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## Emerging Technologies in Eye Sight Correction: Customers Perspective

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### **Emerging Technologies in Eye Sight Correction: Customers Perspective**

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#### Abstract

LASIK (Laser in siter kerato milensis) is a form of refractive surgery which intends to correct eye sight error and reduces the need of other visual aids like glasses and contact lenses. With the emergence of latest technologies in the eye care, the aim of this paper is to explore the eye sight correction surgery: LASIK in the National Capital Region of Inida. It would further identify the market segments that have undergone the surgery or intend to do so in the future, hence highlighting the customers' perception about the same. The research explores upcoming technologies through personal interviews with Eye surgeons in the National Capital Region. The interviews specifically emphasize on the technological milestones in the eye correction area. Further, a questionnaire based survey was conducted, to evaluate customers experience and expectations from these eye care technologies. The study hence, provides a comprehensive overview of the technological high points in the eye sight correction. Also the paper focuses on the various apprehensions raised by customers relating to safety and pricing of these eye surgeries.

Keywords: Technologies, Eye sight correction, LASIK surgery, customers' satisfaction.

### INTRODUCTION

Refractive error is the inability of the eye to accurately focus the rays of light coming from a distance, on the retina. For a long time, all the refractive errors were treated with either glasses or contact lenses, until the advent of eye refractive surgeries. There has been an increase in technology upradation in the area of eye refractive surgeries and one of the most promising and exciting developments in this area has been the introduction of Laser in situ keratomileusis (LASIK) . "The acronym LASIK refers to "LASER" (meaning excimer laser), "In situ" (meaning in place in the corneal bed under the flap), and "Keratomileusis" (meaning to carve the cornea)" (LASIK Vison Correction, 2003). LASIK is a surgical technique in which the surgeon reshapes the cornea (the clear lens at the front of the eye) to change and channel the refracting light. A thin flap is created through the top of the cornea which is very gently folded over, to facilitate the laser treatment on the layer underneath the layer, which is exposed. Some of the corneal tissues situated underneath

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the flap are vaporized through the laser, thus changing the shape of the cornea. As a result the refractive errors are corrected and improved vision is obtained (Aesthetic plastic surgery, 2010).

Technological developments have assisted the entrance into the domain of refractive surgeries. One of the oldest methods is Photorefractive Keratectomy (PRK). Though this is a good procedure, post operative problem of haze has been a common issue with this method. In the procedure, excimer laser is used which has significant advantages over other refractive surgical methods, as it ablates a high degree of precision and no collateral damage. In this procedure the very top corneal layer (epithelial) is removed or kept aside before the excimer laser sculpts the cornea (Wee et al., 1999). A modification of PRK, laser subepithelial keratomileusis (LASEK), was introduced in 1999 to eliminate the disadvantages of PRK. In LASEK the epithelial flap is elevated and turned and ablation is performed. A balanced saline solution is applied and the flap is unfolded on the ablated corneal stroma. The benefits, if any, of the creation of an epithelial flap compared to traditional PRK are not fully appreciated. Ambrosia and Wilson (2003) confirm that there is less pain and discomfort after the surgery with immediate recovery and no side effects of floaters or haze as compared to surgery correction done through standard PRK.

Wave front guided LASIK technology also known as the Wave front 400Hz, which is equipped with computer controlled laser to ensure more precision than any other laser technologies, yields excellent results in image sharpness and contrast sensitivity (Keir et al., 2009); (Charters, 2008); (LASIK India, 2004).

Despite such technological advancements in the area of eye sight correction, the customers' perspective, with regards to eyesight correction procedure, still remains unexplored in India. Customers are one of the primary stakeholders in the surgeries. Apart from technology and price, customer service provided at centers, before and after the LASIK, is one of the important factors to gain the confidence of patients. This indicates that eye centers should guarantee and commit complete care and service to their patients which will increase the trust and relationship with them. The perspective of the customers, who intend to undergo refractive surgery or have already undergone one, is of vital importance for the eye care industry. This is because of the fact that despite these technologies (LASIK) have been developed for the people, customers still hold reservations about such surgeries. The main aim of this paper hence, is to identify the key reason for non acceptance of the LASIK surgery by the people with refractive

errors. The paper also aims to identify the service dimension of LASIK as per the customer expectations.

