

# FINAL YEAR PROJECT REPORT

HELLI SMART HELMET: Market Research | Business Plan | 'Go to' Commercialization Strategy

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# Acknowledgements

We owe our gratitude to all those who helped us in making this project an utmost success. We are indebted to our advisor, Bilal Choahan and all our GEC members (Kishwar Gulzar, Kashir Asghar) for all the support and motivation. We were amazingly fortunate to have such dedicated teachers, who despite having busy schedules were always available to guide. Their constructive criticism and insightful comments at different stages of the project were extremely useful and made us think out of the box. We also owe special thanks to Waqas Kalil, Managing Director of Lets Innovate for providing us all the guidance whenever needed.

### Dedication

We dedicate this project to our parents and teachers for their support and encouragement. Special dedication to the Pakistani nation that has been resilient to several challenges in the past.

### **Abstract**

HELLI, smart helmet is a product of Lets Innovate, a tech empowered startup currently housed in National Incubation Center. This two years old product based startup that is still young in the corporate world has managed to gain success with its previously released products and now with HELLI, it aims to revolutionize the transport sector of Pakistan by offering the kind of product that would enhance road safety for motorbikes and bicycle users.

In the past two years, the team of Lets Innovate has worked rigorously on the technical side of the product. Now, since the product is in the testing phase and is soon to enter the mass manufacturing phase, the team has shifted its focus towards other aspects as well that are critical for HELLI's success. Through market research, the team aims to get better understanding of its market size and through business plan, it aims to attract new investors so that commercialization activities can be carried out smoothly and the company can capitalize on its first mover advantage.

The small team of Lets Innovate that has strong technical background needed the help of business graduates who could assist them with the aforementioned activities, so we picked HELLI as our final year project.

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# **CHAPTER 1: INTRODUCTION**

# FINAL YEAR PROJECT REPORT

HELLI SMART HELMET: Market Research | Business Plan | 'Go to' Commercialization Strategy

# **CHAPTER 1: INTRODUCTION**

HELLI, smart helmet is a product of Lets Innovate, a tech empowered startup currently housed in National Incubation Center. This two years old product based startup that is still young in the corporate world has managed to gain success with its previously released products and now with HELLI, it aims to revolutionize the transport sector of Pakistan by offering the kind of product that would enhance road safety for motorbikes and bicycle users.

In the past two years, the team of Lets Innovate has worked rigorously on the technical side of the product. Now, since the product is in the testing phase and is soon to enter the mass manufacturing phase, the team has shifted its focus towards other aspects as well that are critical for HELLI's success. Through market research, the team aims to get better understanding of its market size and through business plan, it aims to attract new investors so that commercialization activities can be carried out smoothly and the company can capitalize on its first mover advantage.

The small team of Lets Innovate that has strong technical background needed the help of business graduates who could assist them with the aforementioned activities, so we picked HELLI as our final year project. The product description, project scope have been discussed below:

### **Product Description**

HELLI is a smart helmet that promises safety through its connectivity element. The team aims to introduce two variants of the product, HELLI Alpha (the basic version) and HELLI X (the ideal product loaded with additional features). HELLI X holds the following technological capabilities:

- Hands Free Calling
- Wireless Indicators
- High Mounted Night Light
- Motion Based Brake Light
- Shock Detection
- Companion App
- Aerodynamic Design
- Water Resistant
- Built in GPS
- Built in GSM
- Dash Cam
- ECE/DOT Certified

Priority Support

# Project Scope

The project scope is broadly divided into three categories:

- Market Research
- Business Plan
- 'Go to' Strategy for product commercialization

The table below contains the breakdown of each of these categories:

Category	Tasks Breakdown					
	Primary Research					
	Quantitative Research [Survey Questionnaire]					
Market Research	Qualitative Research [Focus Groups]					
a. Nee Need and	Primary Research Findings & Analysis					
	Secondary Research					
	Data collection from existing resources [online, journals]					
	Company Overview					
	Industry Analysis					
	Customer Analysis					
Business Plan	Competitive Analysis					
	Marketing Plan					
	Operations Plan					
	Management Team					
	Financial Plan					
	Social Media Marketing					
	Direct [Personal] Marketing					
'Go to' Commercialization Strategy	Public Relations [Seminars]					
	Sales Promotions [Freebies   Merchandise   Test Drives using					
	HELLI's helmet]					

# Organization of the Report

The entire report has been divided into chapters. It begins by introducing the company we are working with and then provides details about their new product HELLI for which we are responsible to do the market research, write a business plan and devise a 'go to' commercialization strategy.

The second chapter is the 'market research' which mainly outlines details of primary research as secondary research has been covered or made part of the business plan. The third chapter is the business plan itself. Chapter four includes a comprehensive 'Go to' strategy for product commercialization.

As each chapter is independent of the other, so each section's appendix have been attached at the end of their respective chapters.

# **CHAPTER 2: MARKET RESEARCH**

# FINAL YEAR PROJECT REPORT

HELLI SMART HELMET: Market Research | Business Plan | 'Go to' Commercialization Strategy

CHAPTER 2: MARKET RESEARCH

Data Collection and Management

Apart from collecting data from various journals, websites and government forums, primary

research and data collection has also been done in order to receive first-hand information from existing

potential motorbike riders. This chapter would particularly cover details regarding primary research, since

secondary research has been made part of the business plan.

MILESTONES: The purpose of this primary research is to gather knowledge regarding public's needs,

interests and their willingness to use our smart helmet, HELLI. In addition to this, the research is also

targeted towards gathering demographic related information and get a rough idea about the price people

are willing to pay for this gadget.

**METHODOLOGY:** The breakdown of our primary research is as follows:

Quantitative Research: For quantitative research, a survey questionnaire was used. Although, it

contains a mixture of open and close ended questions, but predominantly it has more close ended

questions so it serves the purpose of quantitative research. The survey questionnaire is attached

to Appendix 1 of this chapter.

A questionnaire was developed via Google forms, and was made available online. The survey was

broadly divided into 4 sections which comprised of:

Introduction

**Personal Information** 

Feedback [for HELLI Features]

Suggestions section

Qualitative Research: Qualitative research, being descriptive in nature, helped us gain more

insights about our target market. A series of open ended questions were asked from the

participants who were part of our focus groups. The 'Focus Group' questionnaire can be found in

Appendix 2 attached at the end of this chapter.

For qualitative research, a total of three focus groups were conducted. Two of which were small

informal focus groups while the third being a formal focus group.

FINDINGS: The findings generated from the questionnaire review and the focus groups are explained in

detail in the 'findings and analysis' section.

**LIMITATIONS:** It was difficult to ensure that all the individuals who filled out the questionnaire, were frequent motor bike riders which is why we have responses from non-bikers as well. Secondly, with the means of a questionnaire, it was hard for the respondents to comprehend and envision the various features of HELLI.

# Findings and Analysis

#### SURVEY QUESTIONNAIRE

The analysis is broadly done along these three dimensions:

### User Type

- From the 130 questionnaire responses received, we have gathered that 57% of our respondents were working individuals and the rest 43% were students. However, majority (46.9%) of them belonged to the 21-26 year age bracket, followed by those between the 46-50 years of age (Exhibit 6 of this chapter shows breakdown of users by their age group).
- We have also found out that 43.8% of the respondents rode their bike more than 6 times a week, followed by those who rode 2-3 times a week at 16.2%. However, it should be considered that there were a few respondents who do not ride bikes (2.4%), and those who ride bikes multiple times a day (4%).(Exhibit 7)
- Respondents listed Work (37.3%) and Transportation (33.3%) as the biggest reasons for using a motorbike, followed by recreation. (Exhibit 8)
- 46.9% (Exhibit 9) of the respondents listed that they always wear a helmet while riding a bike and 37% listed safety as the main reason for wearing it. However, in the survey analysis, we also observed a few respondents who did not like wearing helmet and their reasons for not wearing it are:
  - Not being able to attend calls
  - Suffocation
  - Weather problems
  - Difficulty to carry a helmet around all the time

#### Brand Awareness & HELLI Features

• Moving further to the feedback section of the form, respondents stated that majority of them (53.1%) got to know about HELLI through their friends, followed by news from social media and word of mouth. (Exhibit 10).

- Respondents also provided their feedback on various features of HELLI such as brake lights, hazard lights, indicators, speakers & mic and lastly shock detection. The respondents were asked to rate them according to their satisfaction level. 44.6% of the respondents rated shock detection as the most important and satisfying feature of HELLI, followed by speakers & mic and brake lights respectively. 86% of the respondents also favored a wireless/ Bluetooth speaker & mic rather than a wired/cabled speaker & mic. [Exhibits 11-16 display respondents' ratings on HELLI's features]
- Respondents also had additional suggestions:
  - An action camera connected with a smart phone via an app
  - A mirror viper
  - Audio navigation
  - Voice control speed dial
  - Scratch less glass
  - Light weight
  - A wide range of colors

#### **HELLI Prices**

Regarding prices, 47.3% of the respondents suggested to keep the prices between PKR 2000-3000, while 35.7% are willing to pay around PKR 3000-5000. [Exhibit 17]

### Analysis Summary

To summarize, more than 40% of the sample population rides bikes daily for work purposes and as a means of transportation which provides HELLI with a great market opportunity. 46% of these already wear a helmet due to safety concerns and the rest hesitate to wear a helmet because it limits the rider to receive call or listen to music. However, as specified above, 86% of the respondents stated to have a wireless speaker and mic, if this feature is incorporated in a smart helmet, then this will help in meeting the demands of those bike riders who do not prefer to wear a regular helmet.

Shock detection is the most preferred and satisfying feature of helmet and it is believed that this is the main reason why people will be willing to invest in a helmet which is priced higher than standard local helmets. Even though, 47% of the respondents suggested to keep the price between PKR2000-3000, however it should be noted that half of the respondents were students. So a price range between PKR 3000-5000 can be effective after heavy advertisement.

#### **FOCUS GROUPS**

A total of 3 focus groups were conducted to carry out this research. As mentioned above, two of these focus groups were informal discussions between the team and the participants with no formal

moderator present. The participants were mainly bike enthusiasts who were interested and willing to test or give feedback regarding HELLI's features.

The two informal focus groups comprised of 8 and 5 individuals respectively. The discussion between the team and the bike enthusiasts circled around different smart helmets which already exist in various other countries. Topics like smart helmet features that are considered crucial to be present, helmet prices and local smart helmet market were also made part of the discussion. The response received was very enthusing, since they believed there was a need for such product in Pakistani market. Secondly, they also emphasized on having shock detection, indicators and GPS features which the team is already planning to make them part of HELLI. However, they also suggested to add a front camera option with a rechargeable battery in order to record their biking adventures.

The third focus group was a formal one where 6 local bike riders participated. The way the focus group was regulated and the questions asked in the discussion are made part of Appendix 2 of this chapter.

From this focus group, we learned that 3 out of 6 participants already knew about smart helmets via films and social media, while the other 3 did not. Those who knew about the smart helmet were very excited to know that it is being made and launched in Pakistan. Additionally, 5 out of 6 participants mentioned that they do wear a helmet while riding a bike for the daily commute. However, there was one respondent who specified that he does not prefer wearing helmet because he never felt the need to.

The respondents were also briefed about the features of HELLI and their advantages. When asked about the most important features, 5 out of 6 listed shock protection as the most important feature. However, speakers and a mic also emerged as a popular choice since 4 out of 6 listed it as the second best option. The reason being that it tends to get difficult to receive a call while riding a bike, so having a mic and a speaker inside a helmet, while the hands remain free is an added bonus. Participants also shared that using wired headphones for calls tends to be a hassle as well because headphones are not reliable and they break very easily. Secondly, people have to always remember to carry them which tends to be difficult.

Lastly, the respondents were asked to suggest a price for HELLI. The majority suggested price range between PKR 2000-5000, reason being that people who use bikes regularly cannot afford to buy an expensive helmet when there is an already established market for regular helmets. The focus group ended with 4 out of 6 participants saying that they would use a smart helmet rather than a regular helmet.

# Appendix

# APPENDIX 1

HELLI							
Helli, a smart helmet focused on staying safe and connected while riding a bike or motorbike. With state of the art features: GPS, wireless headphones, it is always connected to applications which help dynamically track, monitor and optimize user commute.							
* Required							
1. Name							
2. Email *							
3. Profession *							
4. Age *  Mark only one oval.							
27-30 31-36							
37-45 46-50							
Other:							

Exhibit 1: Introduction

Personal Info	
<ol> <li>How often do you ride your bike? *         Mark only one oval.</li> </ol>	
O-1 times per week	
2-3 times per week	
4-6 times per week	
More than 6 times per week	
Other:	
6. Do you primarily ride your bike for:  Mark only one oval.	
Work Purposes	
Transportation	
Recreation	
Other:	
7. Do you wear a helmet when riding your bike? * Mark only one oval.	
I always wear a helmet when I ride	
I sometimes wear a helmet when I ride, but not always	
I never wear a helmet	
Other:	
8. Please mention your reason for the answer given above. *	

Exhibit 2: Personal Information

eedback Sec											
ceduach set	ction										
9. Where did you f Mark only one ov	ind out a of	bout HE	LU?								
Social Me	da										
Friends											
☐ A Blog											
Website											
○ Word of N	fouth										
Other:											
indly Rate th	ne HE	LLI Fe	eature	es							
ease rate the perce	ived satis	faction k	rvel on ti	ne follow	ing dime	nsions of ou	r produc	ct			
Brake Light *     Brake Light     Mark only one ov	ol.										
	1	2	3 4	5							
Least Usable	0 (	00	0 0	0 0	) Mo	st Usable					
Indicators Mark only one ov											
		2	3 4	. 5							
Least Usable		2 :	3 4	5		st Usable					
Least Usable	1	2	3 4	5		et Usable					
Least Usable	1	0 0	3 4	0 0	) Mo	st Usable					
Least Usable	1	0 0		0 0	) Mo	st Usable Most Usa	uble.				
Least Usable  12. Hazard Lights Mark only one Least Usable	1 oval 1	0 0		0 0	) Mo		able				
Least Usable  12. Hazard Lights Mark only one Least Usable  13. Speakers & N	1 oval 1	0 0		0 0	) Mo		able				
Least Usable  12. Hazard Lights Mark only one Least Usable  13. Speakers & N	oval	2	3	4	) Mo						
Least Usable  12. Hazard Lights Mark only one  Least Usable  13. Speakers & N. Mark only one	1 oval 1	2	3	4	) Mo	Most Usa					
Least Usable  12. Hazard Lights Mark only one  Least Usable  13. Speakers & N Mark only one  Least Usable  14. Shock Detect	1 oval 1	2	3	4	) Mo	Most Usa					

Exhibit 3: Feedback

Suggestions We value your suggestions, kindly help	
15. What Price Range should HELLI be in? Mark only one oval.	
2000-3000	
3000-5000	
5000-10000	
10000-15000	
16. What form would you prefer the Speaker & Mark only one oval.	Mic to be in?
Wired [AUX Cable]	
Wireless [Bluetooth]	
17. If you were to suggest new features, what w	

Exhibit 4: Suggestions

#### **APPENDIX 2**

### **Focus Group Form**

Good evening and welcome to our session. Thanks for taking the time out to join us and talk about HELLI-Smart Helmet. We (Sadia Arshad, Maria Sikandar & Saher Gul) are MBA students from NUST Business School and are here on behalf of Lets Innovate, the startup which is planning to launch HELLI. Waqas Khalil, Managing Director at Lets Innovate asked us to assist him get some information from motorbike riders about your perception regarding this smart helmet. They want to know what features you like, or don't like, improvements you would like to propose and the price you would suggest for this technically sound gadget.

