Improving marketing strategies for software product startup companies in Sri Lanka

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Degree of Master of Business Administration in Information Technology

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ABSTRACT

In the current software industry, the failure rate of the software product startup companies is high. The main reason for the above fact is, the software engineering concepts and the marketing strategies were not aligned appropriately. In Sri Lankan context, vast count of software related undergraduates are joined to the software industry annually. While working as software professionals in the software industry, they gain software based experience in practical manner. This causes them to initiate their own software startup with innovative concepts. The innovative concepts are not sufficient for the software product success as there are number of existing competitors are in the industry and the software product needs to be aligned with marketing strategies.

Through this dissertation, software product marketing strategies will be identified which leads to select best fit set of marketing strategies for the software products. As per the nature of this study, a qualitative research requires face to face interviews to be conducted as the data or evidence collection method. In order to conduct a data collection interviews, it requires interview questionnaire with direct answered, semi structured and open ended questions. The straightforward answers were given by the respondents, are the key findings and their general perspectives are the explanatory evidence for the collected data.

Collected data has been analyzed in a proper method to introduce best fit set of software product marketing strategies for the software products which develop within the Sri Lankan software product startup companies. With the lack of knowledge in software product marketing, the software product startup companies should essential to focus on marketing strategies even if the software product is innovative or non-innovative.

This study identifies the marketing strategies in theoretical and practical perspective. From the set of marketing strategies, the study identifies the best fit set of marketing strategies for the considered software product types through the data analysis of this research for the software product startup companies in Sri Lanka.

As the significance of this dissertation, software product startup companies have to gain a clear picture of marketing strategies which requires to be defined the marketing boundaries for their software products to direct them to their success.

Keywords: Marketing, Marketing Strategies, Software Product Startup Companies, Software Products, Qualitative, Interview

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LIST OF ABBREVIATIONS

AIDA - Attention, Interest, Desire, and Action

ERP - Enterprise Resource Planning

Four (4) Ps of Marketing - Product, Price, Place, and Promotion

IaaS - Infrastructure as a Service

IT - Information Technology

PaaS - Platform as a Service

SaaS - Software as a Service

SWOT - Strength, Weaknesses, Opportunities, and Threats

UAT - User Acceptance Testing

WOM - Word Of Mouth

1.   INTRODUCTION

1.1   Background

The number of IT companies in Sri Lanka and all over the world has grown tremendously in the last three (3) decades. IT companies are categorized under several segments such as software, hardware and services like SaaS, PaaS, IaaS. Most of the IT companies try to deviate from the general product or project releases, by introducing and implementing innovative or new featured IT solutions. Therefore, the IT companies pay attention on market gaps, which would need IT solutions but not exists. This concern has created competition among IT companies for being different and earns considerable profit for their IT solutions with the limited investments or resources available. This in turn has resulted on greater interest for marketing and the importance of the marketing profession emerge in IT sector as well. In general, IT sector companies did not use reliable marketing techniques until the late 1990's but it has become a required practice these days.

Currently, software has been placed in the highest position in IT based solutions. As per the technological advancements most of the software companies are moving from implementing standalone applications to web based applications and cloud computing has emerged. With the introduction of cloud computing, most of the software companies have been committed on implementing web based services to fulfill the requirements related to both software and hardware. As the result of this, software companies have to consider on the cloud computing standards while developing software applications. With the cloud computing techniques, software companies strive to make a bigger impact within their industry, both economically and socially.

In addition to the above revolutionary change in IT industry, all the related technologies in software development have been changing constantly. This creates a huge challenge for the software development startup companies to adapt with. To gain a competitive advantage from their software solutions, software companies should focus on embedding attractive features into their software solutions to market them to the potential clients in demand (i.e. software solutions should include marketable features). Moreover, those companies have to lay on the well-known marketing strategies and introduce their own marketing strategies, which would impact to increase the success rate and keep on moving them to the maturity stage.

As a common definition of marketing states that, it is ''a management process responsible for identifying, anticipating and satisfying customer requirements profitably''. Further illustration of the above definition, it is all about marketing plans which affect all of the other managerial plans, by coordinating all the critical activities to eliminate interference and maximizing the profits. Any marketing strategy looks at all of the areas of selling activities. But the modern marketing strategies mostly focus on customer needs and this is in line with the strategies of software product companies to satisfy customer requirements.

There has been a considerable amount of researches in modern marketing techniques related to the other private sector companies. However, there has been little amount of researches in marketing from the software companies' point of view. While some may feel that any marketing techniques can be applied in the context of software companies, it is considerably different when comparing to the other companies.

This research mainly focuses on determining how software product startup companies viewed software product marketing strategies by identifying real challenges or obstacles to the current software marketing efforts and introduce suitable marketing strategies for the forthcoming software startup companies in Sri Lanka.

1.1.1 Motivation

Marketing is concerned as a relationship between the companies and its customers. As other industrial companies, software companies are also concerned on the needs or the requirements of the customers by providing a software solution or a service to fulfill their needs. Those software solutions are either existing or innovative. With the innovative software solutions, most of the software development companies strive hard to earn profits from them. To achieve high profits through their software products' reputation, they need efficient marketing strategies mostly at the initial stages until it reaches maturity level. Regularly, individuals are attempting to launch their own software based companies with the concept of entrepreneurship. As a new entrant for the software industry, company owner should have a clear vision about what to market, to whom to market or who demands it, when it markets. Hence software companies should do ample of researches on their solution beforehand. Most of the common researches should be executed by the software companies are technological, competitor and feasibility.

Either the software startup companies or the success software companies are not that much concentrated on marketing researches and which do not align with the above stated research types. Meanwhile marketing involvement should not be limited just before and after the developments of the software, but throughout the entire process means throughout the software development life cycle.

1.1.2 Research Scope

This research mainly focuses on determining effective software product marketing strategies for the software product startup companies in Sri Lanka. For the purpose of a better guidance for this research, this bounds with the recommended researches and case studies as references (i.e. to consolidate software product marketing strategies have been practiced by the software companies in foreign countries). This will evaluate few software product startup companies and success software product companies in Sri Lanka. Further, this will mainly target on top management and the

marketing department of the each company. To assist the ideas research will select suitable employee from each company to collect data for the research. Therefore, the sample size for this research will be reasonable to achieve the objective of this research.

1.2 Problem Statement

In general most of the software startup owners are approaching under software engineering background, hence they have high software product or service oriented knowledge and low software marketing knowledge. It emphasizes that, they are experts in software technologies but not in software marketing. Therefore they struggle with strategic plans implementation, product or service planning, software marketing plan and other elements which are necessary for their success. Moreover, the owners of software startups are making most critical marketing mistakes while marketing their software products; which are as follows.

- Not sufficient market-focused and customer-driven.
- Less understanding of target audience and monitoring competitors.
- Weak relationships with stakeholders.
- Difficulties on discover new opportunities.
- Weak in branding.
- Less use of technology.
- Not well organized to carry out marketing.
- Product and service policies are not properly aligned.

More specifically, software startups struggle due to lack of software marketing knowledge caused on understanding specific marketing problems. Since the owners do not understand if they are gained sufficient marketing knowledge to success of their businesses. The recommended marketing technique used by most of the success software startup companies is, marketing and launching an innovative product or service could reach high reputation for the company rather than marketing the software company's name.

Due to the technological advancements, there are considerable amount of innovative ideas to be implemented in near future. To assist those ideas, the software companies need to be grown rapidly with the company reputation as well as their revenue. Marketing department of software companies should responsible to increase the reputation and the revenue of the company. But as per the current situation, the amounts of investments for marketing of stated software companies are considerable low. Therefore, the need of effective or best fit marketing strategies has been arisen for the software companies to attract both customers and their investors.

Therefore this research considers on the success of software product startup companies in Sri Lanka, through the improved and recommended marketing strategies.

1.2.1 Research Question

According to the problem statement, the main research question to be asked is;

- What is the best fit set of marketing strategies which can be applied directly for the software product types which are developed by the software product startup companies in Sri Lanka?

Following sub questions will be answered, to assist with the main research question.

- How software product startup companies view software marketing concepts?

- What are the used marketing strategies in software product startup companies?

1.2.2 Research Objectives

The main objective of this research is;

- To identify best fit set of marketing strategies which can be applied directly for the software product types of the software product startup companies in Sri Lanka.

Furthermore, following sub objectives will also be achieved throughout this research.

- To identify how software product startup companies viewed software marketing concepts.

- To identify the used marketing strategies in software product startup companies.

1.3 Research Significance

The study of "Improving marketing strategies for software product startup companies in Sri Lanka" would be introduced the best fit set of marketing strategies for the software product startup companies in Sri Lanka. The target audience of this research is software product startup companies, as most of the software startup companies are declined before they reach the maturity stage. It is a major risk or threat for the co-founders or the owners of the software startup companies, because they are the persons who answerable for their investment parties like investors.

Even though the owners' of the software startup companies dreamt about their success within the competitive software industry, owners should have clear and unique mission and vision to drive them to their success. Moreover the mission and the vision needed to be aligned with marketing strategies. Hence the owners of the software startups need to have knowledge about the marketing strategies and they should focus on research and developments related to both technical and marketing.

As per the financial records of Sri Lanka and the other countries, any software company is offered positive impact to the economy of the country. With the need of the market and the lack of barriers to enter to the industry, entrepreneurs introduce and launch new software product startup companies to the world IT industry, every day. Hence this research finding will help the software product startup companies to reach the maturity stage by building their own success stories.

According to the literature review of this research, it would grab best use of marketing strategies and recognize what are the suitable marketing strategies for different types of software products which are used by success software development startup companies. According to the conclusion and recommendation of this research, it will introduce best fit set of marketing strategies for the software product startup companies. As per the positive outcome of this research, the owners of Sri Lankan software product startup companies will gain benefits by directing them to their success with marketing stability on both of their software product and software startup company.

1.4   The Limitations of the study

It should be noted that, this research seeking to conduct at least five (5) interviews for any software product type and thirty (30) interviews as total. According to the interview questionnaire it requires descriptive answers to gain enough information for the purpose of generalizes the findings. The sample will be getting smaller, due to the time and logistical constraints.

As per the research concern, it would be required to select software product startup companies in Sri Lanka. In order to select software product startup companies, this research should implement selection criteria but there is no proper way to implement it. For the purpose of overcome this limitation, Dr. Chrishan de Mel (who is one of the members of SLASSCOM) has been answered about the selection criteria for the software product startup companies in Sri Lanka. He stated that "entrepreneurship and software startup concepts are emerging approaches in Sri Lankan context, so there are no proper criteria to select software product startup companies and try to find it through literatures" – unfortunately, the literatures were unable to provide sufficient information about any selection criteria. Furthermore, Dr. Chrishan de Mel explained that, "as same as for the software product startup companies, there are no selection criteria for the success software product companies". Therefore this limitation highly impacted on population and sample selection of this research.

1.5　Research Outline

This thesis contains five chapters and brief descriptions of each chapter are as follows.

The Chapter 1 provides the motivation and background to the research, research problem, research objectives, research design and the significance of the research study. In Chapter 2, will provide an insight to the diverse literature associated with theoretical marketing aspects, about the software startups, and marketing strategies used by the success software development companies around the world.

The Chapter 3 explains the research methodology adopted for the present study, including detail descriptions on the research problem, research design, research method, interview procedure, population and sample selection, and interview questionnaire. In 4th Chapter will provide the observations and results associated with the collected data. Also, a detailed analysis and discussion on the observations and the results obtained would be provided.

Based on the analysis, Chapter 5 includes conclusion and recommendation on the total research outcome, including best fit set of marketing strategies for the software product types. Also, the limitations of the present study along with the directions for future research would be discussed.

2. LITERATURE REVIEW

In this chapter, marketing concepts, marketing strategies and marketing techniques related to software products will be described. Up to which extent, the general marketing concepts could be used on the software products is thoroughly discuss in this chapter. In order to that, it is required to be reviewed about what is a software startup company and its characteristics which will needful to capture related marketing strategies from the literatures.

Based on this literature review, the success rate and failure rate of the software startups will be discussed in order to acknowledge the problem statement of this study. Moreover, this chapter explained about the erroneous initial assumptions made by the owners of software startups, and factors affect on software startups failures. According to the stated sub topics, it will be consolidated how those factors are critically impact on the failure rate of the software startups. It will be a most important to discuss about how the marketing involvement should take place during the software development stage.

Furthermore, this chapter will be discussed about factors affecting marketing strategies in software companies and how to apply marketing concepts for the software startups to overcome the marketing challenges faced by the software companies while they moving towards their success.

2.1 Marketing

Marketing is the group of well-structured activities of a business, which are associated with buying and selling a product or service. Most critical activities in marketing are advertising, selling and delivering products to the consumers. Marketing departments of companies, always try to grab the attention from the target audiences via remarkable slogans, packaging or packing designs, general media exposure and celebrity endorsements (Kottler, & Keller, 2003). Stokes (2000) mentioned that, marketing is everything for a company, until the product goes to the end users, so marketing departments clearly focus on acquiring customers and maintain the relationship with them. The ultimate goal of marketing is to find consumers who need the products or services of the company, to ensure the profitability.

According to the study of Kottler and Keller (2003), it introduces that traditional marketing concepts are divided into four elements which are as follows.

- Under the concept of market and customer orientation, marketing as an organizational philosophy or culture which requires the understanding of

customer needs and wants should happen prior to the development of products and services.

- Marketing strategies define how the organization is competing and surviving in the marketplace. Marketing strategy reviewed through market segmentation, targeting and positioning.
- The marketing mix introduces the stream of specific activities and techniques, such as product development, pricing, advertising and selection of distribution channels.
- Marketing intelligence conforms each of these marketing principles. Marketing oriented organizations handle information related activities such as organization wide generation, dissemination and responsiveness to market intelligence.

2.2 Marketing Strategies

A marketing strategy is an organization specific tactful plan, which is for reaching the individual people and turning them into customers of the product or service that the business provides. The marketing strategy of a company includes value proposition of the company, key marketing descriptions, information which related to target audience, and other high level marketing elements. Moreover, it informs the marketing plan, which has been documented that illustrates the types and time schedule of marketing activities. The company marketing strategy should include a longer lifespan than any individual marketing plan as the strategy is tightly bind with the value proposition and key elements of the company brand. Hence, this kind of company oriented competencies ideally does not shift very much over time (Armstrong, Kotler, Harker, & Brennan, 2015).

A company's marketing strategy always grows the value proposition of the company. The value proposition clearly describes the competitive advantage gained by the company within the industrial market. In marketing perspective; once the value proposition is successfully defined, all the hard work related to marketing, has been done. Marketing is not all about paper advertisement or social media campaigns or word of mouth, but it should include a market research for the purpose of identifying untapped audiences or refining the target consumer (Kottler, & Keller, 2003).