#### **METHODOLOGY**

The sampling method adopted for the research, is non probability method particularly stratified convenience sampling. Primary data has been collected which constitutes a combination of quantitative and qualitative research. Qualitative research is done through in depth interviews with four renowned ophthalmologists in the National Capital Region to epitomize the technological aspects involved in the surgery. The interviews demonstrate the criteria chosen by doctors to identity the suitability of patients for LASIK and also mentions the various tests that are done at Pre - LASIK stage for the patients. The drawbacks of the surgery, with suggestions to improve, were also discussed with the doctors. Another dimension discovered during the interviews with the surgeons was about the machinery used for the surgery, its cost and availability in India. Lastly an important issue was put across to the doctors which involved the post LASIK customer service rendered by eye care centres, to their patients.

Structured questionnaire was developed through literature review and it was filled by 102 respondents. The study depicts the population only in the National Capital Region (India). The questionnaire for the research was divided into three parts. The first part sought demographic information from the respondents. The second part of the questionnaire was aimed at only those respondents who were using visual aids. The purpose of this part of the questionnaire was to highlight the various reasons for non acceptance of such technological advancements. The third segment of the questionnaire was aimed exclusively for the respondents who had undergone Lasik. The purpose of this part of the questionnaire was to identify the post Lasik complications and further, about the services provided by the eye hospitals. These respondents were people who had refractive errors and were using visual aids (glasses or contact lens) or those who had already undergone LASIK. This criterion is used to highlight the various reasons for the reluctance of people towards opting for the surgery. The post LASIK respondents were chosen as they help in identifying dimensions of customer experience and the service aspect of the eye centers. The designed questionnaire used a combination of ranking question, open ended question as well as dichotomous questions. Majority of the sampled filled the second part of the questionaire which signifies that conversion of the customers, from using visual aids to getting a surgery done, is quite low. The sample

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population included 63 male respondents and 39 female respondents. Upon the analysis of the age data of the respondents it was found out that none of the respondents were below the age of 18. This was further corroborated during the one to one interaction with the ophthalmologists. Eventually the reasons for the sample population for not undergoing the surgery, pooled with the interviews with the eye surgeons led the researchers to identify the gaps in the customer expectations and the surgeons, outlook on the same. It also helped in exploring the service elements which are a very crucial aspect of healthcare industry. For the purpose of this research the four interviewed doctors have been nomenclature as Doctor A, Doctor B, Doctor C and Doctor D respectively.

#### LITERATURE REVIEW

#### The Rise of LASIK

The world of Ophthalmology is one of the fastest evolving fields in healthcare. Scientific breakthroughs have brought before the public, novel surgical techniques for vision repair. Vision repair surgery is a surgical procedure used to rectify problems pertaining to vision correction. Since the sixteenth century then there has been a continuous development and refinements in refractive surgery technologies (Charters, 2009). The intention of the surgeries is to minimize the need of other visual aids.

There are a host of technologies available for reducing dependence on visual aids. One of the oldest technique used is Photorefractive keratectomy (PRK) in which the exclaimer laser directly sculpts the front surface of the cornea. The corneal epithelium which is the surface layer is gently removed by the surgeon and the layer regenerates itself within a few days. Reshaping of the cornea is done by exposing the surface to computer controlled pulses. The deeper layers remain untouched. PRK is highly accurate in correcting many cases of nearsightedness (LASIK Vison Correction, 2003). There were however, a number of disadvantages of this technique which got discovered later. These included mild discomfort for 1 to 3 days following the procedure, longer time to achieve best uncorrected vision, seeing a minor glare which could be permanent and mild halos around images (Medicinenet, 2010).

The eye correction procedure, LASIK is speedy, pain-face and highly accurate. It is one of the most technologically advanced procedures available today, for reducing refractive errors. Refractive error corrections that are done on the interior of the cornea (LASIK), have many advantages over procedures carried out on the cornea's surface (PRK). Microkeratome is a specialized instrument used to create a flap of the corneal tissues that is

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held by a 'hinge'. To expose the corneal stroma, this flap is pulled back like a tiny hinged lid. The laser application takes place in the corneal stroma bed and usually takes about thirty to ninety seconds. Employment of laser is done to vaporize the tissue and the amount of tissues removed in each procedure depends on the patient's degree of refractive error (LASIK Vison Correction, 2003).

#### LASIK SURGERIES AND ITS COMPLICATIONS

The patient selection for LASIK procedure is as crucial as the surgery itself. Preoperative examination of all the people, willing to undergo LASIK, determines the overall success of the procedure. Poor surgical candidates are considered to be those patients who possess refractive error which are out of correction range, have active inflammation of the external eye or patients with cataracts/retinal holes (Taravella et al, 2009).