There are no wrong answers but rather difference in perceptions. Please feel free to share your perspective even if it differs from others. Remember that we are just as interested in negative comments as positive comments, and sometimes the negative comments are the most useful.

Your valuable feedback will be shared with Lets Innovate and our university supervisors. Your anonymity would be maintained and we won't share any names in our report.

Let's find out some more about each other. Tell us your name and your one hobby.

Before proceeding, let us brief you about what HELLI is:

"HELLI is a smart helmet and its technological capabilities include built-in Bluetooth, speakers, heart-rate sensor, dash cam, as well as GPS. It is also weather resistant and has an aerodynamic design. Customers can stay connected to their smartphones, take calls while riding the bike and can also navigate to their last location. The helmet comes with a companion app that helps to track roads and also allows HELLI to send distress message in case of a fall or accident."

Let's move on to the questions now:

- How often do you ride your bike and for what purpose?
- How often do you wear a helmet while riding a bike? Reason for wearing it?
- Have you ever heard about smart helmet?
- What are your views about smart helmet? Would you like having one?
- Would you prefer smart helmet over regular helmet? Reason for your preference?
- What are your views on HELLI, its features?
- Do you think this product would work in a local market? If so, Why?
- What additional features would you like to see in HELLI?
- Would you like buying HELLI to make your commute safe?
- What price are you willing to pay for HELLI?

**Exhibit 5: Focus Group Form** 

### **APPENDIX 3**

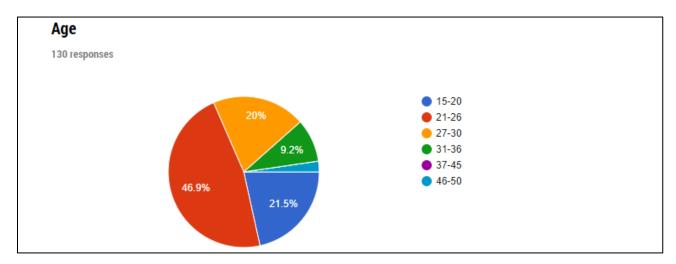


Exhibit 6: User Type by Age Group

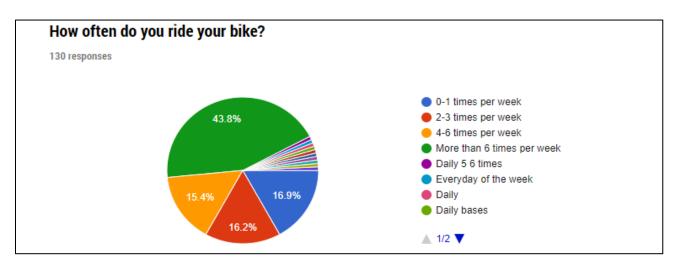


Exhibit 7: Frequency of Bike Usage

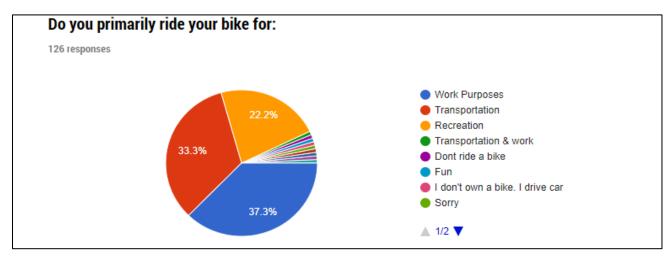


Exhibit 8: Reasons for Bike Usage

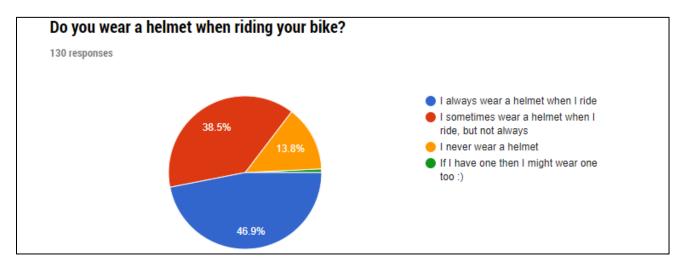


Exhibit 9: Helmet Usage

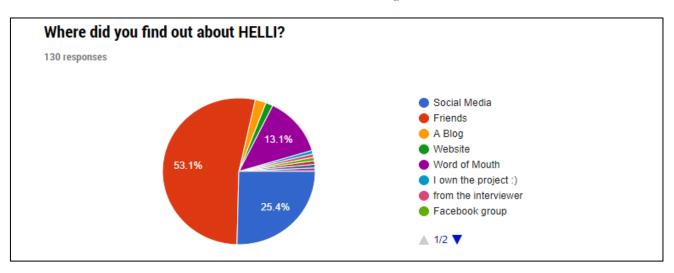


Exhibit 10: HELLI Brand Awareness

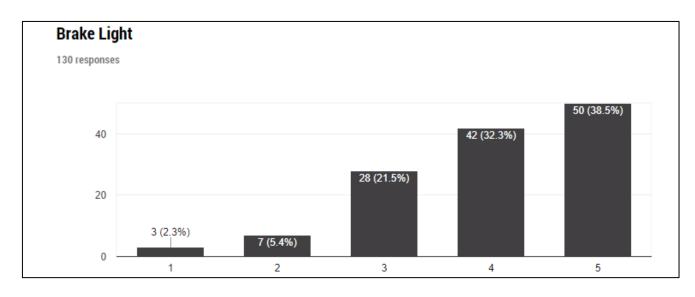


Exhibit 11

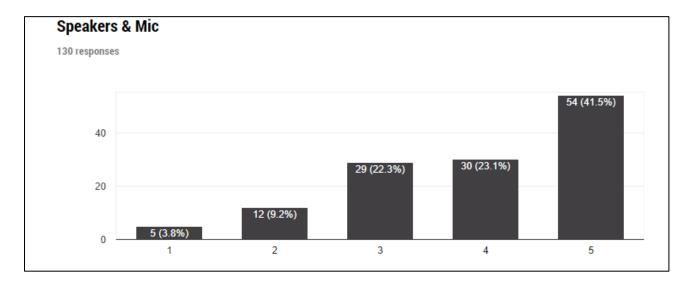


Exhibit 12

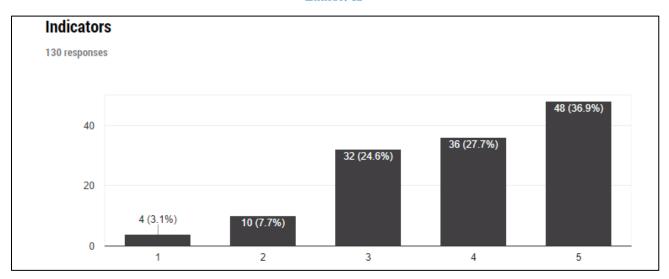


Exhibit 13

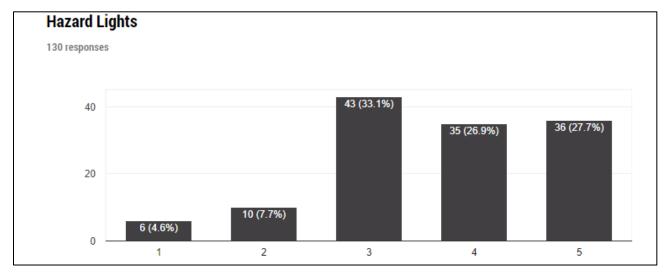


Exhibit 14

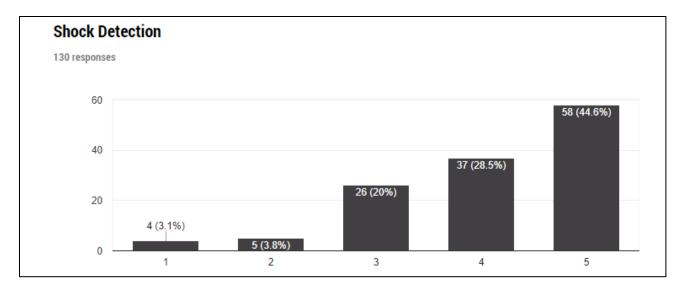


Exhibit 15

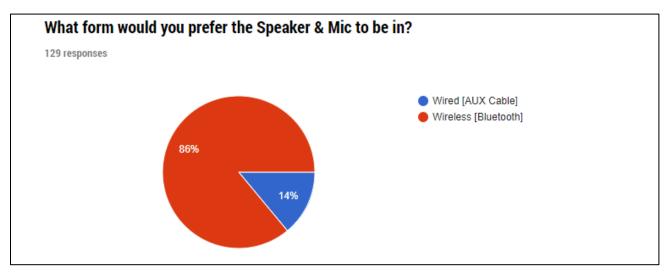


Exhibit 16

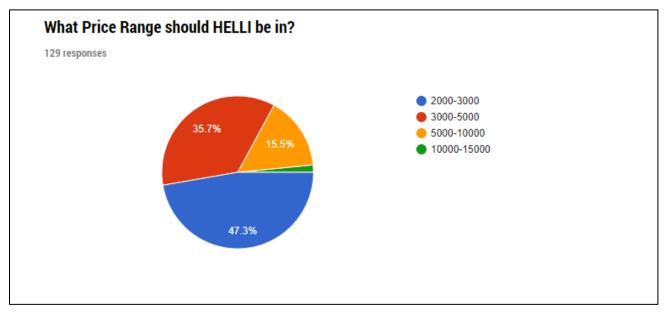


Exhibit 17

# **CHAPTER 3: BUSINESS PLAN**

# FINAL YEAR PROJECT REPORT

HELLI SMART HELMET: Market Research | Business Plan | 'Go to' Commercialization Strategy

# **CHAPTER 3: BUSINESS PLAN**

# **EXECUTIVE SUMMARY**

Our company, Lets Innovate brings a disruptive solution for the Pakistani motorbikes market by introducing a smart helmet, HELLI that would be one of its kind in the local market. This helmet is well equipped with high end technology and its technological capabilities include built-in Bluetooth, speakers, heart-rate sensor, dash cam, as well as GPS. It is also weather resistant and has an aerodynamic design. HELLI promises safety plus connectivity and that too at very affordable prices. We plan to introduce two variants of the product, but to begin with, we have dedicated all our efforts for the release of HELLI-Alpha (the basic version of HELLI). The startup was founded by a team of four members; Ali Syed, Waqas Khalil, Adeel Shabbir, Zain-ul-Hassan, who are technology enthusiasts and have strong entrepreneurial spirit.

The industry for our product is directly influenced by motorbike and bicycle industry. In recent years, the aforesaid industries have witnessed a phenomenal growth. The motorbike market is worth \$120 billion and with 6% annual growth rate, the global motorbike market demand is expected to rise over 132 million units by 2018. Bicycle sales are also expected to hit \$35 billion figure in the next 3 years. Pakistan outperforms all markets when it comes to the growth rate in motorcycle industry. With 20% growth rate, it is anticipated that the motorbikes production would go to over 3 million units per annum by 2018. These progressive figures act as a good motivator for HELLI to enter the market and exploit the first mover advantage. With governments introducing more environment friendly policies and taking strict measures for road safety, the future market trends also portray a positive picture for HELLI's growth.

We, at Lets Innovate aspire to be a global player, therefore after catering the needs of local market, we aim to penetrate in other markets especially North America and Europe where people are more adaptive to technological solutions. The target market for our smart helmet is made up of current and future commuters, law-enforcement and delivery firms using motorbike vehicles. Studies reveal that 70% of the motorbike accidents are caused due to distractions and lack of prompt movement to the hospitals lead to greater number of fatalities. Hence, keeping these horrific figures in mind, HELLI through its connectivity element aims to resolve the safety concerns of its end users.

Our competitors include other helmet manufacturers that sell either regular or smart helmets. In local market, standard helmets might have an edge due to the price element, otherwise in terms of utility, HELLI would soon make its impact. The major competition that HELLI can face is from global players, but price is one element which HELLI can exploit to beat its competition.

As our revenue model would have two ends; B2C and B2B, so the promotional activities would be tailored keeping in mind the target audience. To reach out the general public, social media platforms and public relations activities would play a key role in creating product awareness. For B2B marketing, direct and personal selling would be more fruitful. Our customers would have the flexibility to buy product through online platform or via retailers and showrooms.

Our company strongly believes in 'build-measure-learn' philosophy as it helps in making product improvements quickly. We are currently in the product's prototype testing phase, therefore the next step for our company is to roll out the MVP (HELLI-Alpha) in market as early as possible so as to assess demand.

In addition to the four founding members, the management team is comprised of five other members. Their varied educational and occupational backgrounds help the team fill most of the necessary roles on its own, however the company is short on expertise when it comes to skills related to sales and finance. The CEO is planning to expand its team before the product's launch.

The company expects to reach the break-even in the very first month of its sales. Although, the manufacturing would be done in China where the labor is cheap, but even then the major expense that company incurs is due to manufacturing and marketing costs. We need an initial investment of PKR 10 million in order to quickly roll out the product in market, so as to gain maximum customer traction by capitalizing on first mover advantage.

### **DESCRIPTION OF BUSINESS**

# Company Overview

#### LETS INNOVATE

Lets Innovate was founded by a team of seasoned Roboticists, Computer Scientists and Marketing professionals in 2015. The ideal blend of diverse professions enabled the team to invent cutting edge technologies together in a very short amount of time. We have the capability to develop end-to-end products. The team designed Pakistan's only semiautonomous satellite dish antenna controller, which is now in use within multiple organizations. We want to channel our passion and build products that solve real world problems and are accessible by the masses.

### **Product Overview**

#### HELLI-SMART HELMET

HELLI is one of the initiatives of 'Lets Innovate.' The company has other products under its belt too, but at present the tech enabled startup solely dedicates its efforts in making HELLI a commercial success by treating it as a separate brand.

HELLI is a smart helmet built from the ground up to tackle everyday commuters' needs. We started working on HELLI by keeping our focus on real world problems that plague the motorcycle and bicycle market across the globe. In a nutshell, HELLI-Smart Helmet connects riders while they are on the go along with enhancing their overall safety in the process. We wanted to come up with a product that is in sync with our vision to make cutting edge technology accessible for the masses. The company is expecting to launch two variants of the product (HELLI Alpha and HELLI X), but for the time being all efforts are put into the launch of HELLI Alpha, the basic version of the product. The product itself along with complete feature set has been explained in detail in the marketing plan (under 'products' heading) section of this document.