Marketing plans get more attention as operational documents, because it indicates the set of scheduled work that a company does to sell their products or services to the world. Hence, a marketing plan is the core of every marketing strategy, when the marketing plan clearly mentions a message, a target market and a goal. At the end, company can be set the overall goal for the marketing strategy, with all the correlated marketing plans by inheriting the responsibility on delivery process (Armstrong, Kotler, Harker, & Brennan, 2015).

2.3 Introduction of software startups

Storey (2016) posited that, year and year software has become an increasingly essential to our society. As per the high demand on the software solutions the software solution companies eager to supply number of high tech software solutions to the end users day by day, with the giant developments in software technologies. This creates competitors among software companies, so that software startups should always pay attention on grabbing their reputation from the software industry. To do so, startups are thoroughly and tactfully push their innovative ideas to the new software solutions or to the new featured existing solutions.

Modern innovation incorporated with entrepreneurship concepts constructed about more than thirty years ago. The stated concept has been accumulated with the emergence of the consumer internet markets in middle of the 90's and concluded in 2000 (Perkins, & Perkins, 1999). So the modern entrepreneurs are facilitated with healthy conditions like easy access to potential markets and low cost of services distribution (Marmer, Herrmann, Dogrultan, Berman, Eesley, & Blank, 2011). Today, with the high existence of the internet and mobile devices, human are assisting to an impressive generation of software experiments which caused to initiate software startup companies. Encouragement offered by the success stories, a large number of software startup companies are created every day. However, the most of these startup companies fail within two years from date of their launch (Crowne, 2002).

2.4 Characteristics of software startups

As per the research of Giardino, Unterkalmsteiner, Paternoster, Gorschek, and Abrahamsson (2014) stated that in the past, "startup" has been defined with different explanations. With the conclusions of the stated explanations, a startup is a small company which seeking new business opportunities, working to solve a problem where the solution is not recognized and the market is highly changeable. According to those studies, high uncertainty and rapid growth are the two key characteristics for startups, which better differentiate them from more established companies. Some of the other characteristics are as follows (Giardino, Wang, & Abrahamsson, 2014; Mann, & Sager, 2007; Nguyen-Duc, Shah, & Ambrahamsson, 2016; Barrehag, Fornell, Larsson, Mårdström, Westergård, & Wrackefeldt, 2012).

- Lack of economical, human and physical resources.

- As startup companies are in the initial stage, they would be able to quickly change and adopt with the market, technologies, and product when compared to more established companies.

- To gain competitive advantage from the software solutions; startups needs to focus and explore highly innovative segments of the market.

- Software startups deal with high uncertainty under different perspectives such as market, product features, competition, people and finance.

- Successful software startup companies always try to move upwards of the business life cycle until they meet maturity stage, hence they need to scale the business rapidly.

- The environment forces influence to the startups to work under constant pressure for quick releases such as client demo, investor demo and etc.

- Due to the lack of resources, software startup companies heavily rely on external solutions such as plugins, platforms, development tools, server spaces and etc.

- Software startups start with a small numbers of stakeholders.

- Company activities derived on one product/service only.

- Failure rate of startups is extremely high.

- Low experienced individuals included in the team.

- Startup companies deal with role culture, as everyone in the company has big responsibilities without high management.

- Software startups are not self-sustained as they need external funding to sustain their activities.

2.5 Erroneous initial Assumptions made by the co-founders or owners about their software startups

Blank (2012) posited that, at the stage of the entrepreneurial concept of the software startup comes to the co-founders' or owners' mind, they make inaccurate assumptions on top of their business. This section describes the assumptions have been made by core people during the process, which are most dangerous for a software startup.

- Core people of the company assuming that they know exactly what customer wants.

- Core people assuming that they know exactly about what features to be developed.

- Commercial release date of the software solution.

- Company should focus only on execution plan, rather than hypothesis, testing, learning and iteration.

- Traditional business plans presume that software solutions do not have errors, so do not need any trails.

- They presume that they know about execution plan of sales and marketing.

2.6 Success rate and failure rate of software startups

Hussain, and Mkpojiogu (2016) stated that, the owners of software startups needs to be focused on the bigger picture of their companies because they face uncertainty while maintain their longer life span. This section illustrates the failure rate of software startups during 10 year period between 2006 and 2016.

Within the period of 1st year, approximately 21% of startups which opened 2006 are failed and 79% of software startups move to the period of 2nd year. At the end of year two, the failure rate increased to 34%. During the period of 3rd year, software startups dropped another 12%, which bring to the total failure rate to 42%. At the end of 4th year, the failure rate of software startups increased by 5% and 53% of companies are still in the business life cycle. The position where the 5th year mark is a danger zone for many software startups and only 48% of business were founded in 2006 were moved to 6th year. At the stage of 6th year, the failure rate slows down dramatically by 3% each year and there are about 55% of startups have disappeared. Within the period of 7th year, the success rate drops to 42%. In the 8th year, the failure rate increased up to 60% for the first time and 39% of software startups still doing their business. The decline of the success of the software startups continues in the 9th year, and approximately 36% of software startups continue their career in the industry. When the software startups reached the 10th year anniversary, it is the major accomplishment for the business owners' and there are only three hundred and thirty five (335) of software startups are able to say like they have done it for ten (10) years.

When it comes to turning software startup dreams into reality, it's all about confidence and patience of trying over and over again. Statistically, success rate of software startups increase with each time if they walk down the entrepreneurial path. Dedication and determination are the most important personalities which should gain by the owners of software startups, as those lead to reach the expected goals (Hussain, & Mkpojiogu, 2016).

2.7 Why Software startups fail / challenges in software startups

According to the studies done by Crowne (2002), Charette (2005) and Humphrey (2005), as software startup companies there are so many actions take place which are indirectly contribute to the startup's failure such as poor marketing, weak business model and etc. This section clearly consider about the failure factors or challenges in software startups.

- Poor Management

The core essential part while building a software startup is strong leadership. But the challenge is to choose right people at right time. Approximately 23% of software startups failed due to the support team as a barrier to success.

- Lack of marketing strategies

Even though it is an innovative business idea but the customers not conscious on the requirement as a product or service, this is indirectly worthless if there is no one in the queue to buy. Around 42% of software startups fail due to lack of demand in the market. This is mainly due to lack of marketing strategies hence, inability to attract customers for the product.

- Lack of funding

Initial capital is a critical factor for software startups as initial investments offered by the owner in most of the time. In some cases, startup owners able to find investors luckily at the beginning. It about 29% of startups has none left of cash before they get established. Hence, the capital is never able to cover as return on investment.

- Inability to compete

Study about competitors is a must for software startups, and nearly 20% of software startups could not be able to move forward with the major players in the IT industry.

- Pricing issues

Customers are always mindful on the value of a product or a service with its price. The price has to be reasonable when compared to the features included in the product or service. Approximately 18% of software startups failed, due to the prices of the product or service as less prices emphasize low quality and high prices reach customer affordable level.

- No strategic plan for product development

In most of the software startups, they do not clearly define or establish objectives and goals for product development. The owner should make appropriate decisions on an ad hoc basis, before it goes to greater strategic plan.

2.8 Software developments in startups

The major challenge for the engineers in the software startups is, to implement methodologies to streamline and control the development activities, which is called as software process. Software process defines the work flows which should undertake at each stage of the production; provide assistance for development estimations, and developing plans and quality measurements. During the last decades, several models have been introduced to control software development activities, but software startup companies do not report significant benefits (Sutton, 2000; Coleman, & O'Connor, 2008).

Sutton (2000) stated that, the main concern of the software departments is; to introduce a best fit organizational solution for the common question which is "how to manage development process?" within the complex and challenging circumstances. Furthermore Sutton (2000) illustrated that, startups are creative and flexible in nature which includes energetic and committed people who are highly reluctant to the introduced development process or organizational measures.

As per the study of Alves, Pereira, and Castro (2006), software startups focus on market driven software by developing packaged applications except developing software for a specific consumer. Och Dag (2002) emphasizes the importance of time to market as the key strategic objective for the software startup companies. Even though, the failure rate is considerably high for the software solutions which are produced by the software startups. It happens due to the vague requirements, which have been rarely documented and validated only after the software solution is released to the market. So that the product does not meet the exact customer needs and wants.

Accordingly, product-oriented practices help startups in having a flexible team, with workflows that leave them the ability to quickly change the direction according to the targeted market. Hence, most of the startups focus on team performance and productivity by tightly controlling the employees instead of providing them rigid guidelines (Och Dag, 2002). With the flexibility and the always changing requirements, the developers in software startups sometimes accept compromises the system features in one dimension to meet a high demand in some other dimension. The compromise between high-speed and high-quality engineering is faced daily by software startups, not only in terms of architecture design but in multifaceted aspects (Martin, & Hoffman, 2007).

2.9 Marketing strategies for software development companies

This section illustrates the marketing strategies have been practiced by the software development companies to move forward their business or their software solutions till company reaches the maturity level. Existing marketing strategies for the software development companies are as follows (Kim, & Hyun, 2011; Blank, 2012; Kim, & Hyun, 2011; och Dag, 2002; Rao, & Klein, 1994).

- Channel

When considered on licensed enterprise software companies which focus on establish the relationship between channel partners called value added resellers and independent software vendors to promote, sell, install and customize the software. This procedure not that much exist with Software as a Service (SaaS) companies, but they gained the benefit via externals such as online sales forces and app stores. A successful software channel marketing strategies are not focusing on how the externals can help the software company to achieve the company goals, but how the company can find mutual customers through the existing customers.

- Price

With the drastic changes occur in the information technology stream, the individuals always try to find opportunities to ease their day to day work by software solutions which derived from the latest technological advancements. This creates new challenges for the software solution providers, to deliver a fully satisfied solution to the customers. The next most challenging part is, to define pricing strategies for software solution. Traditionally, software companies are focused on covering direct and indirect costs, achieving desired margins and survive within the competition. In order to be successful in competitive business world, the software solution providers need to define their own pricing strategies by considering the value perceived by the customer from the software solution, rather than using traditional cost-based pricing strategies.

- Promotion

Promotion in the sense in software development companies, it is a must-factor for them to survive in the industry with the competitors. Within this strategy, company bearers need to do a tremendous job to broadcast their company portfolio, its software solutions and services, its culture and its future. For the purpose of ease of promotion, they are focused on promotion strategies like publish via website or social media, electronically through email marketing or SMS marketing, direct selling communication, word of mouth(WOM) conduct general tech-talk meetings, providing sponsorships for the technology related meetups, focus on Corporate Social Responsibility(CSR) projects and so on.

- After Sales Service

As software development companies, after sale service is another core marketing strategy to maintain the trust and guaranty by offering a solid connection between software company and the customers till the customers leave the software solution. This strategy includes software updates (i.e. new releases), trainings on the product and its new features, maintenance and money-back guarantees, technical

support/help desk, 24/7 customer support, automated customer service, support automation and etc.

Furthermore, a customer expects a cost effective and reliable after sales service. Software development company also rely on customer satisfaction to maintain business and sales. Without having a good after sales service, software companies feel difficult to move with the existing customers and find new customers.

- Demonstration

As per software company perspective, demonstration of software solution is one of the best marketing strategies for the software solutions. A demonstration helps to pick prospect interested, excited and potential customers for the software solution. These is achievable via visual sales presentations, focus and articulate the essentiality for a specific individual's business, provides proofs like videos, brochures, pictures, business banners and etc.

- Advertising

Sales and marketing department should take the responsibility to do conduct a research for the purpose of conclude the best fit advertising methods to the software company. The marketing research should tightly focus on most popular advertising methods which have high potential to attract and stimulate the customer mind set on the software solution.

- Social Media

One of the most recommended internet marketing strategies called social media marketing, which involves creating and sharing content on social media networks in order to achieve marketing and branding goals of software companies and their software solutions. For the purpose to drive the audience engagement, social media marketing is included with known activities like posting text and image updates, videos, and other content and media advertising. This helps to achieve number of goals such as increasing website traffic, building conversions, raising awareness towards the software company and its software solutions, creating brand entity, and improve communication and interaction with target audience.

- Develop strategic partnerships with external websites

As most of the successful software companies are being used to develop partnerships and associate with external partners and external websites where the target audience relates and goes. With this strategy, software companies would be able incorporate with other software which have been developed by other software companies.

- Traditional media

Traditional media respect to software companies, which appropriates on the software companies who try to popularize their brand name via their own software solutions. During the period of last 50 to 100 years, marketers used traditional media such as print, radio, TV, yellow pages and even outdoor ads to reach consumer markets.

- Beta test

Beta testing process provides feedback by allowing the software company to integrate the feedback and do the refinements within the software solution. Beta test means a lot about marketing strategy. Therefore beta test can be called as market test where the company runs the same campaigns on a smaller scale as pre planned for the full launch of the software solution. While conducting campaigns, company needs to identify a specific geographical location or one social media channel. By considering sample audience responses, company would be able to do the analysis. The result ensures the success rate of the campaign and when company reaches out a wider audience from the software solution.

- Freemium model/ free trial

Freemium model has become the leading business model for software companies to hook customers on their software solutions. With this method, customers get basic features at zero cost and software solution iteratively introduces the other features and packages with the subscription payment plans. From this method, company would be able to create enthusiasm in the customer's mind about the basic solution and iteratively influencing them to purchase the entire software solution once the trial period exceeded.

- Search Engine Optimization (SEO) - company website and marketing website of software solutions

SEO is the name for a wide ranging set of techniques which targets to move company website/content or its product websites higher up in the search engine results for a particular set of keywords/ key phrases. The algorithm behind SEO is, if the website/content higher up in the search engines, more visitors will receive or find it easily. There are two main optimization techniques such as onsite SEO and offsite SEO. Onsite optimization refers to optimize company's actual website and covers a wide set of techniques. Offsite optimization in the sense of how it links with the external website, which considered as an important aspect for the search engines result. Vast majority of experts consider on off-site optimization is the most important technique compared to onsite optimization. Currently, social optimization has been emerged, which considered about how much company website features in social media.

- Frequently Asked Questions (FAQ)

Currently most of the software companies try to keep set of FAQ in their profile website and the software solution website for the purpose of providing answers for the individuals. Indirectly this helps on SEO as well. By creating FAQ, salesperson could get clear understanding about the target audience and their expectations via the frequently generated questions. FAQ should not equal on two different companies and two different software solutions. FAQ helps on individuals to find best way of using the software product and the services offered by software company through the software product.

- Discussions (groups/ forums/webinars)

There are several discussion groups and forums in the cloud, the sales and marketing department needs to find appropriate groups or forums which are discussed about competitive software solutions in the market. With the assistance of the forums, salesperson could analyze and consolidate the issues and missed functionalities of the software solution and find prospective customers.

