Chapter: 4

PRICING STRATEGY

4.1 Introduction to Chapter

Price is a significant element in the marketing mix. 'Marketing mix' is referred to as the controllable marketing tools through which a firm is able to produce a response for the targeted market. In the marketing mix, price has its own place which determines a customer's payment to acquire a product (Riaz & Tanveer, n.d.). Pricing strategy is beneficial in terms of diverse purchasing behavior of various customers. Secondly, high degree of demand and uncertainty create more revenue. On the other hand, rigidity of production boosts the organization to play with prices(Dolgui & Proth, 2010).The effectiveness and relevance of different pricing strategies such as penetration strategy and price differentiation strategy can be determined by its outcome in terms of sales and customer satisfaction. Organizations can apply any of these strategies to achieve their pricing objective.

This section explains about the pricing strategies of the electronic industry in India and reviews the trends of the industry's pricing strategies. Further the pricing strategy of the chosen company of research in this study, ECIL, has been elaborated in this section which identifies factors like ECIL's present revenues and profit goals, competitors' charge, pricing research, generating pricing strategy and structure, implementation of that pricing strategy. ECIL's pricing strategy is determined and summarized in the data analysis and interpretations section of this chapter. Finally, this chapter concludes that the success of ECIL's pricing strategy depends on its marketing strategy.

4.2 Introduction to Pricing Strategy

Pricing is one of the major elements of the marketing plan. It enables to differentiate a product or service from another one of similar characteristics. Pricing decisions derive from the underlying objectives and best-suited strategies. The elements of pricing objective include profit maximization, revenue maximization, quality leadership, quantity maximization and survival (Roth, 2007). Pricing objective is focused on three factors, i.e. nature, the desired level of attainment and the associated time horizon. Pricing objectives of service organizations are profit maximization, sales maximization, market share maximization, market share increase, return on investment (ROI), price differentiation, price stability in the market, sales stability in the market, discouragement of new competitors, maintenance of existing customers, long term survival(Avlonitis & Indounas, 2005).The underlying factors that determine a company's price decisions can be categorized as internal factors and external factors. Internal factors include company's marketing objectives, marketing mix strategy, and costs; whereas external factors consist of market environment, demand, competition(Khoso, Ahmed, & Ahmed, 2014).

The most common price strategies are high and low price strategies, and adjustable strategy. The high price strategy entails price setting on the basis of the value of the product as perceived by customers. Adjustable strategy identifies strategies like price discrimination strategy, price skimming, discount strategy, penetration pricing and yield management. Market segmentation or price discrimination strategy depends on customers' different levels of needs and their purchasing ability. Among the other popular pricing methods, discount strategy indicates discount sale which states that a set of items are sold for a limited period. Another popular pricing strategy is *price skimming*, where a product is sold at a high price initially but is lowered with time. On the contrary, penetration pricing refers to a setting where initial price is lower than later as this type is focused on cost reduction over time and discouragement of competitors' entry. Lastly, yield management or revenue management focuses on sales anticipation as well as competitors' behavior in order to generate revenue (Dolgui & Proth, 2010). Other less popular pricing methods include general pricing approaches like cost-plus pricing, break even pricing, value based pricing, and competition based pricing.

There are other strategies like product mix pricing strategy and price adjustment strategy. Product mix pricing strategy can further be distinguished into many types like product line pricing, optimal product pricing, captive product pricing, by-product pricing, product bundle pricing. Finally, price adjustment strategies can take various forms like discount and allowance pricing, segmented pricing, psychological pricing, references prices and promotional pricing (Khoso et al., 2014). Two types of pricing strategies, limit pricing and predatory pricing are used by firms in a competitive market. The former is used in the early stages of a product to competitive entry and the latter is executed after the entry. These two types of pricing are based on signaling theory through which it is understood that in limit pricing, the cost structure of the product or service is low and it intends to protect the market through sacrifice (Uslay, 2005).

While deciding a product's price, an organization also takes into consideration a number of other market factors. These factors can be categorized as cost based, competition based and demand based. These methods are elaborated below:

- Cost based methods: Cost based methods are Cost-plus method, target return pricing, breakeven analysis, contribution analysis and marginal pricing. In cost-plus method, a profit margin is added on the service's average cost. Secondly, target return pricing determines the point at which the firm targets the rate of return. Break-even analysis is focused at the point where total revenues equal total costs. Contribution analysis is slightly different from break-even analysis in this regard that it only considers the direct cost of a product or service. Lastly, marginal pricing is placed below total and variable costs.