The upcoming sections discuss the product's history, our vision, product's life-cycle, key milestones to date and the end goal we have in mind for the premium version of HELLI.

#### PRODUCT HISTORY

The idea to introduce the concept of a smart helmet for Pakistani bikers came to surface in 2015 when one of their cofounders had an accident while riding a bike. It was then when the team of likeminded people came together to work on a helmet that not only promises safety, but also ensures connectivity. The product based startup is currently housed in National Incubation Center and is led by Ali Syed, the CEO of Lets Innovate.

#### **VISION & OBJECTIVES**

HELLI was not born out of a business need or a gap in the market we saw. Unlike traditional products, HELLI came into being by understanding and analyzing real world user cases around motorbikes and helmets. Primarily this was driven based on the current need of a smarter and a much safer helmet in the Pakistani market. We set out the following objectives with HELLI:

- To develop a smart helmet that is in sync with the basic needs of an average commuter
- To have a design that is both attractive, practical and does not move miles away with the current helmets in the market
- To develop a product that enhances rider's safety while keeping them connected at the same time
- To be affordable for the Pakistani market and within the reach of an average commuter
- To have a product that can expand globally, adapt as needed and scale based on global needs of commuters

These objectives defined our mind-set with HELLI itself, we wanted to develop a product that is cutting edge while keeping it affordable. At the core, our goal was to make a product that is accessible by the masses and is exactly in line with our company's vision.

#### PRODUCT DEVELOPMENT CYCLE

This section covers the overall product development cycle for HELLI. The following table explains the six stages of product development that essentially form a complete product cycle.

Product Development Stages for HELLI						
Idea Validation	Initial idea validation and detailed research around market cap,					
idea validation	manufacturing and development					
Prototype Phase	Prototype development   Phase 1 with further validation					
MVP	Final prototype phase with a focus on developing an MVP					
Beta Launch	Launch and invite only BETA program					
<b>Product Validation</b>	Final validation   Feedback incorporation and mass production					
HELLI Launch	Initial launch for basic HELLI version					

Table 1: Product Development Stages

The diagram below gives the bird eye view of the product development cycle and also captures HELLI's current progress. The highlighted black dots indicate the current stage of the product development cycle.



Figure 1: HELLI's Product Development Cycle

#### MILESTONES ACHIEVED TO DATE & FUTURE GOALS

The entire team of Lets Innovate has put in a lot effort in making this product a success. In only two years' time, the team managed to transform the mere concept of smart helmet into actual reality. The startup has successfully achieved the following milestones:

- Developed a working prototype
- Product testing is in process
- Established corporate identity and brand names
- Gained good customer traction (company has received 70 pre-order registrations so far on its website)
- Established key partnerships with vendors from China for product manufacturing
- Got recognition at national and International platforms

Growth Strategy calls for the following objectives to be met:

- License or patent product
- Continue R&D and product development
- Fill the team gaps: build strong sales team
- Explore options for financing (venture capital, crowdfunding) in order to speed up product distribution and commercialization activities
- Explore more networking opportunities and build B2B relationships
- Reach out target audience through heavy marketing
- Cut down distribution costs

#### PRODUCT SUMMARY

The startup aims to introduce different variants of the product, but the basic version (beta launch) 'HELLI Alpha' would be available at affordable prices for the masses by the end of September. So far, the product prototype has been tested in the market while product testing is under process after which the manufacturing is expected to begin in China. To date, the product has managed to achieve good customer traction provided that it has yet to enter the commercialization phase. The company has received a good 70 pre-order registrations on its website for the smart helmet, HELLI.

The major investment would be required to overcome manufacturing, distribution and commercialization costs.

### INDUSTRY ANALYSIS

The goal of this section is to provide insights about the core market variables as well as highlight the relevance of key elements that were taken into account when considering the market where we plan to operate.

### Market Overview

We, at Lets Innovate hold a strong vision and believe that our product will soon make an impact not only in local market, but also globally therefore while conducting secondary research we took into consideration the market size and trends of both the markets; local and global. The details are shared below:

# MARKET SIZE & GROWTH Global Market



We started our research with the overall goal of understanding the market size. Based on our analysis, the market size of motorbikes and bicycle rides across the globe is rising exponentially. We found that each region (Asia,

Europe, North America) has distinct needs based on the overall market requirement, however, the common elements here was the fact that the market itself is rising at a rapid pace, allowing the

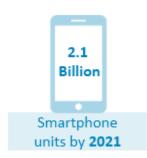
ability to capture it with an innovative solution that it attracts the audience. An industry study published by Freedonia<sup>1</sup> and ReportsnReports highlighted the global motorcycle size to rise to 132 million units by 2018,

With **6%** growth rate, motorcycle market demand is expected to rise to over **132m** units in 2018

<sup>&</sup>lt;sup>1</sup> World Motorcycles', Freedonia (https://www.freedoniagroup.com/industry-study/world-motorcycles-2972.htm)

highlighting the mammoth of a market. Diving further into this, we found that the bicycle market (another area HELLI can expand) is also on the rise, so much so that the overall growth rate is pushing sales north of \$35 billion in the next 3 years<sup>2</sup>. Keeping this in context, we further explored the global sales of motorbikes and found this to be in the region of \$120 billion, indicating the health as well as the trends of the industry. It is therefore clear that there is a clear demand for helmets as these are often coupled with motorbike sales, the market size is therefore healthy and clearly something that indicates a need for a product such as HELLI.

The rise of smartphone market is equally important for HELLI's success since the product comes with a companion app that allows end consumer to reap maximum benefits. According to one report<sup>3</sup>, the global smartphone market is expected to hit about 2.1 billion units in 2021. The global smartphone market growth might be steady in coming years, but a rapid growth is expected in emerging markets like Pakistan and India.



While the research shared above shows an overall global market landscape, we wanted to further understand the local dynamics as our initial market would be Pakistan itself. The insights about the local market have been discussed in the upcoming section.

#### Local Pakistani Market

The Pakistani motorbike market is fairly different from the global industry, the overall landscape here is different, average commuter as well as the buying power of these commuters is significantly varied as opposed to the global industry. We started obtaining as many data points as possible for the local market and found that there are over 10 million motor cycles in Pakistan (based on data collection done in 2011). In recent years, Pakistan motorcycle industry has witnessed a remarkable boom. Mohammad Sabir Shaikh,



Association of Pakistan Motorcycle Assemblers (APMA) Chairman credits this significant growth to certain external factors where lower oil prices and improved business environment tops the list.<sup>4</sup> In year 2015 alone, around 2 million bikes were produced in Pakistan and with 20% growth rate, the number is expected to increase in future. It is anticipated that the production would go to over 3 million units per annum by 2018. This further strengthened our mind-set towards producing HELLI, as the local market is

<sup>&</sup>lt;sup>2</sup> 'Growth Opportunities in the Global Bicycle Industry', ReportLinker (http://www.reportlinker.com/p04837543/Growth-Opportunities-in-the-Global-Bicycle-Industry.html), March 2017

<sup>&</sup>lt;sup>3</sup> 'The global smartphone report: the forces behind the global deceleration in smartphone sales', Business Insider (http://www.businessinsider.com/global-smartphone-market-forecast-2016-3), June 10, 2016

<sup>&</sup>lt;sup>4</sup> Abrar Hamza, 'Motorcycle production in Pakistan reaches nearly 2m per annum', Daily Times, (http://dailytimes.com.pk/business/12-Mar-16/motorcycle-production-in-pakistan-reaches-nearly-2m-per-annum)

booming and clearly indicating a need for an innovative product that can disrupt the industry. If market size is indicator of any product's viability and need, this analysis strengthened our belief in HELLI and the fact that there is a direct need for such an innovative product in the market.

Industry Analysis							
Potential Customers	2015	Growth	2016	2017	2018	2019	2020
Consumers (Millions)	2.00	20%	2.40	2.88	3.46	4.15	4.98

Table 2: Growth in Motorcycle Industry (Expected yearly production)

Pakistan's smartphone market is growing rapidly. Currently, there are 40 million smartphone users in Pakistan and according to Pervez Iftikhar, an ICT expert, phenomenal growth is expected in smartphone penetration in coming years.<sup>5</sup>

# MARKET TRENDS Global Market

The following trends will drive growth of worldwide motorcycles market in coming years:

- With the rise in personal income, more number of people would be able to afford motorcycles.
- Sales of new electric models (electric bicycles) are expected to rise sharply
- Governments introducing more environment friendly policies in order to reduce pollution caused by automobiles would lead to increase in motorcycle sales

#### Local Pakistani Market

In recent years, the Government of Pakistan has not only relaxed the regulatory environment for setting up business operation, but has also played a significant role in promoting the entrepreneurial culture. Such positive efforts have certainly favored the transportation sector as well. Interdisciplinary research has encouraged individuals to explore the application of IT in the field of transport to provide better, safe and quality facilities.

With the availability of 3G/4G services and other psychographic changes like people becoming more tech savvy, the tech enabled solutions will soon be in limelight to handle the demand of people especially when governments have imposed strict road safety rules by making it compulsory for the motorcyclists to wear helmets.

<sup>&</sup>lt;sup>5</sup> Farooq Baloch, 'Studying Pakistan's growing obsession with smartphones', The Express Tribune, (https://tribune.com.pk/story/1060520/studying-pakistans-growing-obsession-with-smartphones), March 7, 2016

### Relevant Market Size

This section will provide more concrete data about our market size. Specific details regarding market size calculations have been shared below. Here are a few assumptions and guidelines that we considered while calculating market size:

- We calculated the annual revenue our company could achieve if it attained 100% market share
- Here, we are assuming that we will only target Pakistani market for the next 5 years
- All calculations are only for HELLI-Alpha
- Formula used to calculate relevant market size:

Potential customers interested in		Amount these customers might be
buying our product	*	willing to spend

The yearly projections have been summarized in the table below:

Relevant Market Size (Yearly)									
Years	1	2	3	4	5				
Potential Customers	92400	236,400	380,400	524,400	668,400				
Amount willing to spend (PKR)	5000	5000	5000	5000	5000				
Relevant market size (000)(PKR)	462,000	1,182,000	1,902,000	2,622,000	3,342,000				

Table 3: Relevant Market Size (Yearly)

# **Industry Analysis Summary**

Based on the research done, it can be inferred that motorcycle and bicycle industry is quite lucrative. Global motorcycle market is worth \$120 billion whereas bicycle industry (another area HELLI can explore) is worth \$35 billion. With 6% annual growth rate, the global motorcycle market is expected to cross the 132 million figure by 2018. Although, overall global motorcycle market is on the rise, but Pakistan, our local market has shown phenomenal growth rate. It is anticipated that with 20% growth rate, the motorcycle production in Pakistan would go to over 3 million units per annum by 2018.

This rise in motorcycle and bicycle demand would act as a good motivator for HELLI Smart Helmet as it can act as a complementary product and provide utility to its potential customers. HELLI market size calculations show that in 5 years' time, with 668,500 helmets sold, HELLI would be able to capture a market size of worth PKR 3.34 billion

# **CUSTOMER ANALYSIS**

One of the key areas of any business plan is linked directly with the segmentation as well as targeting model for the product in question. Therefore, this part of the document deals with segmentation and targeting in addition to explaining customer needs.

# Segmentation & Targeting SEGMENTATION

For segmentation, we took various parameters into consideration to get better understanding about our target market. The details regarding geographical segmentation, segmentation by income and segmentation by usage have been elaborated below:

### Geographical Segmentation

We looked at the global landscape of the market and further analyzed initially with a geographical segmentation approach, one that would allow an understanding of the key markets we aim to grow, both in the short as well as the long term.

Figure 2 showcases our approach to global, geographical segmentation. The rationale for the choice of this section is further explained after the figure.



#### Asia – Top Target Market

We expect ASIA to be our top target market as this has the highest concentration of motorbikes across the globe. Our initial goal is to reach out in the sub-continent and the far

#### North America – Enthusiast Market

Our vision for the North American market is to target the enthusiasts in the area. North America has a large concentration of the motorbikes across the region.

#### Europe – Long Term Expansion

Europe, although limited in the number of motorbikes is the most sought after destination for bicycles, we plan on e explained here in the long run.

Figure 2: HELLI's Geographic Segmentation

Our plan here was to look at the long-term vision of HELLI as a product, we wanted to keep in mind how we would expand and which markets we would go to first. HELLI, in itself is truly a global product, one that can be placed in multiple markets and hence serves as a key point for the longevity of the product itself, in terms of expansion as well as development in the long run.

### Segmentation by Income

In consideration of the premium pricing of the product, the target market for HELLI is essentially the SEC A class. To penetrate the market, the company initially intends to target the middle and upper middle classes with higher disposable incomes and therefore a higher willingness to pay for HELLI compared to lower SEC segments.

### Segmentation by Usage

Potential customers for HELLI are also classified based on the type of use. Business to business (B2B) customers for the product include law enforcement agencies (police motorbikes), and delivery centric organizations, to track, manage and dynamically visualize their delivery fleet. Business to consumer customers for the product include motorbike and bicycle commuters.

#### TARGET CUSTOMERS

The next key step for us was to look at the target market as this would essentially define an overall understanding of how and where we can place the product. In order to further understand the target market, the overall use cases for the product need to be defined and highlighted. The figure below showcases top three target markets for the product.

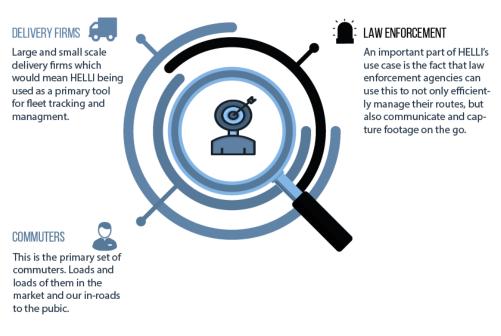


Figure 3: Target Markets

Figure 3 shows key target markets for HELLI, our goal is to move into multiple markets to ensure that the product gains as much tracking as possible in the industry. Furthermore, there are multiple other avenues that can be explored, however, the initial focus here would be to stick to these markets and grow them in order to develop a well-defined and integrated market presence.

### **Customer Needs**

According to the report 'Global status report on road safety 2015' published by WHO (World Health Organization), it is stated that globally around 1.25 million road traffic deaths occur a year where deaths among motorcyclists and bicyclists are intolerably high.<sup>6</sup> The diagram below contains more comprehensive details. In addition to showing the road traffic deaths by

Globally, 1.25
million road traffic
deaths occur a
year where major
fatalities are
among
motorcyclists

type of road user, the diagram reveals other important information like predominant forms of mobility used in different regions.