- Include a video of how software products and company work

Having a video which illustrates the company's portfolio and its culture is most important marketing technique rather than reading a bio of a company. Video summarizes a big story for a small duration and helps to consolidate the point on the individual's mind easily. It is important that company needs unique and attractive set of videos which should include the company profile and specific videos for each software products. The videos of the software products must clearly illustrate their key features against each user roles of it. So the target audience would be aware about how the software product addresses their actual requirements or market gaps via the features of the software product.

- Include product into feature/benefit comparison website/tables

Customers mostly engaged on compare the software solutions before purchase them. So it is an ideal strategy to push the software solution with its portfolio, features and benefits to the comparison website or tables. There are several numbers of software solutions in the market which are fulfilled the same social requirement. With the benefit offered by comparison website or tables, customers could be able to find best fit software solution to purchase from bunch of software solutions which have been implemented by different software development companies. Indirectly this popularized the company brand name and company could find weaknesses of the provided software solution compared to the other competitive solutions.

- Third party reviews

Online user reviews or third party reviews as marketing strategy which is equally powerful with WOM. It builds psychological connection between products or software solution and customer decision. Stated statement described as 88% of online customers trust online reviews like any other personal recommendation. But, online reviews are not just meant for the purpose of branding or influencing customer's purchasing decision. However good reviews help to build up a software solution or company brand's reputation, and negative reviews are valuable to resolve business issues quickly and build up a better reputation. Therefore the third party reviews, are beneficial asset which can impact on the business performance.

- Expand the strategic partnership and develop affiliate marketing program

As per the concept of affiliate marketing which is the oldest form of marketing technique where someone recommends a software solution for a person and if that person buys it, the recommender receives a commission from the company who owns the software solution. Recommender gets paid even if the visitor converts to a customer. As software companies, they need to publish their software solutions on affiliate services which drives into an automatic marketing process.

- Customer interaction

The main responsibility of the sales and marketing department is to convert visitors to their customers. Hence the salesperson needs to practice following facts to incorporate with the individuals. Some of them are stated below.

  o Ensure on the customer mind that company provides quality products or content.

  o Should grab customer attention immediately.

  o Always try to create "You are always and everything for us" philosophy in the customer mind.

  o Design internal pages of the websites (i.e. company website and product website) specifically for the target audience.

  o Grab and integrate the system with the feedback of customer to make the software solution to ease of use for them.

  o Always think in active and think on customer point of view while addressing and consulting on the customer by showing company has been understood their requirements/ pains.

  o Focus on regular email, active in customer forums and online webinars, provide user guides and relevant case studies are the activities to grab the new customers' attention and keep the existing customers on the hand.

- o Have to create and increase the trust factor on customer mind among the software company.
- o Build customer loyalty.

- Provide complementary software solutions

Under this marketing strategy, the management of the software companies consider on identifying other software solutions that could market easily in order to help marketers to sell their primary software solution or provide opportunity to reinforce their selling process.

2.10   Factors affecting marketing strategies in software companies

As per the study of Rao, and Klein (1994) followings are the factors affecting marketing strategies in software companies.

- An emerging fragmented industry

As per the Porter's theory, IT industry consists of technological uncertainty, strategic uncertainty (i.e. there is no exact strategy to follow up), a large proportion of adopters and startups, and most of the startups are very small firms and compared to other industries it is very easy to enter to the market.

- End user competition and imitation

Most often, software firms have to compete not only with their competitors, but also with their end users. Frequently, they have to compete with the in-house development of the end users and moreover, the end users ability to imitate the product.

- High level of Research and development intensity

In IT industry most of the products are developed through innovation process. Most of the startups are reported to spend 40% of their sales on research and development activities.

- High degree of specialization

Most of the software firms are solely depend on the sales of their software products. Further most of the companies do not deviate from the software products to another product.

- Complementarity with software, hardware and computer services

In software industry hardware and software services such as consultancy, maintenance, support, training and data processing are complementary items. Therefore the marketing strategies should be aligned with the complementary products as well.

- High level of maintenance and marketing costs

50% -70% cost in software firms are derived from maintenance which are mostly enhancements and alterations. Moreover, because of greater level of customer support given to software, marketing costs are significantly greater for software compared with hardware.

Overall, the characteristics of an emerging industry, particularly specialization, combined with end user competition and imitation compound the challenges when implementing marketing strategies in software firms.

2.11 How to apply marketing concepts for software startups

Agile development processes are the primary solution for the product or service, which has vague requirements, means the owner does not understand what is the exact product or service to build. Hence they understand the problem fairly well but the solution is not. Even though in the software startup context, neither the problem nor the solution is well understood, all the members in the software startups needs to be focused on not only the regular responsibilities but also on entire business strategies and needs, such as associated business model, efforts in target marketing and customer relationship models(Bosch, Olsson, Björk, & Ljungblad, 2013).

The solution focused thinking under agile practices which has gained increasing attention due to Ries (2011) and the 'Lean Startup' movement. Ries, E. stated that, most of the software startups are failing due to solution focused thinking. Instead of by evaluating what customer's value, most startups spend time and money developing products that people are not interested in. While projects are delivered on time and on budget, nobody wants the product. Ries clearly mentioned the importance of understanding the problem before developing the solution. To do so, the 'Customer Development Model' is heavily influenced on software startups which were outlined by Marmer, Herrmann, Dogrultan, Berman, Eesley, and Blank (2011). As per this model, customers are considered from the very beginning. It is a structured process for testing business model about markets, customers, channels and pricing etc. The model has four steps, which are customer discovery, customer validation, customer creation and company building. The first two steps are about capturing the vision and categorize them into testable business model assumptions; the last two steps focus building demand for the product, start scaling the business and transition from a startup to a fully matured company executing the validated business model.

As per the study of Ries (2011), often the software startup companies change their direction based on what they have learnt from their customers. This central concept within the lean startup is called pivot. By practicing pivoted concept frequently, that causes to the software startups to reach their success. Though the direction is planned initially, successful startups change their direction based on the efficient collection of customer data. By reducing the time in between pivots, it is possible to reach the success by reducing the failures, before running out of money. Another central concept is the 'Build- Measure-Learn' loop; the concept is described how to validate learnings. Within this concept, the generated ideas are consolidated into products, data has been gathered by measuring while the product is used by customers, and ideas for product improvement and innovation are based on what is learned by analyzing the data collected from customers. Hence the concept always focuses on delivering customer value, by minimizing the risk of solution oriented architectures. There are three main stages in lean startup process which are as follows.

- Documentation of initial plan

This should be done by capturing and focusing on not only the product or solution but also the entire business model. The entire team of the software startup needs to be spent too much of time on this regard. The main objective of this is to grab the vision of the business.

- Identify most risk aspects in the initiated plan

By having the documentation of the initial plan, the most risk aspects should be assessed and prioritized. The most risk aspects should be addressed first. In here, there are three types of risks are identified such as product or service risks, customer risks and market risks.

- Test the plan systematically

The initial plan takes place with the prioritized risks, and the rest of the process should be placed by systematically testing and iterating the plan by using the method Build- Measure-Learn loop.

As per the stated lean startup process, Bosch, Olsson, Björk, & Ljungblad (2013) established a model called Early Stage Software Startup Development Model ESSSDM). The main objective of the model is to scale the product idea. There are three aspects needs to be considered which are as follows.

- Idea generation

Ideas need to be generated not only by the internal team of the software startup but also the customers as well. This can be done by following methods.

- Interviews

Visit the places of potential customers and make a discussion with them, is the best way to extract and solve problems. To gain the expected outcome, it is recommended to inspect one customer at a time which helps to the team to focus only on each segment. The main purpose is to identify how potential customers run their businesses, and what are the problems they have encountered.

- Scamper

This is a concept goes under brainstorming technique used to systematically generate new ideas by modifying existing product concepts.

- The backlog

Software startups should be kept the generated ideas in a backlog. The backlog provides an assistance to prioritize and manage the ideas. Following facts help to prioritize the ideas.

  o How much do customers concern about the problem or the requirement? The problem or the requirement should be significant to generate interest and revenue from the software solution.

  o How much does the team concern about the problem or the requirement? Software startups require an ample of investment for the effort and time. All the team members need to be involved with the task.

  o How large is the market potential or target audience?

  o How much domain knowledge exists within the team? With the skilled team, they have domain expertise to reduce the uncertainty regarding the problem and saves valuable time during the problem or solution validation stages.

  o Has the team experienced the problem themselves?

  o Are customers easy to reach? To do so, the team needs identified paths to access potential customers. The team gets rapid feedback from the customers who are experiencing the problem.

- Funnel

In this step it will assist to validate the generated ideas through several steps. This supports to increase the ability to stay objective and it can be difficult for a startup to attach into a one particular idea in the introductory stage.

3. RESEARCH METHODOLOGY

As the nature of the study, this is a qualitative research, and data being collected via structured interviews. To maintain the effectiveness of the interviews, this research introduces an interview questionnaire to get more views and enable to make broader discussions with the interviewees. This will mitigate the flow of vague information from interviewee to interviewer. Moreover, the explanatory information will be the evidence of patterns (i.e. like a bigger population used in survey-based quantitative research) to consolidate the research findings through limited number of responses. Furthermore, the collecting different kinds of data by different methods from different sources provide a wider range of coverage that may result to grab a bigger picture as a unit of the study.

3.1   Research Problem

As stated in the problem statement in this research, most of the owners of software startups are entering to the industry under the software engineering background but they have less knowledge in marketing strategies. Even though, the owners or the co-founders need to focus on where the product goes on (i.e. basically the future of their software products). With the less number of employees in the startups, it would not include any marketing executives, so the owners should address the marketing aspects for their own software products.

As per the mindset of the startup owners in all over the world, 84% of them were built their own software product first and after that they have launched their company and 16% of startup owners did vice versa (Coleman, & O'Connor, 2008). It means software startup owners are trying to build a brand name through their innovative products in to the company good will or the portfolio.

Even though it is an innovative product, marketing strategies needs to be aligned with it for a longer existence. As per the marketing strategies, those are much deviate from the general marketing strategies and the effectiveness of marketing strategies are differentiated, according to the software product type. Hence, the software startup owners should have a clear understanding about marketing strategies against the software product type. In spite of the stated statement, most of the software startup owners meet failures as the software product as well as the company as whole.

According to the stated research problem, this research will identify set of best fit marketing strategies for the software product types, which would be essential for the software startup owners to obtain the industry share for their software products. When conducting the interviews, the discussions were based on following software products types and some interviewees shared their knowledge for more than one software product types regarding their experience in software marketing.

- Business Application

Business application is kind of an ERP which is useful for business owners to handle their businesses even they located in different locations. In current context, business applications or the ERP implementations have been introduced by the software companies and those are the much needed and frequently developing software product type.

- Educational

According to changing world the traditional learning era ends, so the students are more driven to surf internet to seeking knowledge. Therefore, students are more likely to electronic or digital version of learning methodology, so the educational software products are much needed for the today's learning context. To fulfill the requirement of the society, software companies try to obtain a profit from educational web applications and mobile applications.

- Transport and Logistic

The necessity of the transport and logistic applications is high and highly demanded. There are so many transport applications in the market, therefore the new entrants for the transport application development is competitive. For the purpose of marketing the software product, software startup owners should consider on the marketing strategies with the innovative or new features.

- Banking

Due to the time constraint to visit bank for day to day money transferring activities, the consumers are more likely to control their money from their premises. Currently, the offering security for the banking applications is high, so the people are shift from traditional methods of banking to electronic or digital banking.

- HRM (Human Resource Management)

HRM system is a combination of systems and human resource management processes which helps to revolutionize the workplace. With an HRM system, human resource department involves on tracking employee working histories, leaves, salaries, abilities and skills, qualifications, and achievements through a digitalized way. Tasks tracking systems could be integrated with the HRM, so the HR managers could generate any employee related report at any point of it required by mitigating biases of HR managers to some specific employee when the employees get evaluated.

- Platform

Developing software platforms is the new market trend in software industry. So most of the software company owners are focused on developing compatible software platform for the other software's to use. Other than the compatibility, software platforms are more likely reusable and customizable product, which considered different marketing strategies.

As per the current Sri Lankan context, above stated software product types are the frequently developed and the software startup owners are highly focused with. Method of selecting stated types of software product will be explained under population and sample selection (i.e. section 3.2.5).

3.2 Research Design

Mouton and Babbie (2001) stated that, research design assists to plan, structure and execute the research in order to increase the validity of the findings. This is a qualitative research which is used semi-structured interviews for the data collection perspective. The defined questionnaire is used in interviews for the purpose of getting more views. Following subtopics will be discussed for a better explanation of the research design.

3.2.1 The Research interviews

Qualitative research through interviews was used, in order to provide different perspectives, views and opinions on the topics investigated in the research. Structured face-to-face and over the phone discussions were chosen to carry out this qualitative research. In total, thirty (30) interviews were conducted. Given the time constraints of the participants, each standard interview lasted one hour.

Interviews were used, since this is the most appropriate method to get an understanding on the best fit marketing strategies for software product startup companies. This method allowed for additional or follow-up questions to get more clarity. Additionally, they have been questioned about their past experience as follow-up questions to ensure the validity of the study. These questions were posed, in order to gather more information relating to the used and going to be used marketing strategies for the software product type with in their companies.

Classification questions were also asked to gather sensitive information, such as designation, number of companies worked, and industry experience under the designation. The interviews were conducted at participants' either workstations or in a private venue. Furthermore, privacy would be ensured if the interviews were conducted in their workstations. Moreover, the interviewees have been informed about the confidentiality and ensure their anonymity.

3.2.2 The interview procedure

At the initial stage of the interview procedure, each of the participants received an email with requesting their participation for the interview. The requesting email included the main objective of the research and the assurance of the confidentiality of the personnel. Moreover, the email is asking for the convenient date and time for the interview, which should take place before the defined deadline. The participants will accept and acknowledge the request by sending an acceptance email or a phone call.

Two days prior to the scheduled date of the interview, the relevant participant has to be notified via a notification email or a phone call. At the beginning of the interview, the main objective and the procedure of the interview were explained. Thoroughly inform that the confidentiality of the responses and a guarantee of anonymity and their identities and responses were assured. At the same time, the participants have been asked about the preferred media to keep backup, which is written report or audio recording. The interviewees were further informed they are not responsible to answer all the questions in the interview questionnaire and could reject any question if they may feel uncomfortable in answering. All the interviews conducted in English language.

3.2.3 Process of Data Collection

Data collection strategy for this research is interviewing marketing executives of software product startup companies. Accordingly, thirty (30) individuals in different software product startup companies were taken as participants of the interviews for the study. Quantitative approach is not suitable for this study since most of the marketing strategies are unique to themselves. Hence, this study focuses on a qualitative approach to grab their views for further analysis.

Interview questionnaire (Appendix A) was formed based on the literature review and collect the information related to marketing strategies. The open-ended questions were used to get detail information from the interviewee. An interview request email and letter (Appendix B) were sent out to the targeted participants. Furthermore, personal contacts and other means were used to obtain appointments for interviews.

