

### 2.13.3 Practical / managerial implications

After this digital marketing journey, the author would suggest for any startup company to create a digital marketing strategy and to include the two described digital channels. The simple reason is that everyone is online today and if the company wants to grow, be competitive and become successful, it should be active online as well. Based on the researcher's experience, the main challenge in every digital channel was content creation. People are always looking on social media for something relevant to them, or interesting. The research shown that the most likes and views on social media were received from posts with the company's own creative infographics. That is why, the author would suggest that companies always create their own relevant pictures to the content being shared. It is because not only pictures get more attention than text, but also it shows the company's individuality.

Based on the researcher's experience, the first and the most important thing that the company needs to do is to establish digital marketing plan with written strategy, goals and objectives. Everyone in the marketing team and company should have a clear vision of what they are doing online. Without clarified goals, nothing will work. The author itself has learned a lot about digital marketing and has practiced the real implementation of digital channels in business. That is why the author of this thesis would like to give some short and simple recommendations on digital marketing for startup companies:

- Identify goals and objectives of the company.
- Analyze the current company's digital marketing situation.
- If the startup company does not have an experienced digital marketing specialist, then the only thing the company can do is to learn the best practices from digital marketing gurus such as famous Dr. Dave Chaffey.
- The best way to find the company's own way to do digital marketing is to try, test, evaluate, and repeat. If it does not work, then to try something different.

- There is no common digital marketing strategy. Everyone creates their own, based on the company's characteristics.
- Not to be afraid of getting zero results at first
- Consider time. Time will definitely play a crucial role in making all the digital channels work for the company. Nothing happens overnight, especially success.
- Find what works for the company and what does not and keep it going. Running after absolutely all the digital updates is not an effective strategy.
- Even if the budget is limited, the company should consider paid ads in order to generate the buzz.
- Spend more time but create creative, interesting, and individual content.
- Create the company's own style of infographics.
- Everybody in a company should be involved in digital marketing.
- Improve, improve, and improve.

The author hopes that some of the findings and recommendations may become relevant and applicable for Elucidata.

#### 2.13.4 Limitations of the research

The limitations of the inductive approach in the research consists of the particular characteristics, such as this reasoning cannot guarantee the conclusions, as well as it involves the uniformity of the nature of the universe and approach relies on monitoring the collection of information. (Rusnell, 2016).

Within the period of the author's work, there was no permanent team in any department in the company. Hence, people (team members) in the project were often leaving or were being replaced, thus this factor could have had a possible crucial effect on the overall research results. Another factor that can be considered as action research limitation is generalization. Many of the action research projects are unique and have their own peculiar nature, thus cannot be generalized.

#### 2.13.5 Recommendations for future research

The world of technologies is changing fast, so is digital marketing. Because of the continuous technology development, there are emerging many new areas and topics on daily basis regarding digital marketing. Hence, possible future studies could research on other digital marketing channels and their optimization.

Many companies are not exploiting all the benefits of the digital marketing nowadays, thus creating potential opportunities to conduct a research regarding digital marketing in many companies.

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