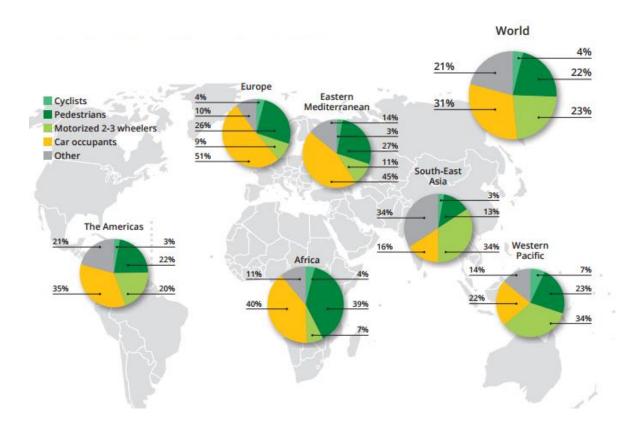


Figure 4: Road traffic deaths by type of road user, by WHO region

<sup>&</sup>lt;sup>6</sup> 'Global status report on road safety 2015', World Health Organization, (http://www.who.int/violence\_injury\_prevention/road\_safety\_status/2015/en/)

Globally, nearly a quarter of all road traffic deaths are among motorcyclists. However, this too is disproportionately distributed across the world as highlighted in the figure above.

The WHO report also reveals another important fact which is that over 90% of the world's fatalities on roads occur in low and middle income countries.

According to Pakistan Bureau of Statistics data on traffic accidents in Pakistan from 2004 to 2013, the overall ratio of deaths in road accidents across the country has been recorded up to 55 %. A total of 51,416 people died in 97,739 road accidents across the country. Motorcycle riders are mainly the victims of such casualties<sup>7</sup>

Another study reveals that 70% of the motorbike accidents are caused

Fatalities =
Lack of
prompt
movement to
hospitals

by distractions and leading cause of distraction is mobile phone usage. Greater number of fatalities happen due to the fact that sufferers do not receive timely treatment or are not moved to the hospital promptly.



Such drastic facts and insights shared above certainly calls for introduction of improved road safety legislations. In recent years, governments including government of Pakistan have made efforts in proposing policies that ensure road safety where major emphasis has also been placed on wearing motorcycle helmets.

Keeping in view such horrific facts, the team at Lets Innovate decided to come up with a product that not only ensures safety, but also makes sure that the injured gets timely treatment through its connectivity feature since as soon as any casualty is reported, an emergency message is sent to the respective authorities (hospitals). The tagline 'Stay Safe, Stay Connected' clearly defines the value HELLI offers, the connectivity element makes the commute much safer hence ensures that it satisfies the underlying needs of its customers.

### COMPETITIVE ANALYSIS

This part of the document covers details regarding what makes HELLI stand out among its competitors. For better understanding, this section covers specifics related to product's SWOT, mentions

<sup>&</sup>lt;sup>7</sup> Fakhar Durrani, 'Traffic accidents kill an average 15 people in Pakistan daily', The News, (https://www.thenews.com.pk/print/58036-traffic-accidents-kill-an-average-15-people-in-pakistan-daily), August 23, 2015

HELLI's direct & indirect competitors and in the end highlights what competitive edge HELLI holds in comparison to its competitors.

### Helli-Swot Analysis

In order to further understand the overall market landscape, we need to consider the dynamics of the market in which we operate and further understand the impact of various variables in the process. A detailed SWOT analysis has been done for HELLI as a product.

#### STRENGTHS

- Technically Sound Team: The team is comprised of people having strong domain knowledge
- Partnership with Key Players: Through partnerships with key vendors, the startup has managed to get hold of China's cheap labor
- Unmatchable Prices: The product HELLI comes with a price tag that cannot be challenged even by global players
- Corporate Identity: The company has managed to establish a corporate identity even before
  the release of product. This would help the firm to create hype while conducting marketing
  activities

#### **WEAKNESSES**

- Weak Financial Backing: Currently, the company is short on investment
- Scalability: The team lacks the capability to manufacture helmets at a large scale
- **Team Gaps:** The team needs to develop its Sales and Finance team

#### **OPPORTUNITIES**

- First Mover Advantage in Local Market: The company can capitalize on this by quickly rolling out the product in market
- Focus on Business to Business Model: Collaborate with law enforcement agencies and delivery centric organizations, this will allow the company to sell its product in bulk
- Psychographic Changes & Technological Shift: A major shift in trends is observed in Pakistan, people are becoming more tech savvy and a change in attitude in observed in lifestyle of consumers. Such changes can act as a good motivator for companies to introduce tech enabled solutions.
- Gain Customer Traction through Heavy Marketing: Being the only product in smart helmet category, the company can gain good customer traction locally through heavy marketing

 Global Opportunities: The company can challenge the global players by introducing the most affordable smart helmet in global market

#### **THREATS**

- Imitators can halt progress: While there are no direct competitors, there is always a risk of copies being pushed into markets and hence causing issues with the growth plan for the product.
- Approval from Regulatory Bodies: Since HELLI would be the one of its kind in Pakistani market so taking approval from regulatory bodies might be a tedious process.
- Consumer Resistance: Being an untested market product, customers might show some initial reluctance in adopting HELLI
- Government Intervention: Introduction of policies related to use of public transport in order to control traffic and pollution related issues can impact motorbikes industry and ultimately helmet industry

The diagram below summarizes the HELLI's entire SWOT analysis:

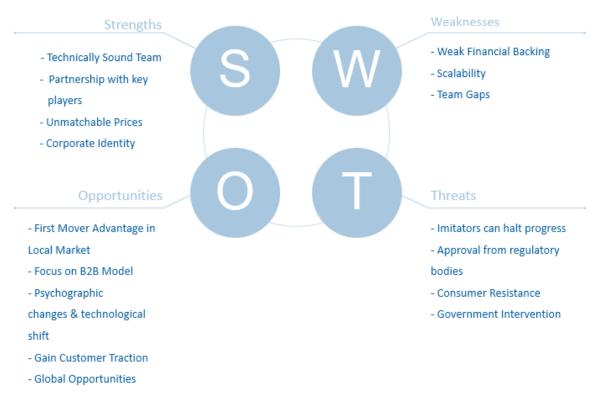


Figure 5: HELLI's SWOT

The SWOT above highlights key areas that HELLI as a product needs to consider when moving forward with the production launch. HELLI currently does not have any competitors in the local market.

At the global scale, HELLI's price bracket in unmatchable and we plan on using pricing as one of tools to capture market share from other smart helmets.

#### **Direct Competitors**

The direct competitors in our case would be those who sell technology enhanced helmets. In Pakistan, the market for smart helmets remains unexplored with no manufacturers of smart helmets currently operating in the country. This essentially means that the company has opportunity to exploit first mover advantages and can successfully penetrate the market with no threat of local competition.

However, global competition for smart helmets is rife with new entrants entering the market every day. Some of the players that can become major competitors include Livall Bling, Lumos Helmet, Coros Linx, Livemap, Classon. The competitors taken into consideration are those that have already made an impact in market or are about to enter market just like HELLI.

#### **Indirect Competitors**

Another relevant substitute for smart helmets is regular helmets priced below 1500. As per the latest available statistic, the size of the global motorcycle market is expected to rise over to 132 million units by 2018, therefore a simultaneous increase in demand for motorcycle accessories is anticipated as well.

#### Competitive Advantages

The grid displayed below would help the reader get a better understanding about our product, HELLI and where it stands in terms of competition. HELLI, along with its competitors has been evaluated on different characteristics. The analysis of the results has been done after the table.<sup>8</sup>

Competitive Analysis Grid								
Smart Helmets	HELLI	Livall Bling	Lumos Helmet	Coros Linx	Livemap	Classon		
Price	Advantage	Even	Even	Even	Disadvantage	Even		
Technological	Even	Even	Disadvantage	Even	ivon Advantage	Disadvantage		
Capabilities	Lveii	Even	Disauvantage	Even	Advantage			
Design/Style	Even	Disadvantage	Disadvantage	Even	Even	Advantage		
Comfort/Fit	Even	Disadvantage	Even	Even	Disadvantage	Even		
Aerodynamic	Even	Disadvantage	Disadvantage	Even	Even	Even		
Safety Features	Even	Even	Disadvantage	Even	Even	Disadvantage		
Waterproof	Even	Disadvantage	Even	Even	Even	Even		

Table 4: Competitive Analysis Grid

<sup>&</sup>lt;sup>8</sup> Aliya Barnwell, 'The best smart helmets are full of cool tech, and totally worth the messy hair', Digital Trends, (https://www.digitaltrends.com/outdoors/best-smart-helmets/), July 22, 2017

The competitive analysis grid presented above clearly shows that our product outperforms its competitors when it comes to price, HELLI comes with a price tag that is unmatchable even at a global scale. Thus, price is one area where we have a competitive edge and can be used to challenge our competitors who offer products of same technical capabilities, but at a relatively higher price. In terms of design, aerodynamics, safety, waterproof and comfort we are at par as most of the premium brand helmets.

#### MARKETING PLAN

This section of the document covers in depth details regarding product features, price element, promotion and distribution. Each of these elements have been elaborated below:

#### Product

HELLI, the smart helmet comes with built-in Bluetooth, speakers, heart-rate sensor, dash cam, as well as GPS. It is also weather resistant and has an aerodynamic design. The helmet that comes with preloaded features promises connectivity and enhanced safety. Customers can stay connected to their smartphones, take calls while riding the bike and can also navigate to their last location. The helmet comes with a companion app that helps to track roads thus makes the entire commute's data available on a single portal. This technology helmet is rechargeable just like any cellphone, however the company plans to equip the device with solar panels so that it can be charged while it's in use.

The startup aims to introduce two variants (HELLI Alpha, HELLI X) of the product, but the basic version (HELLI Alpha) would be available at affordable prices for the masses.

#### **HELLI - FEATURE SET AND VARIANTS**

The goal here is to acquaint the reader with the overall features of HELLI, highlighting the end goal for the product.

Features	Utility			
	This is one of the most basic and primary function of HELLI, users			
Bluetooth/Wireless communication	will have the ability to listen music, answer phone calls on the go			
	without taking their hands off the wheel.			
	Wireless indicators are something we thought necessary a			
Wireless Indicators	when mounted on a helmet they provide a high level of visibility			
	and keeps the rider safe in hazardous environments.			
GPS	The ability to track the rider or track the overall commute is			
	possible with an integrated or assisted GPS module.			
	Assists in biker safety. Shock detection when coupled with a			
Shock detector	companion app allows HELLI to send distress message in case of			
	a fall or accident.			

Table 5: Feature's Utility

These features provide an indication of our vision for HELLI, we want HELLI to be one of the most versatile, effective and viable helmets available in the market.

While keeping these features under consideration, we also wanted to make sure that we widen our reach and keep a global audience under consideration. The following table highlights a summary of core features between two variants of HELLI.

Features	HELLI Alpha (Beta)	HELLI X
Hands Free Calling	✓	✓
Wireless Indicators	✓	✓
High Mounted Night Light	✓	✓
Motion Based Brake Light	✓	✓
Shock Detection	✓	✓
Companion App	✓	✓
Aerodynamic Design	✓	✓
Water Resistant	✓	✓
Built in GPS	X	✓
Built in GSM	X	✓
Dash Cam	X	✓
ECE/DOT Certified	X	✓
Priority Support	X	✓

Table 6: HELLI, Feature Set (Version Variant)

#### **BRAND IDENTITY - HELLI**

#### HELLI – Logo

HELLI uses helmet itself as a logo which allows the end user recognize easily what the company sells.



#### HELLI – Tagline Logo



HELLI tagline logo is shown on the left. The tagline 'Stay Safe, Stay Connected' perfectly describes the utility the product offers.

#### HELLI – Logo Colors and Rationale

The diagrams in this section explain logo colors and rationale for using those colors

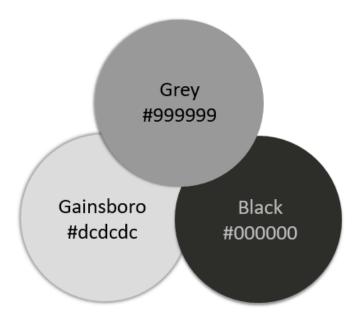


Figure 6: HELLI-Brand Colors

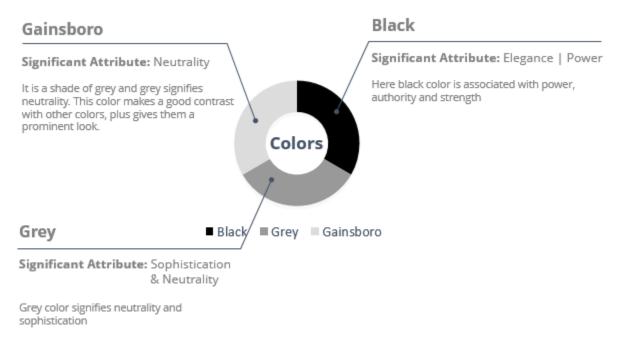


Figure 7: Rationale for Logo Colors

#### BRAND IDENTITY – LETS INNOVATE Lets Innovate - Logo

Lets Innovate uses a light bulb as its logo. The company is known for creating disruptive solutions for the masses and its logo perfectly symbolizes the elements of invention and intelligence, the characteristics that this company possess.



#### Lets Innovate – Logo Colors and Rationale

The diagram below explain logo colors and rationale for using those colors

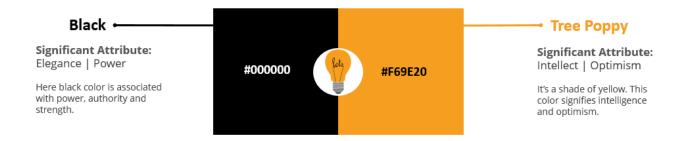


Figure 8: Lets Innovate - Logo Colors and Rationale

#### PACKAGING - HELLI

The helmet would be packed using poly bag and standard cardboard box where poly bag would be used for inner packaging and then cardboard box would be used for outer packaging. The outer box would be branded using brand elements (discussed above) of Lets Innovate and HELLI. In addition, the box would contain important information regarding product features and other company details.

#### Pricing

An important consideration for the product itself is the pricing tiers that we plan on operating and

bringing the product to the market. Our initial goal is to focus on the Pakistani market, the buyer power here is fairly low and we want to make sure that the HELLI basic version is available to the masses before we move to the HELLI X version in the latter parts of the product development. Keeping this in context, our goal for the local launch in terms of pricing is between 3000 – 5000 PKR, depending on the scale of the orders. We plan on developing multiple pricing tiers as the product



matures and as we add more features and markets into the mix. The table 89 summarizes the prices of other smart helmets available in the global market and clearly shows that HELLI takes the lead when it comes to offering economical product.