In this research, researcher personally conducted the interviews and interacted with the respondents either in face-to-face interviews or over the phone discussions. Some of the explanations observed during the interviews were tone of voice and body language. Such observations were too recorded in the notes or memos, which were used to analyze data. Further interviews were carried out using personal interaction skills and framing the questions in proper manner, which were found to be equally important.

3.2.4 Software startup selection criteria

As stated before, there is no predefined selection criteria for software product startups which is one of the main limitations of this research. Following criteria has been defined for the purpose of select the software product startups, for the ease of the research.

- Software company should develop software products.

- Equal or less than twenty (20) employees in the software company.

- Company has established in five (5) to ten (10) years before.

- Annual revenue should be less than ten (10) million rupees(i.e. interviewees reluctant to address about the figures).

3.2.5 Population and Sample Selection

As stated above, there is a challenge to select the population or sample which impacted on collect data for the research success. This research focused on software product types and needs to be selected software product startup companies. For the reliability concern, this research require at least five (5) responses for any given software product type and thirty (30) responses are expected. Thirty (30) responses will be covered by less than thirty (30) respondents, as some of the respondents will be shared their knowledge for more than one software product type and that will be counted as two (2) responses. Forty eight (48) software startup companies have received requesting emails to get the permission to conduct interviews. Concurrently, this research has been conducted another four (4) interviews for successful software product startup companies to recommend and consolidate the key findings for a better understanding.

One individual has been interviewed in each company and some marketing executives are not limited to one product type, so this helpful to compare the suitable marketing strategies for the software product types. The participants (i.e. respondents) of the research interview are as follows.

- Sale and Marketing Managers

- Operating Managers

- Co-founders or Chief Executive Officers

- Chief Operating Officers

- Marketing Executives

3.2.6   Questions for interviews

As per the nature of this study, conducting interviews are the main method of data collection. The interview questionnaire (Appendix A) consists with direct answered, semi structured and open ended questions. The questions in the questionnaire are designed to get detail information from the interviewee via the face to face interviews. From the direct answer questions.   There are three (3) important approaches to interview and those are expecting the unexpected, asking limited number of closed questions to get background details, and asking primarily open questions.

Closed questions focus on direct answers such as yes or no or multiple choice answers or a simple information answer. For an interview based research, closed questions can be used to get exact information about the related area.

Not only that, this interview questionnaire filled with open questions, so the interviewee would be provided detail information for the questions. For an example, the questionnaire asks about some of the challenges faced while marketing a software product and what are the used strategies to overcome those challenges. So that, the research used many opened questions get detail answers for each of them.

3.3   Research Method

As per the figure 3.1 below, it depicts all the milestones have been achieved throughout this research. Each phrase is described under the figure 3.1 as follows.
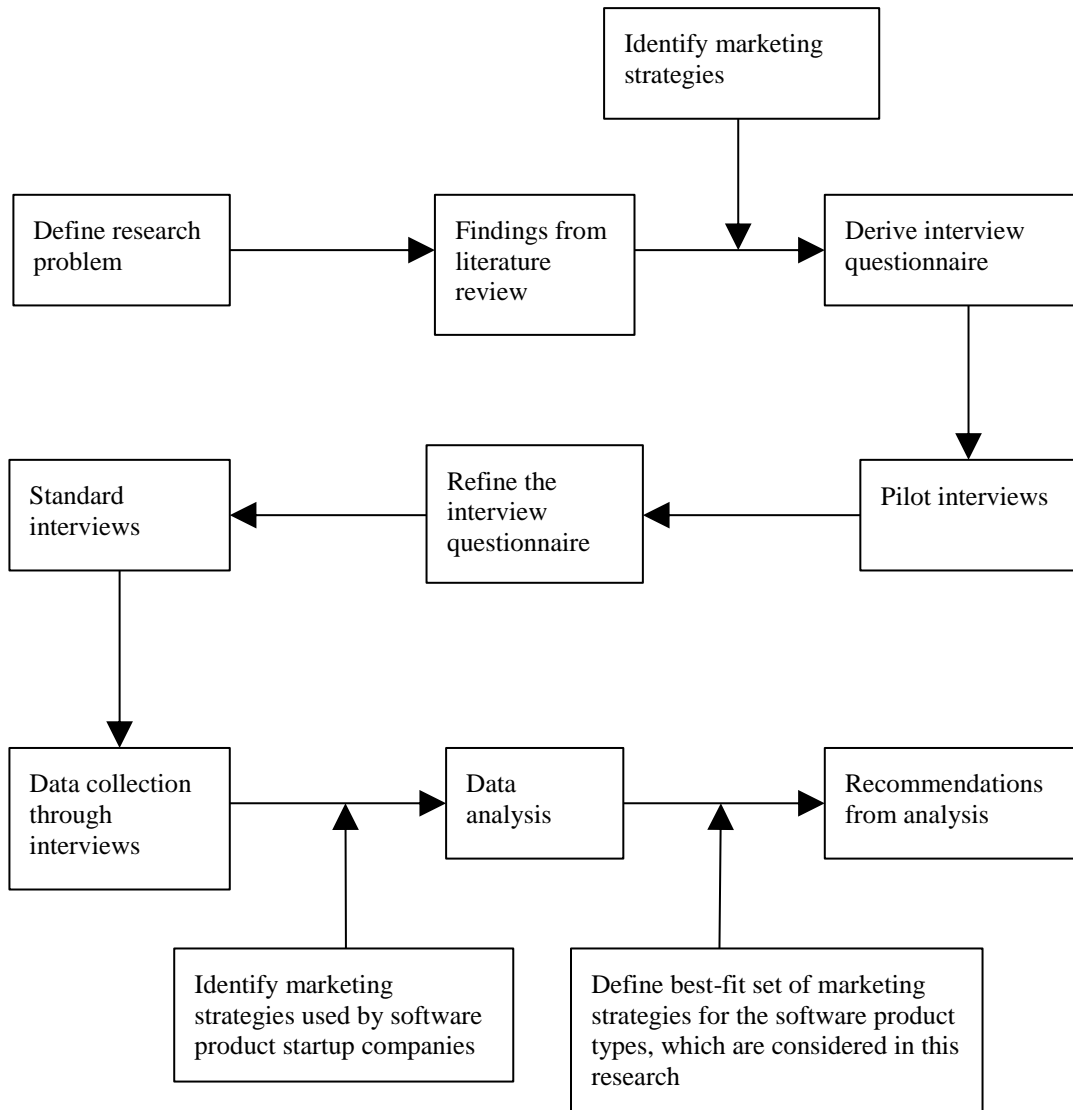
Figure 3.1: Research Approach

Define Research Problem: In this first phase, the research question was formulated according to the current requirement. The research question was defined as "what are the best fit set of marketing strategies which can be applied directly for the software product types(which are considered in this research) of the software product startup companies in Sri Lanka".

Findings from literature review: From this second phase, there are twenty eight literatures have been considered while finding the marketing strategies used by the foreign software companies. The literature review has identified twenty (20) marketing strategies related to software products as findings, which are the most important factors of this research.

Derive interview questionnaire: As per the nature of this study, this is a qualitative research. So the main data collection method is interviews. So in this third phase, the research derived the interview questionnaire with the findings of the literature review and the discussion made with the supervisor. Initially, interview questionnaire consisted questions under two main categories, which are general questions and software related questions. After the discussion made with the supervisor, the question count has been reduced from thirty seven (37) to twenty nine (29), by considering the time constraint and advised to limit it for one hour per interview.

Pilot interviews: The main objective of this fourth phase is for ensuring the interview questionnaire aligns with the research objective and experiencing the interview questionnaire in a real circumstance before conducting standard interview. This would essential to understand about the accuracy level of the questions and how does the questionnaire realistic to limit it for an hour. To grab a better understanding; three (3) pilot interviews have been conducted and each interview consumed almost two hours. All the discussed points have been recorded in written format as the interviewees preferred writings to audio recordings. These records kept for the data analysis, as the same interviewees have not been interested for any another standard interview due to the time constraints. Requesting for permission for an interview has been done via official email and the email template attached in Appendix B.

Refine the interview questionnaire: In this fifth phase, the interview questionnaire has been refined due to the high time constraint. According to the pilot interviews, participants were reluctant to offer two hours' time period for the interview and they were bored at the final stage of this lengthy interview questionnaire. Therefore the interview questionnaire has been refined by removing unaligned questions from the interview questionnaire. Correspondingly, the number of questions has been reduced from twenty nine (29) to twenty (20), by assuming the interview time would be limited to one hour. The refined questionnaire attached in Appendix A.

Standard interviews: For the purpose of focusing on this sixth phase, it decided to conduct at least thirty (30) standard interviews for Sri Lankan software product startup companies for different software product types and required at least five (5) responses for each software product type. Besides from that, this research has been conducted another four (4) standard interviews for success Sri Lankan software product startup companies as well. Forty eight (48) companies have been selected to send requesting emails, so the participants would be received requesting email to attain the permission by asking the date, time and the venue to proceed the interviews. The acceptance emails sent by the participants, which includes the time and venue of the interviews going to be taking part.

With the refinement of the interview questionnaire, the required time has been limited to less than one hour. As per in the pilot interview, the participants were not interested in recording the discussion and they preferred writings. The challenges of this phase are, to get the permission from the participants for interviews, reluctant to publish their marketing strategies as the top managerial employees, visit to suggested venue at the company hours and the time spent for the travel.

Data collection through interviews: In this seventh phase, it focuses on how the data going to be collected through the interviews. For the purpose of future references, it has been kept individual interview questionnaire with the answers for each interviewee. As stated above all the data have been collected in written format. With the experience of the interviewees; some of them are focused on marketing several product types, so it would be beneficial to compare and contrast the marketing strategies for several product types by an individual interviewee. It allows the study to gather more evidence on the marketing strategies.

Data analysis: According to this eighth phase of this study, the collected qualitative data from the interviews were systematically organized and arranged based on the importance. Furthermore the rankings given by the interviewees for the marketing strategies respective software product types have been considered and analyzed for a better outcome in the data analysis. By identifying the marketing strategies used by the software companies would direct to grab better understanding about the relevance and the appropriateness for the software product startups according to developed or desired to develop software product types.

Recommendation from analysis: As the ninth and the final stage of the study, the conclusion and the recommendations takes place according to the findings and the data analysis of the study. This section encloses the best fit set of marketing strategies for the software product types which are considered in this research. So the software product startup companies and success software product companies would grab the beneficial from this study, by introducing best fit set of marketing strategies for their software products. Indirectly, this recommendation will assist on the reduction of the failure rate of the Sri Lankan software product startup companies by reducing the failure rate of the software products.

4. DATA ANALYSIS

Based on the previous chapter, it has been presented the research design and methodology to define the appropriate direction of this research. In this chapter, the obtained results will be presented and the results were obtained by following through the stated steps on the research design for this qualitative research. All the questions in the interview questionnaire will be described, with the perceptions and the consolidated facts of the participants (i.e. interviewees or respondents). Furthermore, this chapter illustrates the usage or the importance of the marketing strategies for the deserved software product types as the key findings of this research which would be essential for the software product startup companies in Sri Lanka.

Cooper, Schindler and Sun (2006) mentioned that, a qualitative study allows the researcher to develop concepts more clearly, to establish priorities, to develop definitions and to improve the final research design.

According to the nature of a qualitative research, this will be used semi-structured interviews for data collection in order to gain perspectives, views, explanations and opinions of the interview respondents. A face-to-face interview or an over the phone discussion will be taken place according to the preference of the interviewee. Few pilot interviews need to be conducted in order to refine the questionnaire and to define the time duration of an interview. The interviews will be scheduled through requesting emails and the interested parties will be asked for preferred date, time and venue. For the future references, the responses will be stored through voice recordings and writings.

4.1   Data Preparation for Analysis

According to the nature of the study, this is a qualitative research and conducting interviews for the marketing professionals, co-founders and chief executive officers (CEO) is the data collection methodology to reach the objectives of this research. Questionnaire refinement was required pilot interviews and that experience was helpful to reject inappropriate questions from the questionnaire. So an interview session was limited to one (1) hour. Standard interviews have been taken place with the refined questionnaire, which includes 20 questions. Respondents had to share their marketing knowledge which needs to be bounded with a software product. There are twenty seven (27) respondents shared their knowledge about marketing strategies and thirty one (31) responses have been collected. The excess four (4) responses were gained through four (4) respondents who shared their knowledge with past experience regarding two (2) software product types. No one has accepted the audio recording and all the explanations were noted in written format. In this research all the questions in the questionnaire have been analyzed according to the explained viewpoints of the respondents.

4.2   Interview Data Analysis

To ensure the reliability of the interview data, research was planned to collect at least five (5) responses for each software product type. Due to the resistance for facing on qualitative study interviews, less than five (5) responses have been collected for some software product types as mentioned in Table 4.1. Mainly the questions in the interview questionnaire have created based on the research objectives, as to identify the perceptions of marketing professionals, co-founders and CEOs regarding marketing strategies, to identify how their software products have been survived within the software market and how does the company survive within the software industry as a software product startup company in marketing point of view. By analyzing the collected data, the research will introduce and recommend best set of marketing strategies for the software product startup companies which are new entrants for the software industry. The individual participant count against their designations is as follows.

- Eight(8) Sale and Marketing Managers

- Five(5) Operating Managers

- Three(3) Co-founders or Chief Executive Officers (CEO)

- Two(2) Chief Operating Officers (COO)

- Nine(9) Marketing Executives

Throughout this research, twenty seven (27) interviews have been conducted and altogether thirty one (31) responses have been collected based on the software products types as some of the respondents in software product startup companies are gained experience in more than one software product type. The notes have been kept separately even for one respondent, if the respondent considered on explaining more than one software product type. As stated within the methodology, four (4) respondents of successful software product startup companies contributed on this research but those are not considered for the analysis, as the main focus of this research is software startup companies. Even though, the stated four (4) responses were contributed to consolidate the gathered data in a reliable manner. Analysis of the responses of the interviewees for the interview questionnaire is as follows.

- *How did you learn marketing concepts? (By you, trainings, workshops, work experience)? Do you think the learned theoretical marketing concepts can be applied directly, while marketing any software product?*

As per the first question of the interview questionnaire, it is considered to obtain the general perspectives of the respondents about marketing. Based on the all respondents, 78% of respondents agreed with the phrase of "learned theoretical

marketing concepts can be applied directly" and 22% respondents shared their views against with the stated phrase.