- Competition based method: This method comprises of various types of pricing approaches like pricing similar to competitors, pricing above competitors, pricing below competitors and pricing according to the dominant price in the market.

- Demand-based pricing: Demand based pricing consists of perceived-value pricing, value pricing and pricing according to the customers' needs. Perceived-value pricing is focused on customers' perceptions of value. On the contrary, value pricing is aimed at low price and high quality service. Finally, pricing according to customers' needs specify the price is set to satisfy customers' needs (Avlonitis & Indounas, 2005). Additionally, three pricing methods have been discussed in this chapter; cost-based method, competitor-based method and demand-based.

Structure model of these strategies and methods are presented below.

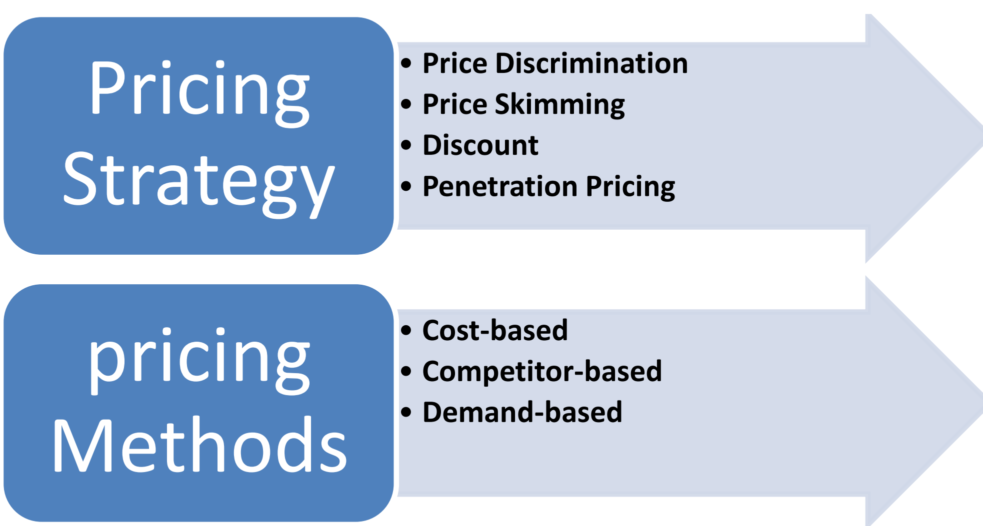

Figure 4.1: Model of Pricing Strategies and Methods

4.3 Pricing strategies used within Electronics Industry

The electronics market is one of the largest in the world and it is expected to reach US$ 400 billion in 2022. This market is projected to grow at a compound annual growth rate (CAGR) of 24.4% during the period 2012-2020. The Indian electronics industry started operations in 1965 with space and defense technologies. This industry is controlled by the government and today comprises of other segments like consumer electronics. In India, the consumer electronics and consumer durables industry offer a wide range of products and services like display technology, entertainment electronics, optical storage devices, electromechanical components, and transmission and signaling equipment, electronic manufacturing services (EMS). Further the regulatory environment of this industry has abolished industrial licensing, except for manufacturing electronic aerospace and defence equipment (CorporateCatalyst(India)PvtLtd, 2015).

India is presently the 3rd largest economy in the world, and its GDP is projected to grow manifold by 2020. According to World Bank, India is placed in third position in sphere of purchasing power parity (PPP) to become third biggest economy in the world (ETBureau, 2014). It also has the 2nd largest pool of engineers and scientists in the world (SPECIALCORRESPONDENT, 2015). Indian electronics landscape paints a hopeful picture, with electronics production projected to be increased by 16% in 2020 and 22% CAGR is expected to be achieved in domestic demand products (VIDEOCON, n.d.). The Consumer Electronics (CE) industry is recognized as the most dynamic industry which deals with changes, innovations of new products or new technology. Today this industry is facing the challenges of social media and its flexible approach, so consumer electronics industry is required to handle the competitiveness and growth of this industry. Apart from this, issues like sustainability, adoption of new technology, regulatory pressure are faced by this industry. Further, today the consumer demand is changing in terms of product life cycle and rapid obsolescence (Dhekne & Chittal, 2011).