Smart Helmets Price Comparison								
<b>Smart Helmets</b>	HELLI - Alpha	Livall Bling	Lumos Helmet	Coros Linx	Livemap	Classon		
Price (PKR)	3000 – 5000	≈12640	≈ 20960	21070	210700	≈ <b>15700</b>		

Table 7: Price Comparison Table

To achieve the goal of introducing economical smart helmets, the brand works on cost cutting by minimizing the manufacturing and operational costs. Manufacturing costs have been minimized to some extent by taking advantage of China's cheap labor.

#### Promotion Plan

Initially, company would consider using platforms that are economical and at the same time most impactful. Therefore, in this contemporary technologically advanced world, digital media (social media platforms) being inexpensive in nature would be used to its best effect in order to reach masses particularly the youth that forms larger chunk of the HELLI's target market. Arranging seminars at university level and distributing HELLI's merchandise (T-shirts, P-Caps) would be another effective way to engage target market as it would play the role of brand recognition and brand recall.

<sup>&</sup>lt;sup>9</sup> Aliya Barnwell, 'The best smart helmets are full of cool tech, and totally worth the messy hair', Digital Trends, (https://www.digitaltrends.com/outdoors/best-smart-helmets/), July 22, 2017

For business to business marketing, the approach to reach out retailers and showroom owners directly (personal selling) would come in handy. Advertising material like posters can be placed outside retail stores. In addition, sales promotions like selling first 30 pieces for free or offering test drive of motorbike while wearing HELLI can help in gaining maximum customer traction.

#### Placement Plan

For the initial stage when the HELLI has yet to enter the commercialization phase, customers can make a direct purchase through pre-order registration on company's website. However, in future various distribution channels would be used in order to reach maximum audience. Smart helmets would be made available on retail stores and showrooms.

#### Marketing Plan Summary

The diagram below summarizes the marketing mix of HELLI-Smart Helmet:



Figure 9: HELLI - Marketing Mix

#### **OPERATIONS PLAN**

This part of the document covers details regarding processes that are critical for HELLI's success and further puts light on the milestones that we aim to achieve in the future.

#### **Key Operational Processes**

HELLI - smart helmet's development part has two ends, one is software and the other is hardware. In order to ensure quality and speed up the working process, our team follows SCRUM based model. SCRUM, being agile in nature helps to follow the 'build-measure-learn' philosophy especially when it comes to software development hence helps in making product improvements in quick successions.

Following a SCRUM based model allows our cross functional teams to plan and conduct daily activities that are in sync with company's long term plans. Some activities that must be conducted on daily basis include tasks related to software and hardware development for HELLI. In addition, our team actively remains involved in activities related to business development (goals of reaching out key partners and potential customers.)

Details regarding company's key functional departments and their roles have been outlined in the table below:

Departments	Roles   Responsibilities
	This is the core of the business and is linked with both R&D and
Engineering	enhancement of the products. This will also be a part of the routine
	maintenance and warranty coverage process for the product.
	The department will be responsible for HELLI's promotion. Its job would be
Marketing	to reach out prospective customers (both B2B & B2C) and investors.
	Initially, we plan on having two dedicated individuals.
Sales	Dovetails directly with the marketing team to ensure sales growth. We plan
Sales	to build a strong sales team especially for B2B activities.
	This will be part of the engineering team. Their day to day responsibilities
<b>Customer Service</b>	would include handling customers' queries and providing relevant
	solutions.
	We foresee to have an 'Account & Finance' department in near future
Accounting & Finance	when our product achieves scalability in terms of sales. This department
Accounting & Finance	would be responsible to look after all financial transactions concerning our
	business.

Table 8: Key Functional Departments

#### Milestones

Our team of experts have been working tirelessly on the innovative product, HELLI since past two years. Some key milestones that would be crucial for our product's success in the future have been listed in Table 9 along with their target dates

Milestones	Target Dates
Complete product design testing	1 <sup>st</sup> week of September 2017
Start a marketing campaign for product's beta launch	Mid of September 2017
Launch beta version of HELLI	End of September 2017
Develop Sales Team	End of September 2017
Form B2B partnership with Islamabad Police	Mid of October 2017
Create new investment opportunities (Run crowdfunding campaigns on Kickstarter or Indiegogo)	Early November 2017
Find new suppliers in order to meet scalability targets	End of December 2017
Release new product prototype with improved features	Early March 2018
Establish new distribution channels (via retailers)	June 2018
Capture new markets (outside Pakistan)	September 2018

Table 9: Key Milestones

#### MANAGEMENT TEAM

The founders of Lets Innovate are Adeel Shabbir, Ali Syed, Waqas Khalil and Zain UI Hassan. Ali Syed is the Chief Executive Officer while Waqas serves the role of Managing Director. Adeel and Zain are appointed at CTO (Chief Technology Officer) and Manager Technical operations posts respectively. The 'Management Team Members' section discusses their educational background and area of expertise.

The CEO is planning to expand its team in near future. The team requirements have been covered in 'Management Team Gaps.'

#### Management Team Members

#### ALI SYED | CHIEF EXECUTIVE OFFICER & CO-FOUNDER

Ali Syed is an electrical engineer who currently serves as a faculty member at CASE (Center for Advanced Studies in Engineering). Prior to that, he worked for various organizations under different capacities and holds vast experience in managing automation and robotics products. His entrepreneurial mindset and passion for engineering motivated him to start two tech based startups. 'Lets Innovate' is one of them that has got recognition at various national and International platforms.

#### WAQAS KHALIL | MANAGING DIRECTOR & CO-FOUNDER

Waqas, an engineering and business degree holder brings a diverse range of skill set to the company. He currently works at Xgrid as a senior marketing manager. Previously, he worked for Plumgrid and Abevco, Ltd as a brand and information development manager. He also holds strong technical expertise and had served as an Instrument Engineer at Schlumberger. He values innovation and creativity thus aims to bring trend setting products at 'Lets Innovate'.

#### ADEEL SHABBIR | CHIEF TECHNOLOGY OFFICER & FOUNDER

Adeel holds a master degree in Information Security. He is the director of CASE programmers Group and has 10 years of work experience. He has offered his services to various telecom companies including Zong China Mobile Pakistan.

#### ATIF YAQUB | VICE PRESIDENT ENGINEERING

Atif brings the culture of innovation to the organization by continuously striving to come up with products and services that are of immense value to the end consumer. His experience in industry, research and academia involves CARE Pvt Ltd, Comcept Pvt Ltd, FAST-NU, UTHM, UMT and CASE. In the past, he has also offered consultation services for the automation in various industries.



#### OTHER TEAM MEMBERS

Team Members	Designation
Syed Ali Jabbir	Chief Technology Officer
Waqas Ur Rahman	Technical Lead
Zain Ul Hassan	Manager Technical Operations & Co-Founder
M. Awais Azhar	Design Engineer II
Syed M. Abdullah	Design Engineer II

Table 10: HELLI's Team Members

### Management Team Gaps

The team working on HELLI Smart helmet possesses strong technical expertise, they have in-depth knowledge and experience in robotics, embedded systems and software development, however the startup in short on resources when it comes to skills related to sales and finance.

Since the company expects its beta launch by the end of September, therefore it needs to develop strong sales team so that the product can be rolled out quickly in the market and reach maximum stakeholders.

Ali Syed is currently looking to expand his team and make it more diverse by hiring people expert in their respective domains.

#### FINANCIAL PLAN

This section of the business plan documents details regarding HELLI's revenue model and briefs about product's other financial highlights. It also contains specifics about company's funding needs and exit strategy.

#### Revenue Model

Lets Innovate, being a product based startup aims to generate revenues by selling HELLI, the product itself. However, in the long run we aim to generate new avenues of revenue streams like by charging customers for providing maintenance services.

Our research results show that targeting businesses would turn out to be more profitable for us therefore based on the in depth research, we came up with two business models. One is business to consumer (B2C) where product would be sold directly to the end consumer. And the other more lucrative revenue model we aim to follow is business to business (B2B) where smart helmets would be sold in bulks to businesses like retailers, showrooms, law enforcement agencies or delivery centric organizations. In order to achieve this target, we have increased our business development activities by pitching our ideas to potential customers. Islamabad Police has already shown keen interest in our product.

### Financial Highlights

HELLI has two product variants, HELLI-Alpha and HELLI-X. However, since the company plans to penetrate the market using the basic version of its product so this section only enlists details specific to HELLI-Alpha.

#### KEY ASSUMPTIONS

We took into consideration some assumptions while working on our product financials. These assumptions and guidelines are listed below:

- We assume that there would be a constant 1000 units/month increase in HELLI's sales for the next
   5 years
- Price would remain static to a figure of PKR 5000 for all the projections

- Company would incur an addition PKR 100,000/month for 'Engineering Staff Salaries' expense
- Per year, almost 10% increase is anticipated in 'Lab Equipment', 'Rent', 'General & Admin Salaries',
   'Travel' expense
- A 10% of total revenue would be solely dedicated for marketing activities.
- 'Sales Commission' would cost around 1% of the total revenue/month
- The tax rate considered to calculate Free Cash Flow (FCF) is 32%

#### **BREAK-EVEN ANALYSIS**

This section helped us understand how many units we need to sell in order to start making profits. In order to calculate Break-Even Point (BEP) in units, we took into account total fixed costs, unit variable cost and unit selling price. Our working shows that we need to sell approximately 1317 units of HELLI in order to reach BEP. Keeping in mind the company's sales targets, where the startup aims to sell 2200 units in first month, it means company would reach BEP in first month of its business.

Break-Even Analysis	
Total Fixed Costs	PKR 2,460,000.00
Unit Variable Cost	PKR 3,132.00
Unit Selling Cost	PKR 5,000.00
ВЕР	1316.92

Table 11: Break-Even Analysis

For detailed calculations and costs breakdown, see appendix 1.

#### SALES FORECASTS

The graph shown in Figure 10 summarizes company's sales forecasts for next 5 years. The company adopts a more conservative, yet optimistic approach by assuming that the HELLI's growth rate will remain constant even in late future years when the product might have gained some customer traction and name in the market. The approach is positive in a sense that even in initial years, the startup expects the increase in sales by PKR 720,000,000 amount.



Figure 10: Sales Forecasts

#### PROJECTED PROFIT & LOSS

An overall set of projections were developed based on a five year model. These projections take into account only HELLI-Alpha sales. A snapshot of these projections is listed below, all numbers are in PKR.

Projected Profit &	Loss				
Years	Year 1	Year 2	Year 3	Year 4	Year 5
Units Sold	92400	236,400	380,400	524,400	668,400
<b>Total Sales</b>	462,000	1,182,000	1,902,000	2,622,000	3,342,000
COGS	298,936,800	757,144,800	1,215,352,800	1,673,560,800	2,131,768,800
Gross Margin	163,063,200	424,855,200	686,647,200	948,439,200	1,210,231,200
Operating Exp.	98,923,200	278,439,200	458,341,600	638,119,040	817,759,024
Total Cost	363,076,800	903,560,800	1,443,658,400	1,983,880,960	2,524,240,976
Net Profit/Loss	98,923,200	278,439,200	458,341,600	638,119,040	817,759,024

Table 12: Projected Profit & Loss

The graph displayed in Figure 11 better illustrates where the company stands in terms of profits or sales. For better understanding of these calculations, refer to Appendix 2. Appendix 3 contains monthly calculations.



Figure 11: HELLI's Financial Overview

#### OTHER FINANCIAL INSIGHTS

Table 13 and Table 14 enlist company's Net Present Value (NPV), Internal Rate of Return (IRR) and Profit Margins. Detailed calculations are added in Appendix 4 of this document.

Other Financial Insights	
NPV (15% discount rate)	PKR 814,166,923.93
NPV (90% discount rate)	PKR 118,238,259.20
IRR	103%

Table 13: Other Financial Insights

Profit Margins					
Years	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Gross Profit Margins</b>	35%	36%	36%	36%	36%
<b>Net Profit Margins</b>	21%	24%	24%	24%	24%

Table 14: HELLI's Profit Margins

#### Funding Requirements/Use of Funds

We require a total of PKR 10 million initial investment. As our financials show that company incurs major costs when it comes to manufacturing and marketing, so our funds would mainly be spent on product improvement and heavy marketing since the product would be new in the market, so a strong marketing campaign would be required to engage the target audience.

#### Exit Strategy

As the company would most likely be seeking equity based funding, so we would be following acquisition strategy when it comes to quitting our business that is selling business to another company.

# APPENDIX

# Appendix 1

Breakeven Point			Break Even P	oint (Formula	Head\					
	Source		DIEGR EVEILE	onit (Formula	Oseuj					
			Break Even Po	oint (Units) = (	Fixed Costs)/(S	ales Price per	Unit-Varia	ble Cost pe	r Unit)	
Fixed Costs										
Lab Equipment	P&L By Month	PKR 300,000.00								
Marketing	P&L By Month	PKR 200,000.00								
'General & Admin' Salaries	P&L By Month	PKR 380,000.00	BEP (Units)	1316.92	≈1317					
Rent	P&L By Month	PKR 200,000.00								
Utilities	P&L By Month	PKR 150,000.00								
Travel	P&L By Month	PKR 500,000.00								
Miscellaneous	P&L By Month	PKR 100,000.00								
Engineering Staff Salaries	Sales Plan	PKR 630,000.00								
Total Fixed Cost		PKR 2,460,000.00								
Unit Variable Cost										
Sales Commission	P&L By Month	PKR 50.00								
Supplies Cost	Sales Plan	PKR 3,082.00								
Unit Variable Cost		PKR 3,132.00								
Sales Price per Unit										
HELLI-Alpha	Sales Plan	PKR 5,000.00								
·										