One of the agreed respondent who is a marketing professional stated that "learned marketing concepts are the basement of my job" and further he illustrated that, even they are well experienced marketing professionals they could not be able to tally their marketing strategies or they could not be able to invent their company own marketing strategies without the learned theoretical concepts of the subject of marketing. One of a co-founder of a software product startup company stated that, he is matured within an IT background and marketing is not his professional stream. Currently he focuses on studying and learning marketing concepts by himself and outsourced marketing consultant is helped him to align marketing strategies with his software product. Furthermore he explained that being a part of this research is appreciated to gain knowledge in marketing strategies, because he has been struggling on introducing or marketing his software product to the global market. So this conclude that some of the co-founders of the software product startups; they are struggling to launch their software product to the market even if they do not have any technological barriers. One of another co-founder stated that, marketing is a philosophy to understand customer mind which consist with the concepts of psychology and sociology and if a person do not learn any concepts of a particular subject he could not be a professional on that stream, he further explained.

One of the opposed respondent stated that, he met several marketing professionals with a marketing degree in depth theoretical knowledge but most of them are failed when they work in practical circumstances. With 9 years of experience in marketing stream, he emphasized that marketing is all about work experience on reading the customers' mind and building customer relationship or interactions. Further he stated that, he always trying to read and watch documentaries of the success stories of software products and that is the only way of learning the practical usage of marketing concepts.

Respondents answered on the sub question of "how did you learn marketing concepts", 41% of respondents stated that they have been learned the marketing concepts through working experience, trainings and workshops. 34% respondents commented that, they are mapping the theoretical marketing concepts to the practical scenarios which have been learned through a degree or a professional qualification. Moreover, there are 25% respondents thoroughly mentioned that they have being in marketing stream without holding any professional qualification. Even though, they could survive within their jobs through the gained working experiences, they highly relied on building customer relationship or interactions through satisfying their customers.

- *How does your company view software marketing concepts and marketing strategies as a whole?*

From among the respondents, 34% stated that, all the employees in their company who aware about marketing concepts and marketing strategies. Among the 34% respondents, two (2) respondents mentioned that the team lead of the technical team

participates for the marketing meeting and the team lead should be responsible for communicate with the technical team to align the deserved marketing strategies with the features of the software product. Product is a concept of a company and marketing team and the research and development team know the exact social needs and wants, therefore the business requirements needs to be traced with the technical team to build the competitiveness within their own products, they further explained. Neutral comments were given by 66% of respondents mentioning that, most of the software engineers concentrate on only the tasks what they assigned to. Moreover, one (1) respondent of 66% of stated respondents stated that the software engineers never make any argument regarding marketing concepts and strategies in software product point of view and this skill needs to be built within their teams for a better outcome.

As startup companies, only 23% respondents stated that they did marketing research before they start the development. Among 23% of respondents, one (1) respondent mentioned that he continues the marketing research even at the middle of the development, to consolidate the social needs and competitor threats. Another one (1) respondent stated that, SWOT analysis for a product is much needed to do, by aligning with marketing strategies use or used with in the software products. The saying of one (1) of marketing executive can be quoted as "thinking about 4Ps of marketing considered with the software product is required and which will be systemized the revenue generation processes through the software product".

As per the 63% of respondents, budget allocation for marketing is considerably low, but the software products require regular promotions to move into the community. Based on 63% of respondents, two (2) respondents mentioned that the top management is always trying to influence the marketing department to carry out the promotions through the social media, but it is just a temporary solution for marketing.

- *Are you aware about the allocated budget for marketing of software solutions in your company?*

Including co-founders, operations manager and marketing managers (71% of respondents) stated that they are responsible to define the marketing budget, and in some circumstances marketing managers need to propose the defined budget to the top management as well. Few respondents (Three (3) of 71% respondents) explained that, they propose the marketing budget at the beginning of the year, however small refinements can be happened due to unavoidable circumstances. The rest of 29% of respondents stated that they are not aware about the allocated budget for marketing, as they are the subordinate staff members including business development executives in marketing department.

- *What are the types of software products that you were/ are responsible for marketing?*

The interviews were conducted for twenty seven (27) respondents and thirty one (31) responses were collected regarding the software product types as mentioned in below Table 4.1.

Table 4.1: Collected number of responses against software product type

Software Product Type	Responses count
Business Application	9
Educational	5
HRM	4
Platform	6
Banking	3
Transport and logistic	4
Total: 6	**Total: 31**

- *What are the challenges/problems you have encountered during the sales and marketing the software products and how does your company overcome those challenges?*

Most of respondents (71%) explained that, the defined pricing model is the most critical problem of a software product. According to one (1) of 71% respondents, it is illustrated that, "company owner needs to sell entire product for unaffordable price to a customer for immediate revenue generation purposes". With the unaffordable prices, the expected level of buying power to purchase the software product will not reach. Even though, the development cycle is completed for one and half (1.5) years, some software products did not attract at least one customer, he further explained. As per his marketing decision, the software product is redesigned as a modularized version to market and sell business modules individually and the prices are more realistic to afford by customers. Another one (1) respondent stated that, the target audience needs to be recognized earlier and the prices should be affordable for them. As per the two (2) respondents of two (2) software startup companies, software marketing plans and strategies were initiated without executing strong SWOT

analysis. Few respondents (one (1) of the two (2) respondents) stated that the SWOT analysis should be considered while designing the software product and during the stage of developing the software product marketing website. According to the 12% of respondents, the companies have not been defined the perfect launch date of the software product and one (1) of 12% respondents mentioned that, the innovative concept needs to be confidential until it launches. With that kind of a circumstance, making early awareness about the software product is not necessary before the end product is on hand, he further explained. Some respondents (4%) stated that, the competitor analysis is not updated timely; hence continuing or renewing the competitor analysis will be a challenge. Further, the saying of "do not select the latest technologies to implement the software product and select the technologies that the development team familiar enough, if not the product delays will occur over the period of time and delay the product launch as well", was mentioned by one (1) CEO. He further stated that conducting a technical feasibility study is compulsory, as a software product requires after sales service through urgent implementations for customer requirements. Therefore the technical feasibility study identifies technological limitations or barriers and proposes the most efficient methods to implement the software products. Among the respondents, few respondents (two (2) respondents) stated that, even though the features of the competitive software products are identical, the software product should be consisted with innovative feature amendments and UX enhancements in future releases or versions.

- *How about your milestones as defined by the company to you (target and duration)?*

Only marketing professionals answered for this question and all the respondents stated that the companies have defined annual targets for them, according to the nature of the company based software product marketing. Most of the respondents (60%) stated that, their company target is to find five (5) customers for the software product. Other 34% respondents stated that, ten (10) customers are needed to be onboard as clients. Remaining 6% mentioned that, their target is to convert twenty (20) customers as their longtime customers.

- *Is it possible for you to achieve each target as the management expected?*

According to the 15% of respondents, if a company allocates proper promotional budget for the software product; they believe on achieving sales targets as management expected. Another 37% stated that, selling a software product is more challengeable with the defined pricing model. Few respondents (4%) explained that, the problem is not critical in the market to resolve with a software solution, which causes to reach individuals to create the awareness. Even though WOM is most powerful in marketing, it does not match with software products and repetitive promotional campaigns which would help to move up through the AIDA model, another 4% of respondents stated.

According to the above limitations within the companies, 30% of respondents stated that, it is not possible to achieve the sales targets as management expected. Neutral comments were given by 52% of respondents on this question. Some respondents (18%) mentioned that, they have the responsibility to achieve targets, and one (1) of 18% respondents stated that, the company expects to reach the targets by selling at least individual modules of the modularized software product.

- *Do you do competitor analysis for your software product/s?*

All the respondents were aware and agreed with this question and 63% of respondents were said "definitely, we do", which is the most reliable answer to express about how they pay attention on their competitors. Remaining 37% respondents stated "Yes" and it shows that all together 100% of respondents thoroughly inspect and examine the competitors who can be threat to their software product. According to one (1) of the respondents, "if any company does a competitor analysis extremely well, the analysis could recognize the gaps of the existing software products and if your product would be able to fill those gaps that is the most crucial factor to compete with the competitors through promoting a less-gaps product by influencing the customers to move with your software product". Furthermore, he stated that competitor analysis would define tactful facts to build rest of the product specific marketing strategies and plans.

- *If there is a competitive software product exists in the market already, how do you compare it with your software product/ how do you do a competitor analysis?*

Most of respondent (82%) stated that "mystery customer" is the best way to do a competitor analysis through a free trial of a product. In order to analyze all the features of the product, 8% of respondents mentioned that they have purchased the commercial products to inspect the features, gaps and its pricing model. Some respondents (12%) stated that, they acknowledge their analysis through internet surfing and online customer reviews whenever possible.

As per 45% of respondents, it is important to conduct professional marketing research to the individual personal to gather their needs and wants through a software product. Moreover, 19% of respondents stated that the individual personals are the best as researchers, as they dig in to deeper to find out best fit software products which could fulfill their requirements. Through this kind of a marketing research, the company could gain information about price, quality, and customer interactions regarding competitive software products. Few respondents (4%) mentioned that the sales brochures of a competitive software product provides the wealth of the product information such as how the competitor is positioning their software product, and what are the features they are using to market or sell their product

- *Are you able to identify missed features and UX (i.e. User Experience) aspects in your software products compared to the competitive software products?*

Most of the respondents (82%) stated that, they have the ability to find out missed features and UX aspects when compared to other competitive software products. Among 82%, four (4) of them mentioned that, they had training sessions regarding the software products once they recruited to the software company. Another two (2) respondents explained that, software startup company with a less number of employees, all the employees have been involved for the product outcome from the beginning to the end, and therefore, they could be able to mature with some technical aspects as well. One (1) of the marketing executive stated that, they should have some technical knowledge as some of the customers would be questioning about some technical aspects. Therefore the marketing professionals in software industry should have the considerable amount of technical ability to identify the features and UX improvements in competitive software products when compared to their software products, he further illustrated. Neutral feedback were given by 18% of respondents since they have less ability or skill to identify missed features and UX aspects, and they expect to gain the required skill once they are gathering working experiences.

- *Do you have the ability to contact directly the development team to encourage them to add innovative and marketable features to the software products? If yes, how do you provide consultancy for the development?*

As software startups, 67% of respondents stated that they have the opportunity to contact the development team directly and encourage them to add innovative and marketable features to the software products. Among the agreed respondents one (1) mentioned that, he trusts or believes on their sustainable users and their new requirements are more sustainable and value addition to the entire software product. Marketing department will further analysis about the necessity of the new requirement and move it to the development team as it gains a significant value addition to the entire software product, he further illustrated. Another respondent mentioned that, if it is a marketable feature which is highlighted by the customer end and customer meetup is required to gain the actual requirement by the team of the software company which should include marketing professional, development team lead and business analyst. Few respondents (two (2) respondents) highlighted that, with the relevance of the regular feedback of the customers, they have privileged to convince and influence the development team directly.

Opposed feedback was given by the 33% of respondents, since it is a long process to push an innovative feature or new feature to the development team directly. They mentioned that, they have to communicate and convince the development team though a presentation about the new amendment of the software product. Hence, it should be further analyzed and should assure that it is a sustainable feature for a long run of the software product. Among the opposed respondents one (1) stated that, as a software startup company this kind of a structured process essential, however he

appreciates if he could bypass those procedures to provide an immediate response or service to the customers by serving with a solution for their urgent requirements.

- *Explain your opinion against the below stated marketing strategies according to their importance for any software product type (Yes / Somewhat / No).*
  - o *Channel*
  - o *Price*
  - o *Promotion*
  - o *After Sales Service*
  - o *Demonstration*
  - o *Advertising*
  - o *Social Media*
  - o *Develop strategic partnerships with external websites*
  - o *Traditional media*
  - o *Beta test*
  - o *Freemium model/ free trial*
  - o *Search Engine Optimization(SEO)*
  - o *Frequently Asked Questions(FAQ)*
  - o *Discussions (groups/ forums)*
  - o *Include a video of how software products and company works*
  - o *Include product into feature/benefit comparison website/tables*
  - o *Third party reviews*
  - o *Expand the strategic partnership and develop affiliate marketing program*
  - o *Customer interaction*
  - o *Provide complementary software solutions*

Table 4.2: General perceptions about the importance of the marketing strategies for any software product type

Software marketing strategy	Yes	Somewhat	No
Channel	11%	48%	41%
Price	89%	11%	0%
Promotion	93%	7%	0%
After Sales Service	100%	0%	0%
Demonstration	71%	22%	7%
Advertising	7%	12%	81%
Social Media	74%	19%	7%
Develop strategic partnerships with external websites	19%	34%	47%
Traditional media	0%	7%	93%
Beta test	4%	12%	84%
Freemium model/ free trial	89%	11%	0%
Search Engine Optimization(SEO)	78%	15%	7%
Frequently Asked Questions(FAQ)	11%	19%	70%
Discussions (groups/ forums)	7%	12%	81%
Include a video of how software products and company works	89%	11%	0%
Include product into feature/benefit comparison website/tables	19%	30%	51%
Third party reviews	85%	15%	0%
Expand the strategic partnership and develop affiliate marketing program	30%	45%	25%
Customer interaction	100%	0%	0%
Provide complementary software solutions	34%	48%	18%

Table 4.3: Importance of the marketing strategies against software product type

Software marketing strategy	Business Application (9 responses)	Educational (5 responses)	HRM (4 responses)	Platform (6 responses)	Banking (3 responses)	Transport and logistic (4 responses)
Channel	67%	40%	25%	0%	0%	25%
Price	100%	80%	100%	84%	67%	75%
Promotion	89%	100%	75%	67%	34%	75%
After Sales Service	100%	100%	100%	100%	100%	100%
Demonstration	100%	100%	100%	100%	100%	100%
Advertising	23%	20%	0%	0%	34%	0%
Social Media	89%	80%	75%	17%	34%	50%
Develop strategic partnerships with external websites	34%	20%	25%	34%	34%	25%
Traditional media	0%	20%	0%	0%	34%	0%
Beta test	12%	60%	50%	84%	34%	25%
Freemium model/ free trial	100%	100%	100%	67%	100%	100%
Search Engine Optimization(SEO)	100%	100%	100%	34%	34%	75%

Software marketing strategy	Business Application (9 responses)	Educational (5 responses)	HRM (4 responses)	Platform (6 responses)	Banking (3 responses)	Transport and logistic (4 responses)
Frequently Asked Questions(FAQ)	23%	20%	0%	17%	0%	0%
Discussions (groups/ forums)	12%	20%	25%	17%	34%	25%
Include a video of how software products and company works	78%	100%	100%	84%	100%	100%
Include product into feature/benefit comparison website/tables	45%	0%	25%	34%	0%	25%
Third party reviews	100%	100%	100%	34%	67%	100%
Expand the strategic partnership and develop affiliate marketing program	23%	20%	25%	67%	0%	50%
Customer interaction	100%	100%	100%	100%	100%	100%
Provide complementary software solutions	78%	40%	25%	50%	67%	50%

- *What are the marketing strategies you have been using and you would initiate to use in the future, which related to your software product (clearly mention from the above list)?*