India's electronic consumption has seen rapid advancement in the 21st century. In 2005 the consumption was worth $28.2 billion which is estimated to reach $363 billion in 2015, signifying a compounded annual growth rate of 30%. The mobile cellphone industry is growing by 9% per year. Further, 30% production of the Electronics Manufacturing Services (EMS) companies involve manufacturing equipment for the consumer electronic industry (Heggde, 2008).

Another study shows that the 'price skimming' pricing strategy is practiced widely in India, which involves charging a relatively high price for a short time for a new, innovative product launched in the market. The skimming is aimed to "skim" off customers who are willingly pay more for the product and then prices are lowered when demand from the "early adopters" falls. The advantage of this strategy is that it enables customer segmentation in the market. On the contrary, this skimming strategy provides opportunity for competitors as high margins of the product compel the other competitors to enter into the market (Huimin & Hernandez, n.d.).

Price discrimination strategy is executed when different prices are charged from different customers, for the same commodity (Gupta, 2010). Japanese and Korean firms follow the strategies to enter foreign markets which is based on factors like; 1) adopting cost leadership and market segmentation strategies, 2) increase similar characteristics of products or provide alternatives to existing products and 3) practice low cost pricing to encourage new players to enter the market and to become price-quality leaders in the chosen markets . In this regard, Japanese and Korean firms prefer to opt for long-term, less flexible strategies in comparison to American firms (Moorthi & Madanmohan, n.d.). Further, LG's adoption of a low pricing strategy was successful in achieving the target of holding majority market share in Indian rural market such by offering products such as Sampoorna (TV) and Cinephus economy products. They created $ 200 billion revenue in 2007 and consequently sales increased in 2011 (Audu, Anyesha, Hassan, & Hassan, 2014).

In another study, consumer electronics and related industries' long term pricing strategies are discussed. Relevant pricing strategies like price skimming and penetration are considered in new products. In this study curve pricing is studied in context of consumer electronics industry as experience curve permits marketers more freedom in terms of pricing products to attain desired market share. Strategic pricing has proved to be wrong in certain cases because the expected cost reductions may not turn up all the time (Hossain, n.d.). On the other hand, in a duopoly environment, dynamic pricing yields good returns only if it is related to product differentiation. In dynamic pricing (DPT), or personalized pricing, price is decided by understanding shoppers' desire, measuring their resources, and then the price is charged accordingly. Therefore by this method, a retailer can identify individual consumer's expectations and form perfect measurements of consumers' willingness to pay for its product.

In this above study, it is found that in electronics industry, if the low quality firm adopts DPT, then it is optimal to use a non-monotonic price schedule. On the contrary, in the other low valuation segments of the market, the DPT firm is a local monopolist which is motivated towards those customers who pays willingly (Ghose, Mukhopadhyay, Rajan, & Choudhary, 2002). A study on high quality low price strategy in China reveals that according to International Monetary Fund in 2006, buying power of these BRIC countries (China, Russia, India and Brazil) has surpassed 5,000 USD. The demand of emerging market for high quality low price is emphasized on individuality. Low cost pricing approach of the mobile phone is observed in Nokia, Samsung, Motorola, Lenovo and to achieve low price and high quality commodity, various strategies are offered ranging from integration of supply chain to development of low cost models. There are four constraints like wealth-related constraints, time-related constraints, access-related constraints and skill-related constraints and these constraints are overcome by Nokia (Chang & Horng, 2010).

4.4 Pricing strategies used within ECIL

4.4.1 Implication of Porter's five model in ECIL's pricing strategy

ECIL's pricing strategy is analyzed through Porter's Five Forces Model which analyses an organization's internal and external environment to determine its competitiveness in the market. The elements of this generic strategy are: bargaining power of suppliers, bargaining power of customers, threat of substitutes, threat of new entrants, and competitive rivalry. Each element is described below.