Exhibit 6: Breakeven Point

# Appendix 2

														$\overline{}$
P &	L by Year	_												⊢
		Source	_		Year 1				Year 2			Year 3		$\vdash$
Sale	I		_					-		40001			4000	+
_	HELLI-Alpha	P&L By Month	$\vdash$	PKR	462,000,000.00	100%	_	PKR	1,182,000,000.00	100%	PKR	1,902,000,000.00	100%	+
	Total Sales		_	PKR	462,000,000.00	100%		PKR	1,182,000,000.00	100%	PKR	1,902,000,000.00	100%	╄
														$\vdash$
COG	55	P&L By Month	_	PKR	298,936,800.00	65%		PKR	757,144,800.00	64%	PKR	1,215,352,800.00	64%	+
_			_			250				222				+
Gros	ss Margin		_	PKR	163,063,200.00	35%	_	PKR	424,855,200.00	36%	PKR	686,647,200.00	36%	Ή
-			_				_				+			$\vdash$
Expe	enses	P&L By Month		PKR	2.000.000.00	0%		PKR	2.200.000.00	0%	PKR	2.420.000.00	0%	+
	Lab Equipment		$\vdash$				_							+
	Marketing	-	$\vdash$	PKR	45,300,000.00	10%	_	PKR	118,200,000.00	10%	PKR	190,200,000.00	10%	-
$\vdash$	'General & Admin' Salaries	P&L By Month	$\vdash$	PKR	4,560,000.00	1%	_	PKR	5,016,000.00	0%	PKR	5,517,600.00	0%	+
$\vdash$	Rent	P&L By Month	$\vdash$	PKR	2,400,000.00	1%	_	PKR	2,640,000.00	0%	PKR	2,904,000.00	0%	-
	Utilities	P&L By Month		PKR	2,460,000.00	1%		PKR	3,900,000.00	0%	PKR	5,340,000.00	0%	-
	Travel	P&L By Month	$\vdash$	PKR	2,150,000.00	0%	_	PKR	1,980,000.00	0%	PKR	2,178,000.00	0%	-
	Sales Commission	P&L By Month	_	PKR	4,620,000.00	1%		PKR	11,820,000.00	1%	PKR	19,020,000.00	1%	+
	Miscellaneous	P&L By Month		PKR	650,000.00	0%		PKR	660,000.00	0%	PKR	726,000.00	0%	-
$\vdash$	Operating Exp.			PKR	64,140,000.00	14%		PKR	146,416,000.00	12%	PKR	228,305,600.00	12%	+
Ope	rating Profit			PKR	98,923,200.00	21%		PKR	278,439,200.00	24%	PKR	458,341,600.00	24%	-
Depr	reciation	P&L By Month		PKR	-			PKR	-		PKR	-		
EBIT	Г			PKR	98,923,200.00			PKR	278,439,200.00		PKR	458,341,600.00		
Inter	rest	P&L By Month		PKR	-			PKR	-		PKR	-		
Tax		P&L By Month		PKR	-			PKR	-		PKR	-		_
Net	Profit/Loss			PKR	98.923.200.00	21%		PKR	278.439.200.00	24%	PKR	458.341.600.00	24%	╁
														†
														$\vdash$
	I.		_				_							_

Exhibit 7: Yearly P&L Projections (Year 1-3)

				_									
by Year													
		Year 4				Year 5							
HELLI-Alpha	PKR	2,622,000,000.00	100%		PKR	3,342,000,000.00	100%						
Total Sales	PKR	2,622,000,000.00	100%		PKR	3,342,000,000.00	100%						
	PKR	1,673,560,800.00	64%		PKR	2,131,768,800.00	64%						
Margin	PKR	948,439,200.00	36%		PKR	1,210,231,200.00	36%						
ses													
Lab Equipment	PKR	2,662,000.00	0%		PKR	2,928,200.00	0%						
Marketing	PKR	262,200,000.00	10%		PKR	334,200,000.00	10%						
'General & Admin' Salaries	PKR	6,069,360.00	0%		PKR	6,676,296.00	0%						
Rent	PKR	3,194,400.00	0%		PKR	3,513,840.00	0%						
Utilities	PKR	6,780,000.00	0%		PKR	8,220,000.00	0%						
Travel	PKR	2,395,800.00	0%		PKR	2,635,380.00	0%						
Sales Commission	PKR	26,220,000.00	1%		PKR	33,420,000.00	1%						
Miscellaneous	PKR	798,600.00	0%		PKR	878,460.00	0%						
Operating Exp.	PKR	310,320,160.00	12%		PKR	392,472,176.00	12%						
ting Profit	PKR	638,119,040.00	24%	П	PKR	817,759,024.00	24%						
ciation	PKR	-			PKR	-							
	PKR	638,119,040.00			PKR	817,759,024.00							
		•				•							
st	PKR	-			PKR	-							
	PKR	-			PKR	-							
ofit/Loss	PKR	638,119,040.00	24%		PKR	817,759,024.00	24%						
				1 7						1	1	1	
	HELLI-Alpha Total Sales  Margin  Ses  Lab Equipment Marketing 'General & Admin' Salaries Rent Utilities Travel Sales Commission Miscellaneous Operating Exp. sing Profit	HELLI-Alpha PKR Total Sales PKR  PKR  PKR  Margin PKR  Ses  Lab Equipment PKR Marketing PKR  Willities PKR Utilities PKR Travel PKR Sales Commission PKR Miscellaneous PKR Operating Exp. PKR  Operating Exp. PKR  ing Profit PKR  PKR  PKR  PKR  TRAVEL PKR  Alicelaneous PKR  Operating Exp. PKR  PKR  PKR  PKR  PKR  PKR  PKR  PKR	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4

Exhibit 8: Yearly P&L Projections (Year 4-5)

# Appendix 3

		_												
P&L	L by Month	Source		M1		M2		M3		M4		M5		M6
				Year 1										
Sales														
	HELLI-Alpha	Sales Plan	PKR	11,000,000.00	PKR	16,000,000.00	PKR	21,000,000.00	PKR	26,000,000.00	PKR	31,000,000.00	PKR	36,000,000.00
	Total Sales		PKR	11,000,000.00	PKR	16,000,000.00	PKR	21,000,000.00	PKR	26,000,000.00	PKR	31,000,000.00	PKR	36,000,000.00
COG	s	Sales Plan	PKR	7,410,400.00	PKR	10,592,400.00	PKR	13,774,400.00	PKR	16,956,400.00	PKR	20,138,400.00	PKR	23,320,400.00
Gros	s Margin		PKR	3,589,600.00	PKR	5,407,600.00	PKR	7,225,600.00	PKR	9,043,600.00	PKR	10,861,600.00	PKR	12,679,600.00
Expe	enses													
	Lab Equipment	Expenses	PKR	300,000.00	PKR	200,000.00	PKR	150,000.00	PKR	150,000.00	PKR	150,000.00	PKR	150,000.00
	Marketing	Expenses	PKR	200,000.00	PKR	1,600,000.00	PKR	2,100,000.00	PKR	2,600,000.00	PKR	3,100,000.00	PKR	3,600,000.00
	'General & Admin' Salaries	Expenses	PKR	380,000.00										
	Rent	Expenses	PKR	200,000.00										
	Utilities	Expenses	PKR	150,000.00	PKR	160,000.00	PKR	170,000.00	PKR	180,000.00	PKR	190,000.00	PKR	200,000.00
	Travel	Expenses	PKR	500,000.00	PKR	150,000.00								
	Sales Commission	Expenses	PKR	110,000.00	PKR	160,000.00	PKR	210,000.00	PKR	260,000.00	PKR	310,000.00	PKR	360,000.00
	Miscellaneous	Expenses	PKR	100,000.00	PKR	50,000.00								
	Operating Exp.		PKR	1,940,000.00	PKR	2,900,000.00	PKR	3,410,000.00	PKR	3,970,000.00	PKR	4,530,000.00	PKR	5,090,000.00
Oper	rating Profit		PKR	1,649,600.00	PKR	2,507,600.00	PKR	3,815,600.00	PKR	5,073,600.00	PKR	6,331,600.00	PKR	7,589,600.00
Depr	reciation	CAPEX	PKR	-										
EBIT			PKR	1,649,600.00	PKR	2,507,600.00	PKR	3,815,600.00	PKR	5,073,600.00	PKR	6,331,600.00	PKR	7,589,600.00
Inter	est		PKR	_	PKR	_	PKR	_	PKR	-	PKR	_	PKR	_
Tax			PKR	-										
Net F	Profit/Loss		PKR	1,649,600.00	PKR	2,507,600.00	PKR	3,815,600.00	PKR	5,073,600.00	PKR	6,331,600.00	PKR	7,589,600.00

Exhibit 9

P&L	by Month		M7		M8
			Year 1		Year 1
Sales	i				
	HELLI-Alpha	PKR	41,000,000.00	PKR	46,000,000.00
	Total Sales	PKR	41,000,000.00	PKR	46,000,000.00
COG	S	PKR	26,502,400.00	PKR	29,684,400.00
Gross	s Margin	PKR	14,497,600.00	PKR	16,315,600.00
Expe	nses				
	Lab Equipment	PKR	150,000.00	PKR	150,000.00
	Marketing	PKR	4,100,000.00	PKR	4,600,000.00
	'General & Admin' Salaries	PKR	380,000.00	PKR	380,000.00
	Rent	PKR	200,000.00	PKR	200,000.00
	Utilities	PKR	210,000.00	PKR	220,000.00
	Travel	PKR	150,000.00	PKR	150,000.00
	Sales Commission	PKR	410,000.00	PKR	460,000.00
	Miscellaneous	PKR	50,000.00	PKR	50,000.00
	Operating Exp.	PKR	5,650,000.00	PKR	6,210,000.00
Opera	ating Profit	PKR	8,847,600.00	PKR	10,105,600.00
Depre	eciation	PKR	-	PKR	-
EBIT		PKR	8,847,600.00	PKR	10,105,600.00
Intere	est	PKR	-	PKR	-
Tax		PKR	-	PKR	-
Net P	rofit/Loss	PKR	8,847,600.00	PKR	10,105,600.00

Exhibit 10

P&L	by Month		M9		M10		M11		M12		M13		M14
			Year 1		Year 1		Year 1		Year 1		Year2		Year2
Sales											7		70.000.000.00
⊢	HELLI-Alpha	PKR	51,000,000.00	PKR	56,000,000.00	PKR	61,000,000.00	PKR	66,000,000.00	PKR	71,000,000.00	PKR	76,000,000.00
⊢	Total Sales	PKR	51,000,000.00	PKR	56,000,000.00	PKR	61,000,000.00	PKR	66,000,000.00	PKR	71,000,000.00	PKR	76,000,000.00
	_												
COG	S	PKR	32,866,400.00	PKR	36,048,400.00	PKR	39,230,400.00	PKR	42,412,400.00	PKR	45,594,400.00	PKR	48,776,400.00
C		PKR	40 422 000 00	PKR	40.054.000.00	DVD	24 700 000 00	PKR	22 507 000 00	DVD	25 405 000 00	DVD	27 222 000 00
Gros	s Margin	PKK	18,133,600.00	PKK	19,951,600.00	PKR	21,769,600.00	PKK	23,587,600.00	PKR	25,405,600.00	PKR	27,223,600.00
F	nses												
cxpe	Lab Equipment	PKR	150,000.00	PKR	150,000.00	PKR	150,000.00	PKR	150,000.00	PKR	330,000.00	PKR	220.000.00
$\vdash$	Marketing	PKR	5.100.000.00	PKR	5.600.000.00	PKR	6.100.000.00	PKR	6.600.000.00	PKR	7.100.000.00	PKR	7.600.000.00
$\vdash$	'General & Admin' Salaries	PKR	380.000.00	PKR	380.000.00	PKR	380,000.00	PKR	380.000.00	PKR	418.000.00	PKR	418,000.00
$\vdash$	General & Admin Salaries	PKR	200.000.00	PKR	200.000.00	PKR	200.000.00	PKR	200.000.00	PKR	220.000.00	PKR	220.000.00
$\vdash$	Utilities	PKR	230,000.00	PKR	240.000.00	PKR	250,000.00	PKR	260,000.00	PKR	270.000.00	PKR	280.000.00
$\vdash$		PKR	150.000.00	PKR		PKR		PKR	150.000.00	PKR	165.000.00	PKR	
	Travel Sales Commission	PKR	510.000.00	PKR	150,000.00 560.000.00	PKR	150,000.00	PKR	660,000.00	PKR	710.000.00	PKR	165,000.00 760.000.00
	Miscellaneous	PKR	50,000.00	PKR	50,000.00	PKR	50.000.00	PKR	50.000.00	PKR	55.000.00	PKR	55.000.00
$\vdash$				PKR									
	Operating Exp.	PKR	6,770,000.00	PKK	7,330,000.00	PKR	7,890,000.00	PKR	8,450,000.00	PKR	9,268,000.00	PKR	9,718,000.00
Oper	ating Profit	PKR	11,363,600.00	PKR	12,621,600.00	PKR	13,879,600.00	PKR	15,137,600.00	PKR	16,137,600.00	PKR	17,505,600.00
Depr	eciation	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	11,363,600.00	PKR	12,621,600.00	PKR	13,879,600.00	PKR	15,137,600.00	PKR	16,137,600.00	PKR	17,505,600.00
Intere	est	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	_
Tax		PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
Net F	Profit/Loss	PKR	11,363,600.00	PKR	12,621,600.00	PKR	13,879,600.00	PKR	15,137,600.00	PKR	16,137,600.00	PKR	17,505,600.00

D 0 1	by Month		M15		M16		M17		M18		M19		M20
Fal	by Month		Year2		Year2		Year2		Year2		Year2		Year2
Sales			Teal2		Teal2		rearz		Teal2		Teal2		rearz
ouic	HELLI-Alpha	PKR	81.000.000.00	PKR	86.000.000.00	PKR	91.000.000.00	PKR	96.000.000.00	PKR	101.000.000.00	PKR	106.000.000.00
	Total Sales	PKR	81,000,000.00	PKR	86,000,000.00	PKR	91,000,000.00	PKR	96,000,000.00	PKR	101,000,000.00	PKR	106,000,000.00
	Total Sales	TIM	01,000,000.00	TIM	00,000,000.00	TIMA	31,000,000.00	TIM	30,000,000.00	TIM	101,000,000.00	TINK	100,000,000.00
COG	s	PKR	51.958.400.00	PKR	55.140.400.00	PKR	58.322.400.00	PKR	61.504.400.00	PKR	64.686.400.00	PKR	67.868.400.00
	_										- 1,000,100		
Gros	s Margin	PKR	29,041,600.00	PKR	30,859,600.00	PKR	32,677,600.00	PKR	34,495,600.00	PKR	36,313,600.00	PKR	38,131,600.00
Expe	nses												
	Lab Equipment	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00
	Marketing	PKR	8,100,000.00	PKR	8,600,000.00	PKR	9,100,000.00	PKR	9,600,000.00	PKR	10,100,000.00	PKR	10,600,000.00
	'General & Admin' Salaries	PKR	418,000.00	PKR	418,000.00	PKR	418,000.00	PKR	418,000.00	PKR	418,000.00	PKR	418,000.00
	Rent	PKR	220,000.00	PKR	220,000.00	PKR	220,000.00	PKR	220,000.00	PKR	220,000.00	PKR	220,000.00
	Utilities	PKR	290,000.00	PKR	300,000.00	PKR	310,000.00	PKR	320,000.00	PKR	330,000.00	PKR	340,000.00
	Travel	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00
	Sales Commission	PKR	810,000.00	PKR	860,000.00	PKR	910,000.00	PKR	960,000.00	PKR	1,010,000.00	PKR	1,060,000.00
	Miscellaneous	PKR	55,000.00	PKR	55,000.00	PKR	55,000.00	PKR	55,000.00	PKR	55,000.00	PKR	55,000.00
	Operating Exp.	PKR	10,223,000.00	PKR	10,783,000.00	PKR	11,343,000.00	PKR	11,903,000.00	PKR	12,463,000.00	PKR	13,023,000.00
Oper	ating Profit	PKR	18,818,600.00	PKR	20,076,600.00	PKR	21,334,600.00	PKR	22,592,600.00	PKR	23,850,600.00	PKR	25,108,600.00
Depr	eciation	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	18,818,600.00	PKR	20,076,600.00	PKR	21,334,600.00	PKR	22,592,600.00	PKR	23,850,600.00	PKR	25,108,600.00
Intere	est	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
Tax		PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
Net P	rofit/Loss	PKR	18,818,600.00	PKR	20,076,600.00	PKR	21,334,600.00	PKR	22,592,600.00	PKR	23,850,600.00	PKR	25,108,600.00