Table 4.4: Marketing strategies have being using and use in the future against software product type

Software marketing strategy	Business Application (9 responses)		Educational Application (5 responses)		HRM Application (4 responses)		Platform Application (6 responses)		Banking Application (3 responses)		Transport and logistic Application (4 responses)	
	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use
Channel	56%	23%	40%	20%	25%	25%	34%	0%	34%	34%	25%	25%
Price	67%	33%	80%	20%	50%	50%	67%	17%	34%	34%	25%	50%
Promotion	89%	11%	60%	40%	25%	75%	34%	34%	66%	34%	50%	50%
After Sales Service	89%	11%	100%	0%	75%	25%	100%	0%	100%	0%	100%	0%
Demonstration	66%	34%	80%	20%	25%	75%	34%	66%	66%	34%	50%	50%
Advertising	12%	23%	20%	60%	0%	50%	0%	0%	0%	0%	0%	0%
Social Media	100%	0%	100%	0%	75%	25%	0%	34%	34%	0%	25%	75%
Develop strategic partnerships with external websites	0%	34%	0%	60%	0%	25%	17%	34%	0%	0%	0%	0%

Software marketing strategy	Business Application (9 responses)		Educational Application (5 responses)		HRM Application (4 responses)		Platform Application (6 responses)		Banking Application (3 responses)		Transport and logistic Application (4 responses)	
	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use
Traditional media	0%	23%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%
Beta test	0%	34%	0%	40%	0%	25%	17%	67%	0%	0%	0%	25%
Freemium model/ free trial	34%	34%	20%	40%	0%	75%	0%	0%	0%	34%	25%	25%
Search Engine Optimization(SEO)	89%	11%	100%	0%	50%	50%	17%	34%	0%	34%	25%	50%
Frequently Asked Questions(FAQ)	23%	56%	0%	40%	0%	50%	0%	0%	0%	0%	0%	25%
Discussions (groups/ forums)	12%	45%	20%	20%	0%	25%	0%	0%	0%	0%	0%	0%
Include a video of how software products and company works	34%	66%	60%	40%	75%	25%	34%	34%	66%	34%	75%	25%
Include product into feature/benefit comparison website/tables	0%	34%	0%	40%	0%	25%	0%	17%	0%	0%	0%	0%

Software marketing strategy	Business Application (9 responses)		Educational Application (5 responses)		HRM Application (4 responses)		Platform Application (6 responses)		Banking Application (3 responses)		Transport and logistic Application (4 responses)	
	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use	Have being using	Will initiate to use
Third party reviews	22%	78%	20%	60%	25%	75%	0%	0%	0%	34%	25%	75%
Expand the strategic partnership and develop affiliate marketing program	0%	23%	20%	20%	0%	50%	0%	17%	0%	34%	0%	50%
Customer interaction	89%	11%	100%	0%	100%	0%	83%	17%	100%	0%	100%	0%
Provide complementary software solutions	0%	23%	20%	40%	0%	25%	34%	50%	0%	66%	0%	75%

- *What are the tactics or strategies you have been using to convert visitors to customers? How do you create the need of the software product on customers mind?*

Majority of the respondents (86%) stated that, for a software product, the most challengeable phase to convert first set of visitors to customers or find first set of customers. Even the product is innovative or non-innovative, one and only challenge is to find sustainable customers; one (1) of marketing professionals further stated. If it is an innovative software product, the hardest aspect is to build awareness and if the software product is non-innovative the marketing strategies need to be aligned not only for the product, but each individual feature needs to be aligned, he further explained. Few respondents (two (2) respondents) assured that extended free trial versions, inbuilt chat system for support services, and bugs free products are critical factors to convert the customers to sustainable users. Another one (1) respondent additionally highlighted that, easy to use of a software product is a double plus point and system should have the ability to track or analyze the pattern of using or most frequently used happy paths and the software product should have the ability to prioritize them further. Online advertising in related blogs and websites is another way of building awareness of the software product, he further explained. Another one (1) of marketing executive stated that, they have the responsibility to find the reasons for "why that user reject our product or left from our product?" if any rejection occurred from the user. If they could find the reasons for that question, software product could cater a better solution for the next customers. As a software startup company, the phrase of "we always be with you" needs to be added into their vision and 24/7 support service is required to cater a better service to the customers, he further described.

Some respondents (14%) stated that, as marketing professionals, they should have the ability to sell whatever a software product through the best fit marketing strategies. Among the 14% respondents one (1) stated that, "there is no more software product which is bug free and cater with most essential features and definitely there are so many gaps in the software products. Filling those gaps with efficient solutions is the plus point to compete with other products and build comparison awareness with products is much needed".

- *Do you consider customer feedback and customize the existing software product as the customer expected?*

Most of the respondents (78%) said "yes" and "definitely" to express their positive attitude regarding this question. Among the agreed respondents, two (2) stated that, once the software product has been launched, customer service is the next critical factor for a long run. Another one (1) respondent stated that if a software company maintains customer relationship as after sales services, they need to consider the customer feedback and customize the existing software, only if the new customer requirement is a value addition to the software product. Few respondents (three (3) respondents) stated that, at the initial stage of marketing the product, customizations should be taken place to grab customers by satisfying their needs and wants. As

software startup companies, they are struggling to create sustainable users and the first set of customers are the most critical to keep them as sustainable users of the software products. Neutral feedback was given by 22% of respondents, since they are developing their software product and not yet introduced to the community. In addition to the agreed respondents' comments, another two (2) respondents said that they are trying to reach customers with the beta versions or prototypes of the software products during the development stage to gain feedback about new customer requirements, since it will be efficient to consolidate and push the new requirements for the developments as customers expected.

- *Have you marketed software products that are innovative in the market at launch time? Are those software products got success? What are the strategies you have followed?*

Few respondents (12%) who are experienced marketing executives stated that they are experienced with marketing innovative software product. At the launching time the innovative software product had a monopoly market, further they explained. Out of 12% of respondents one (1) got success with innovative software product and he described that building a benchmark for the innovative software product is much needed before it creates competitors. Social media marketing is the best way to make awareness which could create the requirement on customers' mind about the software product. At the same time marketing website for the software product is essential and which should be search engine optimized so then customers could find the software product easily. Furthermore, the company website and software product marketing website needs to be correlated with each other, as it could obtain a goodwill and reputation to the software product startup company through the success software product. As per the promotion perspective, exhibitions can also provide a direct route to customers, particularly for business-to-business marketing. Moreover, direct mail can notify selected list of customers and prospects as the costs of designing, printing and mailing of sales brochures can be high. However, it can be a useful tool for businesses, if those were built around high sales volumes. In addition to stated marketing strategies, he concluded that to involve less risk and investment, continually offering added value for software products with small improvements rather than launching major new innovations which could help to maintain the market share.

Majority of the respondents (88%) stated that, they did not have any experience in marketing innovative software products, but three (3) respondents stated that if any startup company concentrate on building awareness, creating requirement on customers' mind and offering reasonable prices would expand the market share for the innovative software product.

- *Does your company have its own marketing strategies?*

There are 82% of respondents who agreed on this question and two (2) of the agreed respondents explained that, even though they built their own marketing strategies but the other software companies could be imitated and introduced that same marketing strategy as their own. Neutral comments were given by 18% of respondents, as those companies accompanied with unstructured marketing strategies and some of the companies did not define their own marketing strategies yet.

- *Do you follow any marketing plan within the company?*

Most of the respondents (74%) agreed with the question and they have been used a marketing plan to reach their customers. Few of them (three (3) respondents) stated that the marketing plan is redefined weekly and it happens on Mondays. Further they explained that, marketing plan is useful in order to understand whether the business meets the need of the target market or not. Neutral comments were given by 26% of respondents, as some of the companies are still developing their software products and they are wondering on how to initiate a marketing plan since they are in the developing stage.

- *Do you ensure that, marketing strategies/ processes/ plans of yours to be different /unique from other software product types/companies? Why?*

Positive feedback was given by 93% of respondents for this question and they said "yes" and "definitely" to express their positive attitude. Among 93% respondents three (3) stated that, not only software marketing strategy but also any marketing strategy should deviate from company to company and from product to product. To consolidate the above statement one (1) respondent stated that "the preferred way to move educational applications to the community through social media, but HRM application prefer demonstrations and extended freemium model". Neutral feedback was given by 7% of respondents, because they could not be able to provide exact answer without comparing marketing strategies of other software startup companies. Among the 7% of respondents one (1) stated that, even though the marketing strategies are unique for the company or product type, all marketing strategies are built on same marketing concepts.

Few respondents (4%) consolidated that differentiation of marketing strategies, processes and plans help the products to stand out in the marketplace. It would be important to be unique, if the product is very similar with other competitive software products. Further, they stated that an effective differentiated marketing strategy gives customers a reason to buy the product with the benefits of the product that the customers may not be aware of.

Several types of marketing strategies were introduced by one (1) of a marketing executive among the selected interviewees. According to the concept of pricing strategies that attempts to position the product, pricing strategies can be classified as low price alternative or high price strategy where it can be used to create a perception

of prestige. A product strategy emphasizes a large selection or products with additional features. For a superior service, customer service strategy is a value added prospect to the software product, further he explained.

- *If you start your own software product company how do you stabilize it with in the industry in marketing point of view(as an example:- implement the software product first and launch the software company second or launch the software company first and implement the software product second)?*

According to the nature of this question, that has been applicable only for twenty four (24) of respondents, as the rest of them are co-founders or CEOs. Among the twenty four (24) respondents, 63% stated that, they will implement the software product first, before they launch their software company as a startup. Another two (2) of 63% respondents commented that, prestige of a software product will maintain the goodwill of the software company as well. Therefore, the company owners could make awareness and popularize the company name within the software industry through a best software product, they further explained. According to one (1) of 63% respondents stated that, "through an innovative software product, company owners could gain high market share if it fulfills a real need of the society". Another one (1) of 63% respondents illustrated that, it will be a value addition for the software product if it has its own marketing website which should link with the company website bi-directionally, so this could improve the awareness of both software product and software startup company simultaneously. Through social media marketing, it could initiate the marketing aspects for both software product and the company to keep the awareness, he further explained. "The clients refer and consider the company portfolio while purchasing the software product, so the portfolio has to be consist with at least one or two small projects, so the client trusts on the credibility and the technical competency of the software startup company", one (1) of 63% respondents stated.

Some of the respondents (37%) mentioned that, they will launch their software startup company with a concept of a software product. Another one (1) stated that, "the challenge of this method is, convincing the investors to cooperate with the proposed startup as the investors might not trust on the feasibility study of the concept of a software product, mainly about financial feasibility and other feasibility factors". Another one (1) of 37% respondents stated that, the company name could be marketed via a standard software product which has to be bugs free with high UX.

5.   RECOMMENDATIONS AND CONCLUSION

This study suggests best fit set of marketing strategies for software product startup companies in Sri Lanka. Software product companies which are in startup stage and who are willing to enter the industry will gain the benefits from this research. This chapter explains the research findings, recommendations, research limitations and future research areas.

5.1   Discussion of research findings

As stated in the research methodology, the data collection has been done via face to face interviews and the interviewees had been answered for an interview questionnaire. Most of the respondents shared information beyond the boundaries for questions of the questionnaire. Those explanatory answered will be considered as comparative evidence for other respondents' direct answers. According to the main focus of this research, this section describes the best fit set of marketing strategies for the software product startup companies in Sri Lanka.

According to the last question of the interview questionnaire, majority of the respondents stated that marketing the software product company through a best software product will keep the prestige and the goodwill of both the company and the product. Further they stated that, by introducing the software product to the industry first and with the success of it, that marketing strategy is more effective to launch the software company with in the software industry. Therefore, software product marketing strategies are the most critical factors to be success on both the software product and the software product startup company.

Table 4.2 consolidates general perceptions of twenty seven (27) respondents regarding the importance of the marketing strategies for any software product type. By analyzing the numbers, Table 4.5 illustrates the descending/best order of the marketing strategies based on the value of "Yes % + Somewhat %" according to the respondents' general perceptions against marketing strategies.

Table 5.1: Descending/best order of value of "Yes % + Somewhat %" according to the respondents' general perceptions against marketing strategies

Software marketing strategy	"Yes %" + "Somewhat %"
Price	100%
Promotion	100%
After sales service	100%
Freemium model/ free trial	100%
Include a video of how software solutions and company works	100%
Third party reviews	100%
Customer interaction	100%
Demonstration	93%
Social Media	93%
Search Engine Optimization(SEO)	93%
Provide complementary software solutions	82%
Expand the strategic partnership and develop affiliate marketing program	75%
Channel	59%
Develop strategic partnerships with external websites	53%
Include product into feature/benefit comparison website/tables	49%
Frequently Asked Questions(FAQ)	30%
Advertising	19%
Discussions (groups/ forums)	19%
Beta Test	16%
Traditional media	7%

As per Table 4.3, it explains importance of the marketing strategies against software product types for different number of responses. Moreover, Table 4.4 condenses about the usage of marketing strategies against the software product types. The respondents agreed on either "been using" or "will initiate to use" according to Table 4.4.

According to Table 4.5, ten (10) marketing strategies have been selected and compared with the values of Table 4.3 and Table 4.4 as stated below.

- Price

This strategy is identified as one of the most important software marketing strategy according to Table 4.3 and Table 4.4. As any other products manufactures (i.e. any other product except software products), software product startups also need to be consider pricing strategies on their software products as customers are highly price conscious on their purchases. Some of the software products types like banking applications pay less awareness on pricing strategies when compares to other software product types. Because, the purchase audience is banks and there is high potential to use skimming pricing strategy for the banking applications. Furthermore, software products like banking applications, all the modules of the application are tightly interrelated and it is not effective to introduce prices to individual features (i.e. set different prices for features of the software product).

- Promotion

Promotion is one of another most important software marketing strategy due to the acknowledgements given by the respondents under Table 4.3 and Table 4.4. Price and Promotion are the factors of 4Ps marketing mix strategy. As marketing professionals of the software products, the main responsibility is to promote their software product by building the customer awareness. Promotions are focused on how the software product company converts the visitors to their customers through their software products. The respondents stated that, they have been focusing on several promotional strategies in different stages of the software product and that is the best way to rebuilding the customer awareness time to time. According to banking applications, only 34% of respondents stated about its importance according to their own perceptions through Table 4.3. But according to Table 4.4, 100% of the respondents of banking applications mentioned that, their companies have been using and will initiate to use this software product marketing strategy.