As with any surgery, there could be complications intra-operatively and postoperatively. Post LASIK dry eye is the most frequent problem, in which the cornel nerves are severed during the creation of flap. Halos and glare are also frequent complications after vision correction surgery and these symptoms are more noticeable in the night but usually dissipate over time (Sakimoto et al, 2006).

Dry eyes accompanied with pain are one of the overwhelming concerns for patients post LASIK. In a study conducted by Donnenfeld (2010) about 32% of patients had dry eye prior to LASIK; post operatively, the percentage with dry eye was slightly higher and went upto 35%'.

One of the limitations highlighted, with the consensus of the surgeons, is that patients with high myopia should not undergo LASIK 'because of comprised visual outcomes' (Ito et al, 2004). Enhancement procedures are further required by some of the patients who have undergone LASIK. Most of the time the flap created during the surgery may pose certain complications which are then reversed with touch up enhancements. Some flap complications can lead to serious visual impairments that might require additional treatments (Charters, 2007). The Food and Drug Administration (FDA) panel suggested that patient warnings must be issued about visual distortions that can occur after LASIK FDA has also provided the patients with the provision of filing complaints through its LASIK webpage (Consumer Reports, 2008). FDA argues that surgeons should prepare the patients for the most common side effects associated with the procedure and they should also inform that 2-10 % of the patients need a second, touch up surgery. The surgeons should also inform that if pre LASIK, the vision is very poor, the patient may still require glasses for performing

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certain activities and the probability of experiencing halos and glare is more for such patients. Also around the age of 40, the patient might require glasses despite experiencing the LASIK procedure. The Ophthalmologist during interviews had also stated about the enhancement procedure in some cases and also confirmed the usage of glasses as patients reach the age of 40 or 45.

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#### LASIK TECHNOLOGIES AND CUSTOMER PERSPECTIVE

Post LASIK customer service is a vital tool in the hands of the hospitals/ eye centers to enhance the customer experience. In today's world where services excellence is found in all sectors, be it retailing, education, banking, telecommunication, healthcare, transportation etc, (Kandampully J et al, 2001) importance of customer satisfaction cannot be ignored. Service firms have no reason to exist without customers and their prime motive is to create happy and satisfied customer (Hoffman and Bateson, 2007). "Hawthorne effect" (Mayo, 1933) which discusses customer satisfaction states that many patients may rate the satisfaction level with the surgery high, in order to please their physician. There have been disturbing examples of patients where they express their satisfaction with the results despite having visual handicaps and or being at a significant risk of poor night vision (Maguire, 1994).

Internationally, research on customers satisfaction, with regards to eyesight correction surgeries, has been limited. According to a press release of world body scientific literature, American Society of Cataract and Refractive Surgery (ASCRS), "globally 94.5% of patients undergone LASIK are very satisfied". This Meta analysis was reported by the M.D. Dr. Kerry Solomon who examined and confirmed this result after viewing more than 3000 research articles from past 10 years. (ASCRS, 2008). It concluded that that 75% of the patients were disappointed and were using visual aids even after the surgery. (LASIK Newswire, 2009).

Kent (1999) suggented that with the number of patients growing, the number of complications is "bound to grow" ' However, this complacency leads to lesses focus on patients expectations.

Limited research has been done in India to explore the customer's outlook on the surgery despite the fact that globally LASIK is an accepted surgery. Worldwide the demand for LASIK surgery exceeds other medical options for eye sight correction. When measured by the number of eye sight correction surgeries conducted, China, in the year 2010, became the leading market for LASIK. In America, amongst the 7 million people who have gone through vision correction throuh laser, only a small percentage

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of patients had unsatisfactory outcome. However research done in the Wills Eye institute, Philadelphia (January 2004 to December 2006) showed that some customers remain unhappy for many years and an attempt to understand the reasons could facilitate better screening and preoperative counseling that emphasizes appropriate, realistic expectations. During the same research it was identified that surgeons need to make more efforts in maintaining long term realtions with their patients through follow ups, hence they need to train their staff accordingly (Guttman, 2008)<sup>B</sup>. This initiated the need for a similar research to be done in India to understand the patients' view, both pre and post surgery.