Exhibit 12

P&I	by Month		M21		M22		M23		M24		M25		M26
	.,		Year2		Year2		Year2		Year2		Year 3		Year 3
Sales	5												
	HELLI-Alpha	PKR	111,000,000.00	PKR	116,000,000.00	PKR	121,000,000.00	PKR	126,000,000.00	PKR	131,000,000.00	PKR	136,000,000.00
	Total Sales	PKR	111.000.000.00	PKR	116,000,000,00	PKR	121,000,000.00	PKR	126,000,000.00	PKR	131,000,000.00	PKR	136,000,000.00
			, ,		, ,		, ,		, ,				, ,
COG	S	PKR	71,050,400.00	PKR	74,232,400.00	PKR	77,414,400.00	PKR	80,596,400.00	PKR	83,778,400.00	PKR	86,960,400.00
Gros	s Margin	PKR	39,949,600.00	PKR	41,767,600.00	PKR	43,585,600.00	PKR	45,403,600.00	PKR	47,221,600.00	PKR	49,039,600.00
Expe	nses												
	Lab Equipment	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	363,000.00	PKR	242,000.00
	Marketing	PKR	11,100,000.00	PKR	11,600,000.00	PKR	12,100,000.00	PKR	12,600,000.00	PKR	13,100,000.00	PKR	13,600,000.00
	'General & Admin' Salaries	PKR	418,000.00	PKR	418,000.00	PKR	418,000.00	PKR	418,000.00	PKR	459,800.00	PKR	459,800.00
	Rent	PKR	220,000.00	PKR	220,000.00	PKR	220,000.00	PKR	220,000.00	PKR	242,000.00	PKR	242,000.00
	Utilities	PKR	350,000.00	PKR	360,000.00	PKR	370,000.00	PKR	380,000.00	PKR	390,000.00	PKR	400,000.00
	Travel	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	165,000.00	PKR	181,500.00	PKR	181,500.00
	Sales Commission	PKR	1,110,000.00	PKR	1,160,000.00	PKR	1,210,000.00	PKR	1,260,000.00	PKR	1,310,000.00	PKR	1,360,000.00
	Miscellaneous	PKR	55,000.00	PKR	55,000.00	PKR	55,000.00	PKR	55,000.00	PKR	60,500.00	PKR	60,500.00
	Operating Exp.	PKR	13,583,000.00	PKR	14,143,000.00	PKR	14,703,000.00	PKR	15,263,000.00	PKR	16,106,800.00	PKR	16,545,800.00
$ldsymbol{ld}}}}}}$													
Oper	ating Profit	PKR	26,366,600.00	PKR	27,624,600.00	PKR	28,882,600.00	PKR	30,140,600.00	PKR	31,114,800.00	PKR	32,493,800.00
Depr	eciation	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	26.366.600.00	PKR	27.624.600.00	PKR	28.882.600.00	PKR	30.140.600.00	PKR	31.114.800.00	PKR	32.493.800.00
COII		FINK	20,300,000.00	CNK	27,024,000.00	rnn	20,002,000.00	CNK	30, 140,000.00	rnn	31,114,000.00	FINK	32,483,000.00
Intere	est	PKR		PKR		PKR		PKR		PKR		PKR	
Tax		PKR		PKR		PKR		PKR		PKR		PKR	
						···							
Net P	Profit/Loss	PKR	26.366.600.00	PKR	27.624.600.00	PKR	28.882.600.00	PKR	30.140.600.00	PKR	31,114,800.00	PKR	32.493.800.00

P&L	by Month		M27		M28		M29		M30		M31		M32
			Year 3		Year 3		Year 3		Year 3		Year 3		Year 3
Sales													
$\vdash$	HELLI-Alpha	PKR	141,000,000.00	PKR	146,000,000.00	PKR	151,000,000.00	PKR	156,000,000.00	PKR	161,000,000.00	PKR	166,000,000.00
$\vdash$	Total Sales	PKR	141,000,000.00	PKR	146,000,000.00	PKR	151,000,000.00	PKR	156,000,000.00	PKR	161,000,000.00	PKR	166,000,000.00
COG	S	PKR	90,142,400.00	PKR	93,324,400.00	PKR	96,506,400.00	PKR	99,688,400.00	PKR	102,870,400.00	PKR	106,052,400.00
Gros	s Margin	PKR	50,857,600.00	PKR	52,675,600.00	PKR	54,493,600.00	PKR	56,311,600.00	PKR	58,129,600.00	PKR	59,947,600.00
Expe	nses												
	Lab Equipment	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00
	Marketing	PKR	14,100,000.00	PKR	14,600,000.00	PKR	15,100,000.00	PKR	15,600,000.00	PKR	16,100,000.00	PKR	16,600,000.00
	'General & Admin' Salaries	PKR	459,800.00	PKR	459,800.00	PKR	459,800.00	PKR	459,800.00	PKR	459,800.00	PKR	459,800.00
	Rent	PKR	242,000.00	PKR	242,000.00	PKR	242,000.00	PKR	242,000.00	PKR	242,000.00	PKR	242,000.00
	Utilities	PKR	410,000.00	PKR	420,000.00	PKR	430,000.00	PKR	440,000.00	PKR	450,000.00	PKR	460,000.00
	Travel	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00
	Sales Commission	PKR	1,410,000.00	PKR	1,460,000.00	PKR	1,510,000.00	PKR	1,560,000.00	PKR	1,610,000.00	PKR	1,660,000.00
	Miscellaneous	PKR	60,500.00	PKR	60,500.00	PKR	60,500.00	PKR	60,500.00	PKR	60,500.00	PKR	60,500.00
	Operating Exp.	PKR	17,045,300.00	PKR	17,605,300.00	PKR	18,165,300.00	PKR	18,725,300.00	PKR	19,285,300.00	PKR	19,845,300.00
Oper	ating Profit	PKR	33,812,300.00	PKR	35,070,300.00	PKR	36,328,300.00	PKR	37,586,300.00	PKR	38,844,300.00	PKR	40,102,300.00
Depr	eciation	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	33,812,300.00	PKR	35,070,300.00	PKR	36,328,300.00	PKR	37,586,300.00	PKR	38,844,300.00	PKR	40,102,300.00
Intere	est	PKR	_	PKR	_	PKR	_	PKR	_	PKR	_	PKR	_
Tax		PKR	_	PKR	_	PKR	_	PKR	_	PKR	_	PKR	_
Net P	Profit/Loss	PKR	33.812.300.00	PKR	35.070.300.00	PKR	36.328.300.00	PKR	37.586.300.00	PKR	38.844.300.00	PKR	40.102.300.00
.vet I	10110 2033	+ PAIX	00,012,000.00	- DOM	00,010,000.00	2 Park	55,525,550.00	7 Park	07,000,000.00	+ PAIX	55,0 <del>11</del> ,500.00	CONT	10, 102,000.00

Exhibit 14

	b 11		M33		M34		M35		M36		M37		M38
P&L	. by Month						Year 3						
Sales	_		Year 3		Year 3		Year 3		Year 3		Year 4		Year 4
Sales		DIVE	474 000 000 00	DIVE	470 000 000 00	DIVD	404 000 000 00	DICE	400 000 000 00	DIVE	404 000 000 00	DI/D	400 000 000 00
	HELLI-Alpha	PKR	171,000,000.00	PKR	176,000,000.00	PKR	181,000,000.00	PKR	186,000,000.00	PKR	191,000,000.00	PKR	198,000,000.00
$\vdash$	Total Sales	PKR	171,000,000.00	PKR	176,000,000.00	PKR	181,000,000.00	PKR	186,000,000.00	PKR	191,000,000.00	PKR	196,000,000.00
COG	s	PKR	109.234.400.00	PKR	112,416,400.00	PKR	115,598,400.00	PKR	118,780,400.00	PKR	121,962,400.00	PKR	125,144,400.00
	-		,,						,,		,,		
Gros	s Margin	PKR	61,765,600.00	PKR	63,583,600.00	PKR	65,401,600.00	PKR	67,219,600.00	PKR	69,037,600.00	PKR	70,855,600.00
Expe	nses												
	Lab Equipment	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	399,300.00	PKR	266,200.00
	Marketing	PKR	17,100,000.00	PKR	17,600,000.00	PKR	18,100,000.00	PKR	18,600,000.00	PKR	19,100,000.00	PKR	19,600,000.00
	'General & Admin' Salaries	PKR	459,800.00	PKR	459,800.00	PKR	459,800.00	PKR	459,800.00	PKR	505,780.00	PKR	505,780.00
	Rent	PKR	242,000.00	PKR	242,000.00	PKR	242,000.00	PKR	242,000.00	PKR	266,200.00	PKR	266,200.00
	Utilities	PKR	470,000.00	PKR	480,000.00	PKR	490,000.00	PKR	500,000.00	PKR	510,000.00	PKR	520,000.00
	Travel	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	181,500.00	PKR	199,650.00	PKR	199,650.00
	Sales Commission	PKR	1,710,000.00	PKR	1,760,000.00	PKR	1,810,000.00	PKR	1,860,000.00	PKR	1,910,000.00	PKR	1,960,000.00
	Miscellaneous	PKR	60,500.00	PKR	60,500.00	PKR	60,500.00	PKR	60,500.00	PKR	66,550.00	PKR	66,550.00
	Operating Exp.	PKR	20,405,300.00	PKR	20,965,300.00	PKR	21,525,300.00	PKR	22,085,300.00	PKR	22,957,480.00	PKR	23,384,380.00
Oper	ating Profit	PKR	41,360,300.00	PKR	42,618,300.00	PKR	43,876,300.00	PKR	45,134,300.00	PKR	46,080,120.00	PKR	47,471,220.00
Depr	eciation	PKR	-										
EBIT		PKR	41,360,300.00	PKR	42,618,300.00	PKR	43,876,300.00	PKR	45,134,300.00	PKR	46,080,120.00	PKR	47,471,220.00
Intere	est	PKR	-										
Tax		PKR	-										
Net F	Profit/Loss	PKR	41,360,300.00	PKR	42,618,300.00	PKR	43,876,300.00	PKR	45,134,300.00	PKR	46,080,120.00	PKR	47,471,220.00

P&	L by Month		M39		M40		M41		M42		M43		M44
_			Year 4										
Sale													
⊢	HELLI-Alpha	PKR	201,000,000.00	PKR	206,000,000.00	PKR	211,000,000.00	PKR	216,000,000.00	PKR	221,000,000.00	PKR	226,000,000.00
<u> </u>	Total Sales	PKR	201,000,000.00	PKR	206,000,000.00	PKR	211,000,000.00	PKR	216,000,000.00	PKR	221,000,000.00	PKR	226,000,000.00
_													
COG	S	PKR	128,326,400.00	PKR	131,508,400.00	PKR	134,690,400.00	PKR	137,872,400.00	PKR	141,054,400.00	PKR	144,236,400.00
L_													
Gros	ss Margin	PKR	72,673,600.00	PKR	74,491,600.00	PKR	76,309,600.00	PKR	78,127,600.00	PKR	79,945,600.00	PKR	81,763,600.00
Expe	enses												
	Lab Equipment	PKR	199,650.00										
	Marketing	PKR	20,100,000.00	PKR	20,600,000.00	PKR	21,100,000.00	PKR	21,600,000.00	PKR	22,100,000.00	PKR	22,600,000.00
	'General & Admin' Salaries	PKR	505,780.00										
	Rent	PKR	266,200.00										
	Utilities	PKR	530,000.00	PKR	540,000.00	PKR	550,000.00	PKR	560,000.00	PKR	570,000.00	PKR	580,000.00
	Travel	PKR	199,650.00										
	Sales Commission	PKR	2,010,000.00	PKR	2,060,000.00	PKR	2,110,000.00	PKR	2,160,000.00	PKR	2,210,000.00	PKR	2,260,000.00
	Miscellaneous	PKR	66,550.00										
	Operating Exp.	PKR	23,877,830.00	PKR	24,437,830.00	PKR	24,997,830.00	PKR	25,557,830.00	PKR	26,117,830.00	PKR	26,677,830.00
Ope	rating Profit	PKR	48,795,770.00	PKR	50,053,770.00	PKR	51,311,770.00	PKR	52,569,770.00	PKR	53,827,770.00	PKR	55,085,770.00
Depr	reciation	PKR	-										
EBIT		PKR	48,795,770.00	PKR	50,053,770.00	PKR	51,311,770.00	PKR	52,569,770.00	PKR	53,827,770.00	PKR	55,085,770.00
Inter	rest	PKR	_	PKR	-	PKR	_	PKR	-	PKR	-	PKR	-
Tax		PKR	-										
Net I	Profit/Loss	PKR	48,795,770.00	PKR	50,053,770.00	PKR	51,311,770.00	PKR	52,569,770.00	PKR	53,827,770.00	PKR	55,085,770.00
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Exhibit 16