- After sales service

According to the Table 4.3 and Table 4.4, the all respondents extremely considered on after sales service of software product. Furthermore, they have recommended to offer twenty four by seven (24/7) after sales service to the customers, because they

believed and guaranteed that they would build solid connection between customer and the software product company this marketing strategy. Moreover, they have stated that, any customer expects trainings, maintenance, both general and technical support and cost effective and reliable after sales service. This marketing strategy is really helpful to the customers to stay with the software product till they leave it. The respondents further stated that, if the software product company offers high reliable after sales service for a software product, that would be manageable even with any defect in the sold software product. As per the nature of software products, the enhancements and feature developments would not be lasts like software projects, so the frequent feedback and the new requirements of customers are really essential for a software product for enduring in a long time of period.

- Freemium model / free trial

According to Table 4.3, respondents based on five (5) software products stated that, any customer expects free trial period before they purchase the software products. So they 100% agreed with this software marketing strategy except platforms. Two (2) of platform based respondents mentioned that, it is not effective to offer a free trial period because the customers could not be able interact with a platform directly as it provides an infrastructure for another product.

As per Table 4.4, business, educational and HRM applications are focused on moderate use of this software marketing strategy. Through this software marketing strategy, the software companies could find missed but high appropriate features which need to be implemented in the software products. In addition to that, it covers UAT through other personnel so it recognizes defects and new user patterns of using the software products; the respondents of stated three (3) software products elaborated.

- Include a video of how the software products and company works

According to Table 4.4, above marketing strategy was gained maximum 100% value for all software products. All the respondents of six (6) software products 100% agreed to use this software marketing strategy for their software products according to the calculation of the value of "been using" and "will initiate to use" for all the software products.

As per Table 4.3, one (1) respondent of platform based company was mentioned that, due to the nature of platform product there is no front end user interfaces to define features in a software product video. But as software product company they could be able to create and publish a video to define company portfolio with success stories and culture of it, he further stated.

- Third party reviews

According to this software marketing strategy, it is most reliable method to find another customer. A rich content of a third party review would be impacted on converting visitors to customers, which illustrates through Table 4.3 and Table 4.4. As per the perception of the importance of this marketing strategy, there are four (4) software products were gained 100% and platform and banking applications were gained 34% and 67% respectively. In order to describe the stated low values; one (1) of the respondents was further mentioned that, publishing a marketing web site for this kind of software product is not essential but software company could build their goodwill and their prestige with a reliable software product through this software product marketing strategy.

- Customer interaction

According to Table 4.3 and Table 4.4, this software product marketing strategy gained 100% for all the software products. Because, the software product companies are highly rely on customer interaction with customer satisfaction. Two (2) respondents stated that, even if the software product does not entirely robust and reliable, the solution provider could be able to bind the customers with their software product through regular customer interactions.

- Demonstration

As per Table 4.3, all the software product types were gained 100% of positive feedback about the importance according to perception of the respondents. The respondents further stated that, "Demonstration is not applicable only for software product, but it can be applied for any product in any manufacturing company". According to Table 4.4, all together 100% of respondents stated their companies have been using and will initiate to use this marketing strategy for their software product success.

- Social Media

As mentioned in Table 4.4, four (4) software product types have been using or will initiate to use social media as a software marketing strategy except banking applications and transport and logistic applications. All the respondents based on stated four (4) software product types, concluded their usage level of social media as 100%. One (1) of those respondents, he shared his personal opinion like social media marketing is not much applicable for software products and it could not reach the marketing expectations of software product companies. Even though his marketing department has to conduct social media marketing with the influence of the top management and top management believe that they could build awareness of the software startup company, while marketing their software product through social media.

According to platform and banking applications, the respondents less focused on using social media because they believe on they could not reach target audience through this marketing strategy. They further stated that social media is not essential for any software product, but social media marketing can offer positive impact on software services like SaaS, PaaS, etc. As per Table 4.3 their perception of importance of social media on software products is low, except business, educational, and HRM applications. The respondents based on business, educational, and HRM further stated that; LinkedIn and Twitter are the most effective social media marketing services for software products. Because those social media have been reached the expected target audience, hence it is more effective to build the awareness of the stated software products on their target groups. Facebook, Instagram, Pinterest are less appropriate on software products to use as social media marketing. In addition to that, email marketing is another effective method to build awareness on individuals by targeting the exact customer groups.

- Search Engine Optimization

According to Table 4.3 and Table 4.4, search engine optimization was gained highest value of 100%. In fact, the awareness of marketing professionals on this software marketing strategy is high. The usage values for platform and banking applications are critically low, and the important level against the respondents' perceptions is also low according to the Table 4.4 and Table 4.3 respectively. Because their target audience is considerably small and they are high end customers. So the customers would not surf internet to find any software product which is match with high end requirements through search engines like Google, Yahoo, Bing and etc.

5.2   Recommendations

As per the gathered data from the qualitative interviews, this section describes the views and recommendations of the respondents regarding the selected software product marketing strategies.

5.2.1   Price

As per the most of the companies in different industries, pricing takes part a central control in the strategy even in the software companies as well. Pricing directly determines the current turnover and how the turnover fluctuates in the long run. However, the reputation of the company and the customer relations are at a risk, in case of erroneous pricing decisions. Even though the traditional pricing concepts cannot be easily applied to software products, because the economic rules of software industry are fundamentally different to other industries. As per the varieties of the products in other industries, software products are also offered and obtained in

various ways. Today in the software industry we can observe an increasing trend towards on-demand solutions than traditional on premise software.

While designing a pricing model, it should consider the characteristic of the selling product and the market conditions of the respective industry. When it comes to software product, it is a digital good. Hence the economic theory of the digital products initializes the development of pricing strategies for the software providers. Some of the characteristics of the software products are, fulfills identical needs through same quality of different vendor products, modifies with minor changes by allowing the software product to be cost-effective and copying is possible for the software products without a loss of quality at low cost. However, the stated characteristics are not perfectly aligned with all of the software providers' products.

Initially, a software product usually intended to high fixed costs for the software provider and significantly variable costs incur once the support and service started. For an example, software providers have to look into each instance of the software product which includes the hosting and support services besides software provision. Furthermore about the software products, the actual value can be assessed by the customer only after it is purchased.

To establish a pricing strategy for the software product startup companies, following facts have been explained by the interview respondents as recommendations and verified through the literature reviews.

Initially the software companies have to be settled with the level of prices by determining which needs to be laid down with the software product. Following approaches should be considered when determining the pricing levels.

- Cost based price determination - This form of price determination is important for software products because of their special cost structure compared to other industries. This approach is not suitable for the software products which provide software licenses. In contrast, price determination based on costs can make good sense for SaaS.

- Demand based price determination - According to this pricing approach, software provider evaluate that the appreciation of the existing customers towards the software product instead of the cost of software product.

- Competitive based price determination - As per the nature of this pricing approach, software product prices have to be aligned with the prices of the competitive software products. The customer attractiveness towards the software product from competing software products depends on the similarities of the product and market structure among others.

According to the nature of the software industry, it is crucially important for the software providers to obtain a large market share for their software products. Therefore, competitive pricing plays an important role for software products in addition to demand-based pricing.

When designing software pricing models, software companies should consider on two options; either the customer makes a single payment and obtains perpetual rights of use for the software or the pricing model requires regularly recurring customer payments. And also the combination of both of the above stated variants is possible. Modern software payment method is software licensing, which allows the customers to use the software temporarily with unlimited rights. While designing of regularly recurring payments, software companies should consider about the subscription price, payment frequency and payment duration for using the software. Above pricing model is particularly used by SaaS solutions, where the software products consist with the feature of online subscription payments while using the software. According to the customer's perspective, this pricing model provides benefit for the customers to use the software product for short periods as a subscription payments are usually less than a single payment for a software license. Moreover, also hybrid forms of single and regular payments are possible. When it comes to software licenses, they should link to software maintenance contracts as well.

It is common to purchase a software license which is linked to a software maintenance contract. This usually guarantees annual payments in the amount of a fixed percentage of the license payment. This model has the advantage for the providers that payments will flow relatively steadily.

One of the best pricing model determination technique is assessing the software product through per user utilized time. The utilized time is strongly linked with how the customer has been impressed with the software product over the payment which they made, and that has to be fair.

By considering the assessment of the software product, software providers will divide the software into two (2) main component categories, such as usage-independent and usage-dependent. With regard of this, software providers could consider pricing components separately. In the sense of usage-independent components (such as concurrent user, server, master data, etc.), the customer has to be paid basic amount for a short period to cover the fixed and variable costs of the software product. For usage-dependent components (such as number of transactions, memory requirements, software usage time), the customer has been pushed to pay for the indirect cost like storage capacity. According to the interviewed respondents, they recommended that software companies could yield significant profit through the use of two price components compared to a pricing model with only one price component.

Another parameter of software pricing is; offering the same products to different buyers at different prices. When compared to a pricing model with a standard price, the software provider identifies about the customers' willingness to pay for different product benefits. Therefore the software provider realizes higher total turnovers by differentiated prices. This approach is called as price discrimination, which allows selling software products to customers with a lower willingness to pay due to low variable cost of the software products. Moreover, the simple and less cost modifications of the software products promote the application of these pricing strategies. Software companies practice price discrimination approach as follows.

- Customer receives a price offer in the amount of his/her willingness to pay. But the implementation of this type of price discrimination is difficult in software industry, due to software providers' lack of knowledge about the willingness to pay of every single customer.
- Customer self-selection allows the customer to decide which product-price combination is suit best.
- Software providers change the average price per unit according to the total quantity purchased. This approach is widely used for software licenses, especially for key accounts.
- With the usage of the software products, the customers raise new requirements or customizations as change requests. These product variants are offered at different prices with the concept of software product versioning. Software product owners have the ability to be profitable from the different versions of the software products as a result of their cost structure. As a practice in software product industry, software product owners initially develop high quality and extensive product before removing certain features in order to be able to offer different versions to the customers.

There are two (2) main significant pricing strategies have been recommended by some of the respondents, which are penetration strategy and follow the free strategy. The penetration pricing strategy is especially important for software product startup companies as they are the new entrants for the software product market and there could be have a several number of existing software solution as alternatives. At a future stage, the owners of the software product startup companies could gain the ability to increase the prices of their software product, once it finds the expected customer base. Within the customer base, at least the first five (5) customers should be declared as their loyal customers and the software product should have the ability to serve them with special benefits when compared to other customers. Customers will receive the software product free of charge, in the case of follow the free strategy. The objective of this pricing strategy is to create a lock in effect on customers' side in order to generate revenues in the future through complementary software products or premium versions(i.e. software product owners will be offered their software products free of charge and some of the associated services like installation, trainings, maintenance and customizations will be charged).

5.2.2 Promotion

Under promotional strategies for software product startup companies, co-founders should focus on the growth of their innovative software product rather than the growth of their software product company. The co-founders have to promote their innovative concept for their funders (i.e. investors), if they exist. The initial discussions should bind with the growth of the software product and its market share. Once the co-founders realize that the software product could gain a considerable amount of market share, then they could launch software product startup company with a high reputation and they would promote their software startup company through their software product.

As a software product, direct marketing should be the first step of promotional campaign. Advertising should align with the direct marketing operations to build the awareness towards the software product and the software company. Public relations are also a significant promotional strategy, but it's not appropriate for the software product startup companies until they reach the break-even point through the software product.

As a software product, the best promotional channel is WOM. So, talking about the software product and website are important opportunities to encourage customers to spread the word. Any product has a potential to spread out its good will, if it addresses exact market requirements. If the software product is an innovative, the owner should standardize it within the marketplace to stabilize and to compete with other alternate software products. Another strategy goes under WOM is, make sure that all employees know well about the business and business website in order to have a strong performance and to support the WOM. It can work both positively and negatively, like misleading the customers through software product would cause on the business negatively.

5.2.3 After sales service

After sales service of software products ranges from online self-help to intensive customer trainings. The vendor should see after sales support as a means of assisting the customers to gain the most benefits from their original purchase. That is, to enable the vendor to assist the customer to make the best use of the product or service, solve their needs or problems real-time and enhance the customer experience.

With the lack of UX (i.e. User Experience), many software products are not that simple or obvious to use and customers often need support to take advantage of the various features and functions of it. So the customers are willing to have updated user manuals, help desk support, online videos, case studies and user classes to assist customers to learn how to use the software products or to apply them to specific circumstances. In most cases, these support facilities have to be provided free of charge but those which provide training or support beyond the basic usage of the product are normally fee based, which should be clearly mentioned in the pricing model of the software product.

Software product vendor should analyze their customers individually, in order to understand the customer perceptions and smartness towards software product. Therefore the after sales service or support has to be vary depending on the customer awareness upon the software product. By providing a range of support options, is key to ensuring customer satisfaction, even if fee based.

After sales support is an important for customer relationship building. A customer who is engaged through the after sales program is connected to the vendor, and periodically reinforces the original purchase decision. Software product vendors should have the ability to build a positive mindset towards their software companies,

through 24/7 positive support experience. With the positive mindset, the customers will be provided new feature ideas to the software vendors, which are market potential requirements for the software product.

It is compulsory to inform the customers or the users at least two (2) weeks before about the date and time when the software product is unavailable to use, if the software vendors intended to do maintenance of the software product.

5.2.4 Freemium model / free trial

Offering a freemium model / free trial for a defined and limited period of time or quantity is a good marketing strategy for a startup company or a startup product. If the startup company has a significant level of confidence, free trials can be used to enter into the industry and boost up the confidence level.

Advantages of offering free trials can be listed as follows;

- Creates an impression on the stakeholders that the startup can be trusted.
- Provides an opportunity to customers to compare the product and have a better understanding on the company.
- Using free trials makes customers to have the product as its necessity in their mind set.

To acquire the above mentioned advantages free trial should have the following characteristics;

- Trial period should be fair and standard.
- If the product requires the functionality of external system or service, it should be automatically disabled after the expiration of the trial period.
- After disabling the product, thank you message should be displayed and purchasing options should be given to the customers to proceed further with the system.
- Free trial should not incur high cost to the startup company.
- If the free trial incurs high cost, provide the product only for the potential customers.

When offering a free trial following strategies can be used;

- Understand the end users - This is the first and foremost strategy for any software development company or a startup. When offering free trials, the startups should be aware that most of the end users do not have any intent to pay for the software. Therefore, when finding the actual customers, startup should be focus on the audience who is eligible to convert from the free trial. Therefore, customer analysis is a mandatory strategy for a startup prior to offer the free trial.
- Have a clear communication mechanism with the end users - This will be critical when it comes to answer the questions regarding the software product. Therefore the end users should be provided a reliable source of information to

have a long relationship with the product. Further there should be multiple sources of communication such as mail, messaging, voice calls.

- Provide a knowledge base - Though there are communication methods, most of the users are not comfortable enough to reach the company directly with their issues. Therefore building a sufficient support, FAQs, tutorials will be helpful for the end users.
- Remove conversion friction - Converting free trial users into subscribers is the most important phase in the free trials. If the process is difficult, the conversion rate will be low. Therefore, removing the conversion friction is essential. This can be achieved by having several payment options, allow users to transfer the trial data to the purchase system, provide clear communication channels.