Figure 4.2: Porter's five in ECIL's Pricing Strategy

Threat of new entrants: Threat of new entrants provide competitive environment for the existing competitors. The entry of new firms can create challenges for the established organization. ECIL's joint development efforts with R&D associations like BARC (Bhava Atomic Research Centre), DRDO, ISRO and the organization's promotion of technology development support enhance its ability in its field. However, competitors of ECIL like AP&SD products, COMSAT, ICOMM, ASTRAL, BEL have entered ECIL's specialized area. In addition to this, the Indian government decided to allow new entrants in system engineering industry as these new firms had limitations in production levels and technological development. For instance, they were not able to assemble components onto printed circuit boards (Grieco, 1984).

- **Threat of substitutes:** ECIL's substitute products of computer systems are systems offered by Computer Maintenance System (CMC), Hindustan Computers Limited (HCL), DCM Data Products and Operations Research Group (ORG). CMC's monopoly in foreign computer systems and ORG's assembly system indicate that these types of threats have negatively impacted the sale as well as image of ECIL in the market.
- **Bargaining power of suppliers:** The bargaining power of suppliers indicates the relationship between the organization and the suppliers. There are factors which solidify ECIL's suppliers' power, such as raise prices without affecting demand, can reduce quantity supplied, can cooperate formally or informally, can impose switching costs on customers, availability of few substitutes, and criticality of the product (TeamFME, 2013). The organization is dependent on suppliers because it purchases most products for divisions like CAD, AP&SD and TAD from a limited number of suppliers. Therefore the importance of suppliers is greatly evident in its business operations.
- **Bargaining power of customers:** ECIL serves valiantly in India's Nuclear Power Program and supports self-reliance in electronics world.Being a multi-disciplinary organization, it is focused to computers, control systems and communications. In this organization, customers' requirements are clearly conveyed

to the suppliers which are designed to achieve customers' satisfaction. The priorities like maintenance of control systems to communication systems are taken care of and the issues like vendor development and quality assurance are highlighted. On the other hand, assistance is provided to the suppliers in terms of product development, engineering, evaluation, qualification and implementation of ISO 9000 quality management system ("Customer Centric Materials Management -A Case Study of ECIL," n.d.).

- **Competitive rivalry:** ECIL faces various challenges which increase its competitors in the market.Firstly,theR&D domain is perceived as less important hence the organization has almost stopped developing new products. Secondly, the organization was not able to upgrade its marketing efforts and develop the EDP (Electronic Data Processing) market further. Further, it lost its earlier position in computers as its total sale was reduced. Thirdly, ECIL faced the threat from competition for its approach towards mechanism of computer. Apart from this, ECIL's competitors are able to produce microcomputers without licenses for data processing applications. However, ECIL's Computer Division was not interested in adopting this microcomputer technology and did not make any effort to build scientific model (Manikutty, 1990).

ECIL's products are categorized into three types; Control and Automation Division (CAD), Antenna Products & SATCOM Division (AP&SD) and Telecommunication

Division (TAD). The products of CAD Division are Simulators, C&I for PHWRS, B1-B2, CC & I Panels and Sensors. Products of AP&SD are Earth Station Antenna, VSAT Network in SATCOM area, Stabilization Platform and this division's pricing strategy states that few its antenna parts are manufactured in their workshop and most of the parts are given to sub-contractors. The products of third division, TAD are Surveillance Systems, Encryption Systems, Design & Implementation of Access Control Systems, Design & Implementation of Network Solutions. Products of CAD division and TAD division are purchased from suppliers. These three divisions' profit margins are estimated to be 20% - 25% and its costs are retrieved through overhead charges, installation and commission charges, and maintenance charges. In AP&SD divisions little work is done internally, so its price is less that other two divisions. On the other hand, CAD and TAD divisions' materials are procured externally, so these two departments' have higher prices than AP&SD division.

4.5 Data Analysis and Interpretations

The organization's data analysis is described below. The variables have taken to determine pricing strategies of ECIL are type of pricing strategy, pricing framework, adoption of penetration policy, effects of skimming pricing policy, pricing policy in terms of its sales in higher or lower price, competitors' price.

The questionnaire has been distributed to the respondents of ECIL and only 100 responses have been gathered in this study. The data analysis of quantitative data is done by the application of statistical analysis. After the collection of data, data compilation is done in worksheet and SPSS is used for data evaluation. In this chapter, frequency and percentage analysis is done.