#### THE CURRENT STUDY

Though technological developments in the area of eye care, are not new, still the skepticism of customers in accepting such innovations remains an issue. This study tries to locate the customers' (from National Capital Region) inhibitions towards undergoing such technological innovations in the correction of refractive errors in the eyes. The objectives of the study are to:

- Identify the emerging technologies in eye sight correction
- Measure the awareness of the population about eye surgeries
- Highlight the key issues for non acceptance of LASIK
- Satisfaction level of the people who have undergone LASIK
- Customers' perspective on pricing of the surgery and on post LASIK experience

#### FINDINGS AND DISCUSSIONS

#### Use of visual aids: Customers' response and Eye surgeons' perception

The role of visual aids, other than surgery, can be positively established through the study. The sample reveals that 88% of the respondents use glasses or contact lenses to rectify their refractive errors. Table I shows that 47% of the respondents have been using visual aids for the last ten years. 37 % respondents used glasses or contact lenses from the last 10-20 years. However, 17% of the sample population was dependent on visual aids for more than 20 years. The doctors believe that any patient can undergo LASIK if he passes the various tests done for the selection of suitable patients. The first test performed by surgeons is to take a complete medical history of the patient, to identify whether a successful surgery can be performed. This selection process identifies the patients who should not be going through this procedure. These include patients, already suffering from diabetic or glucoma, pregnant and lactating Emerging Technologies

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women, people with either high or low refractive errors and patients with scarred corneas or other eyes diseases. Then an eye check up is done followed by a pachymeter which measures the corneal thickness and a pulpiometer which measures the pupil. Patients with large pupil usually get advised to avoid undergoing LASIK, as the chances of post LASIK complications are high in their case (Bekker, 2010). As per the eye doctors, the duration for which the person has been dependent on visual aids has no significance on their suitability as a potential LASIK customer. As per Doctor B, "the duration for which the person has been dependent on visual aids has no significance on their suitability as a potential LASIK customer". Further supported by Doctor A who also specifically stated that, " LASIK is not suitable for people with scarred corneas, thin corneas, dry eyes, large pupils or with very high errors".

#### Level of awareness

Table I reflects that the level of consciousness about the eye correction surgeries, which as prevelant is positive. Amongst the population using visual aids, 77% were aware of the surgery for eye sight improvement. This brings out the fact that though people are abreast with the emerging technologies still there are certain reasons that hold them back for getting the surgery done. In the arena of refractive surgeries, LASIK is one of the most popular procedure worldwide (Moshirfar, 2010). However, 23% of the sample population using visual aids, suggested that they were ignorant that eye sight rectification can be done through surgery. This emerges as an interesting finding from the study and brings forth that there still lies an ample scope for better promotion and marketing of such technologies in the National Capital Region. A need for creating more awareness of these technologies could now be established.

Table	1:	Intention	to	undergo	LASIK:
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	Yes	No
Use of visual aid	90	12
Percentage	88.24%	11.76%
Awareness of LASIK Surgery	69	21
Percentage	77%	23%
Intend to opt for LASIK Surgery	12	78
Percentage	13%	87%

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#### Intention to Undergo LASIK:

One of the most challenging aspects that emerged from the study was that despite 77% of the people (who use visual aids) were aware of the LASIK, surgery only 13% from them showed an intent intention to undergo LASIK. The rest 87% had no intentions to get the surgery done. A vital issue mentioned by most of the people, not willing to undergo the surgery, was that most of them felt that they could not risk their eyesight. This indicates towards the long term success of the surgery. Suitability of LASIK in Indian patients was also a concern for some respondents. In the year 2002, there had been a controversy surrounding LASIK which highlighted that this technology might be inappropriate for Indian corneas. The Indian Ophthalmic community had responded to this stating " the procedure is as safe and effective in Indian eyes as anywhere in the world provided proper care in pre-LASIK screening is taken" (Dutta, 2000). Few respondents also stated that they were happy with the visual aids they were using. On having a word with the doctors, Doctor D agreed that "not all the patients with refractive errors wish to get the surgery done. The reasons most cited included the post surgery complications involved and the efficacy of the surgery. Table 2 shows the data.

# VARIOUS REASONS IDENTIFIED FOR NON ACCEPTANCE OF LASIK BY THE POPULATION:

Table II highlights the reasons identified by people for not undergoing eye correction surgery. The most important reason was that people did not feel the need for the surgery. Nearly 48% of the population (who used visual aids) affirmed to this reason. Second reason was the lack of knowledge about the surgery and skepticism about the technology. The sample responded negatively to the acceptance of refractive surgeries thereby identifying a vacuum in the system of evolution and acceptance of technologies.