5.2.5 Include a video of how software solutions and company works

Another marketing strategy, which can be used by a software product startup company, is including a video of the software solution and how the company works. This video can be published in a social media site, company website or in the product marketing website itself. To success this marketing strategy following strategies can be used;

- Determine the video content - A company should determine what will the video content will achieve and the target market. Further value add-on can be used to pitch the video for the relevant audience.
- Outline the scope - A company should analyze which functions of the business will use the video and the scope should be designed based the video topics.
- Establish responsibility - Depending on the quality of the product and the budget of the company, the decision of in-house videography or outsourcing should be selected by assessing the resources. After that, the responsibility for each task such as creative concepts, scripting should be distributed.
- The video should not be more than five (5) minutes longer and within that time, video should clearly describe the company and the software product.
- The video should include; the outline of the software product, core features, how each user role gains the beneficial through the software product and comparison with other alternate software products if exists.

5.2.6 Third party reviews

Third party reviews is also a common feature when applying for software development companies. This has been proven to improve sales, where most of the customers read reviews before they decide to purchase software products.

Reviews can be several types. Most of the customers are not interested in positive reviews and negative reviews are the most important to a company to boost up the sales since they provide the real view about the company. Negative reviews should have a fair distribution compared to positive reviews to make a customer attract to the company since it would reflect the genuineness of the company. Therefore a company should encourage all kinds of reviewers to review the business profile.

Reviews can also be collected from the influencers of the industry. This can be done by requesting endorsements from reputed client to show the trustworthiness of the company.

Following strategies can be applied to have effective reviews towards the company.

- Easy mechanism to post reviews - Customers do not prefer to allocate more time to provide their reviews. The mechanism should be simple for a customer to understand which provides more opportunity to get a review. Company should provide links to post the reviews via mails and websites which makes easier for a customer to easily click and post reviews.
- Respond to reviews - Even though the review is positive or negative, providing a response quickly is necessary to have more effective reviews. If the review is regarding an issue providing a response after resolving the issue will boost up the customer loyalty. Further providing appreciation comment for positive reviews will also help to improve the trustworthiness.
- Send personal emails to the loyal customers to encourage for reviews. They are more likely to leave immediate feedback.
- Add links to online review profiles in to the email signature of each support team member, if they interact with customers on a regular basis.
- Manage negative reviews properly. By answering a bad review immediately in a positive impression, it shows potential customers that the software company is dedicated to customer service.

5.2.7 Customer interaction

Improving customer experience is the most critical strategy when consider on the customer interaction over software products. Customer interaction is more important for a startup company. Since the customers who have positive experience with the company, are tend to be more loyal and have long lasting relationship with the company.

Compared to the customer service, customer interaction is bit different. Customer service is mostly done by an employee who is committed for a specific service which helps to deliver excellent customer service. On the other hand, customer interaction / experience not only person to person service but also providing connections to the customer in new ways using the technology. This will strengthen the relationship with the customers.

A startup company should focus on attracting more customers while retaining the existing customers. Following strategies can be followed to improve the customer interaction for the company.

- Have a clear customer focused vision - To define the vision, a company should create a set of statements that act as guiding principles. After that, these principles will drive the behavior of the company. This will be more important for a software startup company to have clear focus on their mission.
- Understand the customer base - In order to have excellent customer interaction, a company should know the different types of customers who deal with the customer support teams. A company should know about the customer needs to provide the best solution. This will help a startup company to have better recommendations from the customers, repurchases and to build less price sensitivity.
- Real time customer feedback - To have a realistic customer interaction, capturing customer feedback in real time will be more essential. This can be done via automated tools, emails, calls or face to face interviews.
- Team development - After identifying customer needs, it is important to train the support team members for each need. Team development should be further monitored through online learning, supervising, and group training.
- Regular employee feedback - To have an effective customer interaction, employee feedback should be taken regularly to monitor their engagement and the service. This may also help a software startup company to identify how employees feel towards the company, software product and customers.

5.2.8 Demonstration

For a software product startup, a product demonstration is a good marketing option if the product is standard and high quality. This helps to attract the customer and improve the interest regarding the solution.

For software products it is more important to provide visual or hands on experience about the product rather that sales pitching. Experiencing and feeling the product is more appealing to customers and it helps to boost up the sales if the company is in the startup level.

Further, successful product demonstration helps to feel sense of ownership of the product to the customers. This gives a temporary ownership for the customers to work with the product without paying for it.

Software product demonstration also helps to provide necessary proof to the customers on the functionality of the product. Further this also helps to clarify the concerns regarding the misinformation and issues of the software product.

Following strategies are identified to practice for a successful demonstration;

- Prepare better for the demonstration by analyzing the customer profile and their needs.
- Personalize the demonstration based on the customer profile.
- Provide relevant information regarding the software product to the customer.
- Clarify the issues and concerns regarding the software product.
- Introduce the road map or the further enhancements of the software product which will be introduced in future phases.
- The contents of the demonstrations and demo products should relate to the customer business stream.
- Target on innovators and early adopters throughout the demonstration.

5.2.9   Social Media

Social media is the place where most of the audience hangs out these days. Therefore it is a powerful way of reaching all levels of customers. Marketing on social media such as Facebook, twitter, LinkedIn can bring remarkable success to a company, and especially software product startups.

Following strategies can be used for a successful social media marketing plan;

- Social strategy - This strategy should identify the objective a company is going to achieve using social media, target audience, the behavioral patterns of the audience in the social media and message to be sent by using social media marketing. This will eventually help a company to select the best suitable social media site for the relevant product.
- Social content - The posts should be regular and should have quality and interesting content. The content which can be shared on the social networks can include social media images, videos, infographics, and how-to guides.
- Tracking Competitors - Tracking competitors on social media can provide valuable data for keyword research and other social media marketing insight.
- Invite satisfied software product users to add reviews in the company and software product profile pages.
- Involved with software product related trending topics with in the social media.
- Keep posting about new software product versions and the included features.

5.2.10   Search Engine Optimization

Another marketing strategy which can be used for successful internet marketing is Search Engine Optimization (SEO). This is the process of customizing the website based on search engine algorithms to rank the company website or software product marketing website. To use this marketing strategy company should be up to date with the knowledge of search engines since the effectiveness of the algorithms continues to change with the time as the technology evolves. Therefore company should keep up to date with the best practices to have a better rank for the relevant keywords.

To rank well in search engines following strategies can be used to optimize the websites;

- Research on keywords - A company should analyze on the keywords to identify the search patterns of the users to discover their own website. A company should analyze the competitive keyword in the industry related to the company and the software product.
- Quality content - A website should have a quality content rank for keywords and it also creates a positive customer experience.
- Social Media - A company should present in social media occasionally to have ratings for the website. These social media sites influence the search engines' signals. The company and software product website should feed the reviews and posts from the social media.
- Product images - When consumers search for a product or solution in the search engines they are also looking at the "images" results. If the site has quality images with relevant keywords, this will help to rank the website in the search engines. This avenue will drive a lot of traffic to the website, as potential customers will click on that image to find the product.
- Optimizing websites for mobile browsers - Since the mobile market has exploded, most people user mobile device to search. Therefore optimizing websites for mobile browsers is critical if the software vendors want to rank well in search engine results pages.

5.3   Research Limitations

Following limitations have been encountered while conducting this study.

- There are no predefined selection criteria to define software Startup Company, even in the literature reviews.

- Selection criteria have been defined in this research to fulfill the stated limitation, but some of the selected software companies did not match with the criteria as expected.

- Some of the owners of the software startup companies (i.e. interviewees who are CEOs and co-founders) have less marketing knowledge and they could not be able to explain their own perspectives either.

- All the respondents have not granted for the researcher to use voice recorders; therefore all the explanatory answers were kept in written format for future references. This is not the effective way of recording the answers of the respondents as the interview should be limit for one (1) hour. Even though they have reluctant to permit the voice recorders due to confidentiality concerns.

- Some of the respondents were reluctant to share true information regarding their company focused marketing strategies.

- The perceptions of the less experienced respondents (i.e. two-third of respondents) have been considered in this study due to the unavailability of experienced respondents.

5.4   Future research

This study identifies best fit set of marketing strategies for any software product type which are developed by software product startup companies in Sri Lanka. It is extremely useful for both software product startup companies and new entrants for the IT industry. Some of the future research opportunities have been identified by performing a detail analysis of the collected key findings via the past literatures and the professional marketing personal of the existing software product startup companies in Sri Lanka.

- Criteria to define software startup companies.

- How do software startup companies initialize to apply the identified software product marketing strategies with in their company?

- Define best fit set of marketing strategies against any given software product type.

- How to apply marketing strategies at the pre-development stage and during the development stage?

- How to differentiate and apply marketing strategies for a software product which is innovative or non-innovative when the launching stage?

5.5   Conclusion

The research problem associated with the present research was:

- What is the best fit set of marketing strategies which can be applied directly for the software product types which are developed by the software product startup companies in Sri Lanka?

In answering this research problem, two research objectives had been initiated:

- To identify how software product startup companies viewed software marketing concepts.

  The present study has referred a large amount of research literature in the fields of marketing strategies and inter-related areas of marketing strategies for software product startup companies. The different perceptions of the software vendors related to different types of software products have discussed in detail. Marketing strategies in previous researches were thoroughly studied and got the expert knowledge in order to align with software products which are developed by software product startup companies. As per the nature of this research, this conducted interviews, so this research has been gathered the perceptions of software vendors towards the marketing strategies and how those effect on establishing in the software product in the marketplace. Therefore, the present study has successfully substantiated this research objective.

- To identify the used marketing strategies in software product startup companies.

  Based on the gathered data, the used marketing strategies have been found and some of the marketing strategies were rejected as some of them are not appropriate for the software products startup companies and for the Sri Lankan context. According to the used marketing strategies, recommendations have been explained about how to initiate and software product marketing strategies with the guidelines. Not only "used" marketing strategies, but also "willing to use" marketing strategies were captured from the software product vendors in Sri Lanka. Therefore, the present study has substantiated this research objective.

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APPENDIX A

Refined interview questionnaire is as follows.

May I record this conversation or just take notes?

    Interviewee Name:
    Company Name (originated country)
    Designation
    How about your experience in software solution marketing?

    Is your software company a product or project based company?
    How many employees are working in your company?
    How long your company been in the IT industry?
    How about the annual revenue of your software company?

(Above general questions have been asked only as per future references for the researcher, and the responses would not be traced throughout this research, to assure their confidentiality and their anonymity).

1. How did you learn marketing concepts? (By you, trainings, workshops, work experience)? Do you think the learned theoretical marketing concepts can be applied directly, while marketing any software product?

2. How does your company view marketing concepts and marketing strategies as a whole?

3. Are you aware about the allocated budget for marketing of software solutions in your company?

4. What are the types of software products that you were/ are responsible for marketing?

5. What are the challenges/problems you have encountered during the sales and marketing the stated software product and how does your company overcome those challenges?

6. How about your milestones as defined by the company to you (target and duration)?

7. Is it possible for you to achieve each target as the management expected?

8. Do you do competitor analysis for your software product/s?

9. If there is a competitive software product exists in the market already, how do you compare it with your software solution?

10. Are you being able to identify missed features and UX (i.e. User Experience) aspects in your software products compared to the competitive software products?

11. Do you have the ability to contact directly the development team to encourage them to add innovative and marketable features to the software solution? If yes, how do you provide consultancy for the development?

12. Explain your opinion against the below stated marketing strategies according to their importance for any software product type (Yes / somewhat / No).
    a. Channel
    b. Price
    c. Promotion
    d. After Sales Service
    e. Demonstration
    f. Advertising
    g. Social Media
    h. Develop strategic partnerships with external websites
    i. Traditional media
    j. Beta test
    k. Freemium model/ free trial
    l. Search Engine Optimization(SEO)
    m. Frequently Asked Questions(FAQ)
    n. Discussions (groups/ forums)
    o. Include a video of how software solutions and company works
    p. Include product into feature/benefit comparison website/tables
    q. Third party reviews
    r. Expand the strategic partnership and develop affiliate marketing program
    s. Customer interaction
    t. Provide complementary software solutions

13. What are the marketing strategies you have been using and you would initiate to use in the future, related to your software product(clearly mention from the above list)?

14. What are the tactics or strategies you have been using to convert visitors to customers? How do you create the need of the software product on customers mind?

15. Do you consider customer feedback and customize the existing software product as the customer expected?

16. Have you marketed software products that are innovative in the market at launch time? Are those software products got success? What are the strategies you have followed?

17. Does your company have its own marketing strategies?

18. Do you follow any marketing plan within the company?

19. Do you ensure that, marketing strategies/processes/plans of yours to be different/unique from other software product types/companies? Why?

20. If you start your own software product company how do you stabilize it with in the industry in marketing point of view(as an example:- implement the software product first and launch the software company second or launch the software company first and implement the software product second)?

APPENDIX B

Email template for requesting the participation for a qualitative Interview.

Dear Mr. /Miss /Mrs. (Name of the Interviewee),

I am W.H. Prashan C. P. Dharmasiri, who is a postgraduate student of Master of Business Administration in Information Technology (MBA in IT) in University of Moratuwa Sri Lanka. To pass through this degree program, it is required to do an individual research in management stream under the subject of Information Technology.

My interest in marketing strategies has developed as a result of my academic studies and employment experience. I currently serve as a Business Analyst in a private organization, where I concentrate on marketing researches and promoting the software products other than the main responsibilities.

The title of my research is, "Marketing strategies for software product startup companies in Sri Lanka", and the concept of software startup is an emerging concept in Sri Lankan context today. The motivation of this research is that, most of the graduated IT professionals are dreamt about their own software startup company with less marketing background and they start to build their own innovative software product as the first stage of their company initiation. With the lack of knowledge in marketing strategies, the CEO or the company owners are struggled to align the best fit marketing strategies to their software product. As a result of that, the software startup companies are declined before they reach the maturity stage as a company. Throughout this research, it will be recommended the best fit set of marketing strategies for frequently developed software product types, which would be essential for the owner of software product startup companies to consider on reaching the maturity stage from this competitive industry.

As per the nature of this research, this is a qualitative study and it is required to conduct interviews as the data collection methodology. So the main purpose of this email to request from you to be a part of my interviews and I would welcome the opportunity to speak with you to learn more about the field marketing strategies for the software product types. If you wish to help me through, please let me know about a convenient time and venue for one hour interview and I am happy to work around your schedule. You could reach me through prashan.16@cse.mrt.ac.lk or by calling 0718675931.

Thank you for considering my request. I look forward to speaking with you soon.

P.S. - As the researcher of this research I would assure that, this research will be secured with a severe protection of your confidentiality and ensured your anonymity.

Yours Sincerely,

W.H.P.C.P. Dharmasiri

(prashan.16@cse.mrt.ac.lk)