D 2 I	. by Month		M45		M46		M47		M48		M49		M50
FAL	by Month		Year 4		Year 4		Year 4		Year 4		Year 5		Year 5
Sales	:		Teal 4		Teal 4		rear 4		rear 4		rear 5		Teal 3
ouic	HELLI-Alpha	PKR	231.000.000.00	PKR	236.000.000.00	PKR	241.000.000.00	PKR	246.000.000.00	PKR	251.000.000.00	PKR	256.000.000.00
	Total Sales	PKR	231,000,000.00	PKR	236,000,000.00	PKR	241,000,000.00	PKR	246,000,000.00	PKR	251,000,000.00	PKR	256,000,000.00
	Total Sales	TIM	231,000,000.00	TIME	230,000,000.00	TIM	241,000,000.00	TIM	240,000,000.00	TIM	251,000,000.00	TIM	250,000,000.00
COG	s	PKR	147.418.400.00	PKR	150.600.400.00	PKR	153,782,400.00	PKR	156.964.400.00	PKR	160.146.400.00	PKR	163.328.400.00
			,								,		,
Gros	s Margin	PKR	83,581,600.00	PKR	85,399,600.00	PKR	87,217,600.00	PKR	89,035,600.00	PKR	90,853,600.00	PKR	92,671,600.00
Expe	nses												
	Lab Equipment	PKR	199,650.00	PKR	199,650.00	PKR	199,650.00	PKR	199,650.00	PKR	439,230.00	PKR	292,820.00
	Marketing	PKR	23,100,000.00	PKR	23,600,000.00	PKR	24,100,000.00	PKR	24,600,000.00	PKR	25,100,000.00	PKR	25,600,000.00
	'General & Admin' Salaries	PKR	505,780.00	PKR	505,780.00	PKR	505,780.00	PKR	505,780.00	PKR	556,358.00	PKR	556,358.00
	Rent	PKR	266,200.00	PKR	266,200.00	PKR	266,200.00	PKR	266,200.00	PKR	292,820.00	PKR	292,820.00
	Utilities	PKR	590,000.00	PKR	600,000.00	PKR	610,000.00	PKR	620,000.00	PKR	630,000.00	PKR	640,000.00
	Travel	PKR	199,650.00	PKR	199,650.00	PKR	199,650.00	PKR	199,650.00	PKR	219,615.00	PKR	219,615.00
	Sales Commission	PKR	2,310,000.00	PKR	2,360,000.00	PKR	2,410,000.00	PKR	2,460,000.00	PKR	2,510,000.00	PKR	2,560,000.00
	Miscellaneous	PKR	66,550.00	PKR	66,550.00	PKR	66,550.00	PKR	66,550.00	PKR	73,205.00	PKR	73,205.00
	Operating Exp.	PKR	27,237,830.00	PKR	27,797,830.00	PKR	28,357,830.00	PKR	28,917,830.00	PKR	29,821,228.00	PKR	30,234,818.00
Oper	ating Profit	PKR	56,343,770.00	PKR	57,601,770.00	PKR	58,859,770.00	PKR	60,117,770.00	PKR	61,032,372.00	PKR	62,436,782.00
Depr	eciation	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	56.343.770.00	PKR	57.601.770.00	PKR	58.859.770.00	PKR	60.117.770.00	PKR	61.032.372.00	PKR	62.436.782.00
			55,515,776.66		07,001,770.00		55,555,776.66		55,117,176.00	···	51,552,572.55		52,100,702.00
Intere	est	PKR		PKR	-	PKR		PKR	-	PKR	-	PKR	-
Tax		PKR		PKR	-	PKR		PKR	-	PKR	-	PKR	-
Net F	rofit/Loss	PKR	56.343.770.00	PKR	57.601.770.00	PKR	58.859.770.00	PKR	60.117.770.00	PKR	61.032.372.00	PKR	62.436.782.00

	. by Month		M51		M52		1150						****
P&L	. by Month		Year 5		Year 5		M53 Year 5		M54 Year 5		M55 Year 5		M56 Year 5
Sales			Tear o		Tear o		Tear o		Tear o		Tear o		Tears
Jaies	HELLI-Alpha	PKR	261.000.000.00	PKR	266,000,000.00	PKR	271.000.000.00	PKR	276.000.000.00	PKR	281.000.000.00	PKR	286.000.000.00
	Total Sales	PKR	261,000,000.00	PKR	266,000,000.00	PKR	271,000,000.00	PKR	276,000,000.00	PKR	281,000,000.00	PKR	286,000,000.00
	Total Sales	FKK	261,000,000.00	FKK	266,000,000.00	FKK	271,000,000.00	FKK	276,000,000.00	FKK	281,000,000.00	FKK	286,000,000.00
COG	S	PKR	166,510,400.00	PKR	169,692,400.00	PKR	172,874,400.00	PKR	176,056,400.00	PKR	179,238,400.00	PKR	182,420,400.00
Gros	s Margin	PKR	94,489,600.00	PKR	96,307,600.00	PKR	98,125,600.00	PKR	99,943,600.00	PKR	101,761,600.00	PKR	103,579,600.00
Expe		PKR	219.615.00	PKR	219.615.00	PKR	219.615.00	PKR	219.615.00	PKR	219.615.00	PKR	219.615.00
	Lab Equipment Marketing	PKR	26.100.000.00	PKR	26.600.000.00	PKR	27,100,000.00	PKR	27,600,000.00	PKR	28,100,000.00	PKR	28,600,000.00
	'General & Admin' Salaries	PKR	556.358.00	PKR	556.358.00	PKR	556.358.00	PKR	556.358.00	PKR	556.358.00	PKR	556.358.00
	General & Admin' Salaries	PKR	292.820.00	PKR	292.820.00	PKR	292.820.00	PKR	292.820.00	PKR	292.820.00	PKR	292.820.00
	Utilities	PKR	650.000.00	PKR	660.000.00	PKR		PKR	680.000.00	PKR	690,000.00	PKR	
		PKR	219,615.00	PKR	219,615.00	PKR	670,000.00 219.615.00	PKR	219.615.00	PKR	219.615.00	PKR	700,000.00
	Travel Sales Commission	PKR	2.610.000.00	PKR	2.660.000.00	PKR	2.710.000.00	PKR	2.760.000.00	PKR	2.810.000.00	PKR	2.860.000.00
	Miscellaneous	PKR	73.205.00	PKR	73.205.00	PKR	73.205.00	PKR	73.205.00	PKR	73.205.00	PKR	73.205.00
	Operating Exp.	PKR	30.721.613.00	PKR	31.281.613.00	PKR	31.841.613.00	PKR	32.401.613.00	PKR	32.961.613.00	PKR	33,521,613.00
	Operating Exp.	TIKK	30,721,013.00	TIXIX	31,201,013.00	TIXIX	31,041,013.00	TIKK	32,401,013.00	TAK	32,301,013.00	TIKK	33,321,013.00
Oper	ating Profit	PKR	63,767,987.00	PKR	65,025,987.00	PKR	66,283,987.00	PKR	67,541,987.00	PKR	68,799,987.00	PKR	70,057,987.00
Depre	eciation	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	63,767,987.00	PKR	65,025,987.00	PKR	66,283,987.00	PKR	67,541,987.00	PKR	68,799,987.00	PKR	70,057,987.00
					.,,						-,,		
Intere	est	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
Tax		PKR	-	PKR	-	PKR	-	PKR	-	PKR	-	PKR	-
Net P	rofit/Loss	PKR	63.767.987.00	PKR	65.025.987.00	PKR	66.283.987.00	PKR	67.541.987.00	PKR	68.799.987.00	PKR	70.057.987.00

Exhibit 18

P & L by Month		M57		M58		M59		M60	
			Year 5		Year 5		Year 5		Year 5
Sales	1								
	HELLI-Alpha	PKR	291,000,000.00	PKR	296,000,000.00	PKR	301,000,000.00	PKR	306,000,000.00
	Total Sales	PKR	291,000,000.00	PKR	296,000,000.00	PKR	301,000,000.00	PKR	306,000,000.00
COGS	3	PKR	185,602,400.00	PKR	188,784,400.00	PKR	191,966,400.00	PKR	195,148,400.00
Gross	s Margin	PKR	105,397,600.00	PKR	107,215,600.00	PKR	109,033,600.00	PKR	110,851,600.00
Expe	nses								
	Lab Equipment	PKR	219,615.00	PKR	219,615.00	PKR	219,615.00	PKR	219,615.00
	Marketing	PKR	29,100,000.00	PKR	29,600,000.00	PKR	30,100,000.00	PKR	30,600,000.00
	'General & Admin' Salaries	PKR	556,358.00	PKR	556,358.00	PKR	556,358.00	PKR	556,358.00
	Rent	PKR	292,820.00	PKR	292,820.00	PKR	292,820.00	PKR	292,820.00
	Utilities	PKR	710,000.00	PKR	720,000.00	PKR	730,000.00	PKR	740,000.00
	Travel	PKR	219,615.00	PKR	219,615.00	PKR	219,615.00	PKR	219,615.00
	Sales Commission	PKR	2,910,000.00	PKR	2,960,000.00	PKR	3,010,000.00	PKR	3,060,000.00
	Miscellaneous	PKR	73,205.00	PKR	73,205.00	PKR	73,205.00	PKR	73,205.00
	Operating Exp.	PKR	34,081,613.00	PKR	34,641,613.00	PKR	35,201,613.00	PKR	35,761,613.00
Operating Profit		PKR	71,315,987.00	PKR	72,573,987.00	PKR	73,831,987.00	PKR	75,089,987.00
Depre	eciation	PKR	-	PKR	-	PKR	-	PKR	-
EBIT		PKR	71,315,987.00	PKR	72,573,987.00	PKR	73,831,987.00	PKR	75,089,987.00
Intere Tax	st	PKR PKR	-	PKR	-	PKR	-	PKR PKR	-
Net P	rofit/Loss	PKR	71,315,987.00	PKR	72,573,987.00	PKR	73,831,987.00	PKR	75,089,987.00

Exhibit 19

# Appendix 4

NPV & IRR								
	Source	Year 1	Year 2	Year 3	Year 4	Year 5		
Revenue	P&L By Year	PKR 462,000,000.00	PKR 1,182,000,000.00	PKR 1,902,000,000.00	PKR 2,622,000,000.00	PKR 3,342,000,000.00	Additional Notes	
Expenses	P&L By Year	PKR 363,076,800.00	PKR 903,560,800.00	PKR 1,443,658,400.00	PKR 1,983,880,960.00	PKR 2,524,240,976.00	Initial Investment	10000000
Net Profit		PKR 98,923,200.00	PKR 278,439,200.00	PKR 458,341,600.00	PKR 638,119,040.00	PKR 817,759,024.00	Discount Rate 1	15%
Tax	32%	PKR 31,655,424.00	PKR 89,100,544.00	PKR 146,669,312.00	PKR 204,198,092.80	PKR 261,682,887.68	Discount Rate 2	90%
Free Cash Flow		PKR 67,267,776.00	PKR 189,338,656.00	PKR 311,672,288.00	PKR 433,920,947.20	PKR 556,076,136.32	Tax Rate	32%
Discount 1		0.87	0.76	0.66	0.57	0.50		
Discount 2		0.53	0.28	0.15	0.08	0.04		
Present Values 1		PKR 58,493,718.26	PKR 143,167,225.71	PKR 204,929,588.56	PKR 248,095,709.89	PKR 276,468,118.03		
Present Values 2		PKR 35,404,092.63	PKR 52,448,381.16	PKR 45,439,902.03	PKR 33,296,318.11	PKR 22,457,750.53		
NPV 1		PKR 814,166,923.93						
NPV 2		PKR 118,238,259.20						
IRR		103%						
Margins								
Gross Profit Margins		35%	36%	36%	36%	36%		
Net Profit Margins		21%	24%	24%	24%	24%		

Exhibit 20: NPV, IRR & Profit Margins

# CHAPTER 4: 'GO TO' COMMERCIALIZATION STRATEGY

# FINAL YEAR PROJECT REPORT

HELLI SMART HELMET: Market Research | Business Plan | 'Go to' Commercialization Strategy

# CHAPTER 4: 'GO TO' COMMERCIALIZATION STRATEGY

HELLI already has a website established for the sole purpose of sharing information regarding product development, features, usability and order details with the public. So, with the website in place, launching HELLI in Islamabad/Rawalpindi region will need an effective marketing strategy which will help increase public engagement and encourage potential buyers to switch to the website for orders. The strategy will be divided into two phases, mentioned below:

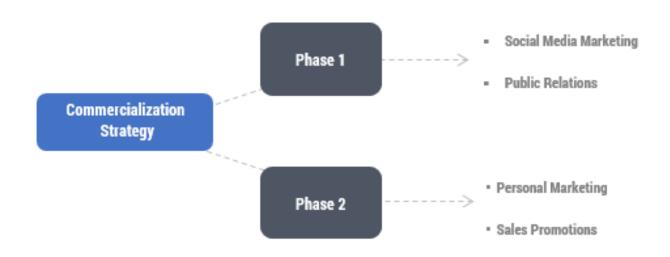


Figure1: Phases of Commercialization

# Phase 1: Social Media Marketing & Public Relations SOCIAL MEDIA

The first phase of the launch comprises of bringing HELLI on multiple social media platforms 40-45 days before the actual launch date. It will include building a strong presence in the Pakistani community, educating the public regarding product features, building brand ambassadors and generating followers. In order to make the social media campaign a success, a known celebrity will be brought on board by Lets Innovate for effective marketing.

FACEBOOK YOUTUBE TWITTER

- A separate page for HELLI will be made and promoted via the parent company's page (Lets Innovate).
- Daily posts related to various features of HELLI and their importance will be shared.
- Posts including product videos, team messages and insights regarding smart helmet market will be made.

- Small video clips will be made and uploaded including teasers, informative videos.
- Promotional ads will be uploaded (which will be developed according to the launch date decided).
- HELLI's twitter profile will be set up and used to get in touch with bike enthusiasts especially celebrities to make a larger impact.
- Creating a general awareness among the public and for promotions.
- To bring in the element of co-creation, #ShareYourExperience campaign can be carried out after people had experienced test drives using HELLI

Figure 2: Use of Social Media Platforms

#### Step by Step Content Release Guideline

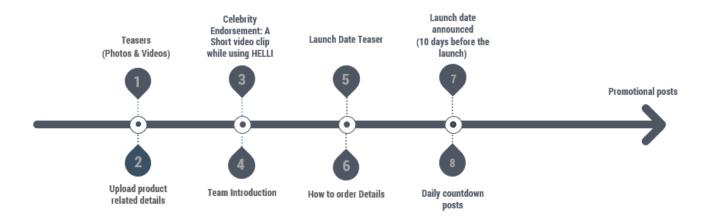


Figure 312: Content Release Guidelines

#### **PUBLIC RELATIONS**

The team behind HELLI would be speaking and promoting the product via various talks and seminars, so that the public can share their queries regarding the product. These seminars should be conducted at different universities in the Islamabad & Rawalpindi region, such as NUST, FAST, and Bahria etc. Apart from universities, different biker clubs and associations can also be contacted for seminars. The team should consider providing test rides to interested candidates (bike riders), this way the rider would get a chance to test various features of HELLI and can learn firsthand how beneficial they are.

#### Phase 2: Personal Marketing & Sales Promotions

#### PERSONAL MARKETING & BANNERS

For the initial stage, only vertical banners of 120\*240 sizes should be used. They can be displayed on highways and roads throughout Islamabad & Rawalpindi. For the start, the team of Lets Innovate must not consider having TVCs or big banners. However, direct personal marketing to consumers and to retailers can be carried out. Directly approaching customers will be carried out via seminars, Biker's association and universities. Additionally big retailers such as Honda should be approached for a partnership.

#### SALES PROMOTION

The following techniques can come in handy for customer engagement:

- Merchandise: HELLI T-shirts, Water bottles, Mugs, and keychains.
- Freebies: Islamabad Traffic Police has already shown interest and made request for 70 helmets. However, 30 free helmets will be given to them. This would help build customer loyalty. Other agencies and companies like, Pakistan Post, food delivery companies etc. can be given 1 free helmet for testing as well.
- Test rides: HELLI can provide free bike rides to the public for product testing at various locations by setting up booth programs. These locations can be used to set up such events; universities, public parks, big markets including Kohsar Market, Jinnah super, commercial Market etc.