	Lack of Knowledge	Health Issues	Financial Issues	Past Experience of others	felt no need
Rank 1	30	9	0	9	43
Percentage	33.33%	10.00%	0.00%	10.00%	47.78%
Rank 5	5	13	50	15	5
Percentage	5.56%	14.44%	55.56%	16.67%	5.56%

Table 2: Reasons identified for non - acceptance

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#### PERSPECTIVE OF CUSTOMERS WHO UNDERWENT LASIK:

Table 3 exhibits that only 12% of the sample had actually undergone LASIK. This reflects that the people are still not sure of the efficacy of this technology. LASIK has, over the year, gained the trust of customers and practitionies yet the sample, did not show, extreme confidence in the procedure. The identified hesitation of the consumers intensifies the need for making educating people about the surgery. Doctor B during the interview emphasized on "LASIK being the method of choice by the people because of good results, simple procedure, few complications and speedy recovery".

SATISFACTION LEVEL:

Table 3 shows the satisfaction level of the patients who underwent LASIK. The study reveals that 75% of the people were satisfied with their surgery and were quite comfortable within a few hours of surgery. 25% of the dissatisfied population highlighted certain complications associated with their surgery. The doctors affirmed that some cases do not get 100% accuracy in the surgery which could be the reason for dissatisfaction of the people. Doctor D underlined the fact that "LASIK is safe if proper pre assessment and screening is done". Doctor C stressed on the "importance of the machinery that is being used in the surgery and rigorous servicing which is required to keep the machine well functioning".

	Yes	No
Undergone LASIK Surgery	12	90
Percentage	12%	88%
Satisfaction with LASIK surgery	9	3
Percentage	75%	25%
Problems in post LASIK surgery	3	9
Percentage	25%	75%
Awareness of good ophthalmic surgeons	12	0
Percentage	100%	
Awareness of good hospitals	9	3
Percentage	75%	25%
Appropriately priced	6	6
Percentage	50%	50%

Table 3: Satisfaction level of patients who underwent Lasik

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#### **PROBLEMS POST LASIK:**

75% of the people had no problems post LASIK while 25% of the population experienced problems after their LASIK surgery. The main problem mentioned by the respondents was of floaters and haze. A respondent also highlighted that zero refractive error in the eyes, could not be achieved, even after LASIK surgery. According to the Doctor A, "LASIK \_ despite being the most popular technology being used for eye sight correction has a few complications which can be made correct. There is no failure rate but .25% patients require an enhancement second procedure to get the optimum results after 3 months of the primary procedure". According to the doctors, LASIK, despite being the most popular technology has a few complications. They stated that there is no failure rate but 25% patients require a follow-up enhancement procedure after 3 months of the first surgery to get the optimum results. Continuous advancements, however, in the original procedure have contributed in making the surgery more safe, accurate and repeatable. New technologies are responsible for better instruments making the surgery easier for the surgeons. The advances in technology driven laser refractive surgery will continue to make the procedure more effective and safer (Sakimoto, 2006)

#### GOOD DOCTORS IN NATIONAL CAPITAL REGION:

The survey highlighted that all respondents (in NCR), who had undergone LASIK were aware of good ophthalmic surgeons in NCR, which signifies that the region has well known specialist. Yet, actual surgeries are few. This, according to the doctors, highlights the need for building a strong customer base. 'Customer profiling is a standard practice in most industries, not well established in health care sector' (Barber et al 2001) and this could be helpful in defining and expansion of customers base in the sector. This would lead to optimum utilization of the well known Ophthalmic surgeons in the National Capital Region.

#### GOOD HOSPITALS IN THE NATIONAL CAPITAL REGION:

75% of the sample who underwent the surgery had done a full survey on the best available options before getting the surgery done. The rest 25% were those who had got their surgery done from other places in India and not National capital region. This throws light on the fact that despite possessing the leading technologies accompanied by well trained and established doctors, National capital region still has room to attract 100% potential customer to their centers. The respondents specifically mentioned Emerging Technologies

that the prime motive of going to other cities was some known eye surgeons (family or friends) being placed outside the National Capital region.

#### PRICING OF THE SURGERY:

One major area of concern which emerged from the study was that 50% of the respondents felt LASIK was not appropriately priced. They felt that the cost of surgery which amounts to around 35000 INR is quite high and the cost of the surgery should be reduced. Pricing is an obvious driver in medical sector and cost cutting seems to be the key to staying competitive and patients look at the surgery as a commodity and not a surgical procedure (Kent, 1999). Doctor B confirmed "the expenditure to be 30000-35000 INR for both eyes". He further added that "the pricing is such owing to the fact that the machinery used for the surgery, costs around three crores and is imported from USA. VISX is currently the top end machine used at leading LASIK centers of the world". The doctors confirmed the expenditure to be 30000-35000 INR for both eyes. They owe this price to the fact that the machinery used for the surgery costs around three crores and is imported from USA. (VISX is currently the top machine used in leading LASIK centers of the world).

#### **CONCLUSION AND RECOMMENDATIONS:**

Managing customers expectations is very critical in the health care industry owing to the fact that creating the conditions under which technological advancements will be embraced, still remains a grave issue. LASIK is a surgery developed for the people who wish to be free of wearing glasses or contact lens (FDA U.S. Food and Drug administration, 2005). The National Capital Region has emerged as one of the potential places where customers are embracing the technology driven refractive surgeries. The doctors in the region are well trained and equipped with the best available machines for the surgical procedure. Simultaneously, it is also important to manage the patient's satisfaction and comfort level with such technology -based evolutions. The Ophthalmic surgeons in the National Capital Region have come a long way from using the 5th generation Bausch and Lomb Tecnolas to the 7th generation VISX machine. Despite the availability of refractive surgeries by competent surgeons, backed by high end machinery, the population in this region still remains skeptical towards undergoing LASIK. The continuous up gradations in the technology have given a wide choice of refractive surgeries to the consumers. From PRK to LASIK the journey has been facilitating the customers by minimizing the effects of the technology, post surgery. The awareness amongst the population about refractive surgeries is high but it can still be promoted because all of the

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sample population was not of these technologies. A vast number of patients were happy and satisfied post LASIK, but our study shows that some patients were not satisfied with the surgery. Pricing of the surgery is also highlighted as a concern as 50% of the respondents who had undergone LASIK, felt that the surgery is not appropriately priced. This issue could be sorted out by the consensus of the ophthalmic society by providing the surgery at "the least possible cost" (Kent, 1999) to the people in the National Capital region. One very important aspect was absence of post LASIK services provided by the eye centers in the National Capital region. The post LASIK care could be optimized by the surgeons in the region to enhance their patients. The surgeons as well as the relevant people at eye hospitals, need to develop a relationship with the patients and 'maintain a long term follow-up' and 'provide a customized support' to them (Guttman, 2008).

Based on the study it is recommended that the eye centers and the ophthalmic surgeons should try and create more awareness about evolving technologies amongst the population. The lack of consumer knowledge contributes to limited adaption of the technology by people. The eye hospitals should emphasise on more marketing of their services, do customer profiling and hold seminars and knowledge sharing sessions for the patients, intending to undergo LASIK.

#### MANAGERIAL IMPLICATIONS

This research would help the eye care centers in maintaining a database for all the customers interested in LASIK and enhancing the services associated with LASIK. Word of mouth is a prime tool in the hands of health care industry to create goodwill about their brand, technologies and surgeries. Hence optimizing the pre as well as post LASIK services would aid the centres in attracting more customers and achieving their objectives. Enhancing their customers' experience by offering best services and counseling (pre LASIK as well as post LASIK) should be the turning point for eye hospitals and surgeons. LASIK, if priced better could attract some population who consider cost as a big concern for undergoing surgery. Overall the focal point of these emerging technologies should be to enhance customers experience and provide optimum benefit to the society with minimum complications.

#### LIMITATIONS AND FUTURE RESEARCH:

The emerging technologies in eye sight correction have been confined in this paper to specifically LASIK. It is apparent that LASIK also has some limitations like it is 'irreversible, it cannot treat high refractive errors' (Christopher and Agarwal, 2010) which would be eliminated with the ongoing technological advancements. Hence any further research could highlight the latest and novel

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techniques developed for refractive surgeries. Future research could also emphasize on the level on acceptance of eye correction technology throughout the nation rather than restricting the study to a single region. This research could not categorically identify all the post Lasik issues faced by the patients, due to the small sample size, hence further direction could be given to study on the post Lasik aspect only.

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