4.5.1 Pricing strategy of ECIL

Findings:

	Pricing Strategy
Monopoly	83
Oligopoly	3
Monopolistic	14

Table 4.1: Pricing strategy of ECIL

Data Presentation:

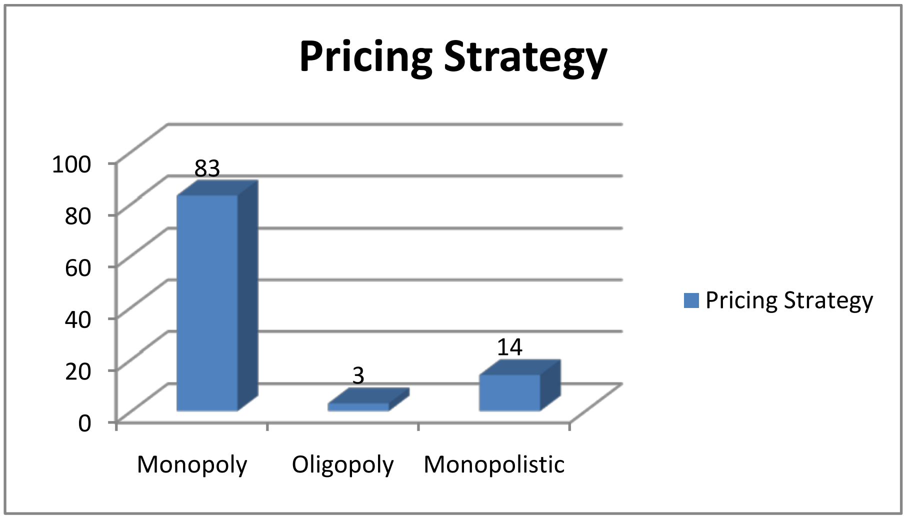

Figure 4.3: Pricing Strategy of ECIL

Data Analysis:

From the above table, it is understood that selection of pricing strategy entails that 83% respondents opt for monopoly pricing strategy, only 3% choose oligopoly and 14% go for monopolistic pricing strategy. After observing the organization's internal environment and product line, selection of monopoly market reduces the scope of new entrants as well its sustenance.

4.5.2 Pricing framework

Findings:

	Pricing framework
Strongly Agree	52
Agree	30
Neutral	14
Disagree	2
Strongly Disagree	2

Table 4.2: Pricing framework of ECIL

Data Presentation

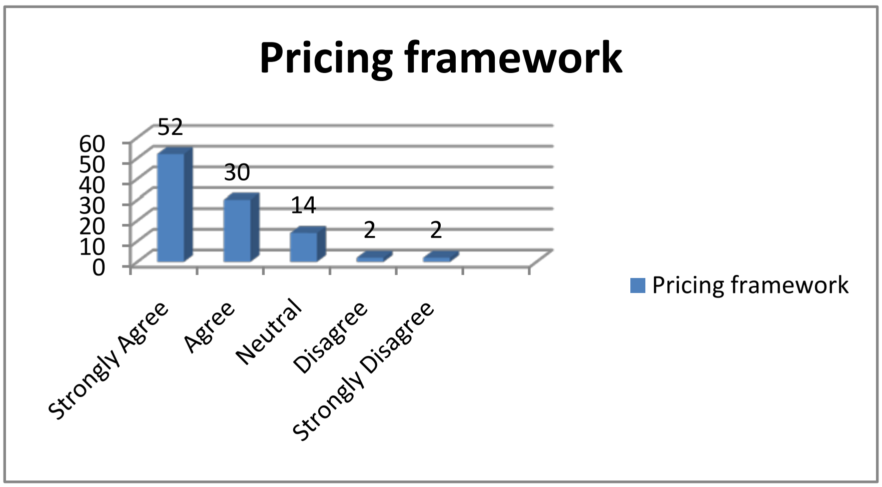

Figure 4.4: Pricing Framework of ECIL

Data Analysis:

Pricing framework of ECILdenotes that 52% respondents are strongly agreed to this concept and 30% respondents also choose this. 14% respondents are neutral, however only 2% respondents are not agreed or disagreed as well as strongly disagreed. So most of the respondents believe that stable pricing framework is able to bring prospective customers for the good image of the organization.

4.5.3 Business penetration pricing policy

Findings:

	Penetration pricing policy
Strongly Agree	28
Agree	35
Neutral	28
Disagree	6
Strongly Disagree	3

Table4.3: Business penetration pricing policy of ECIL

Data Presentation

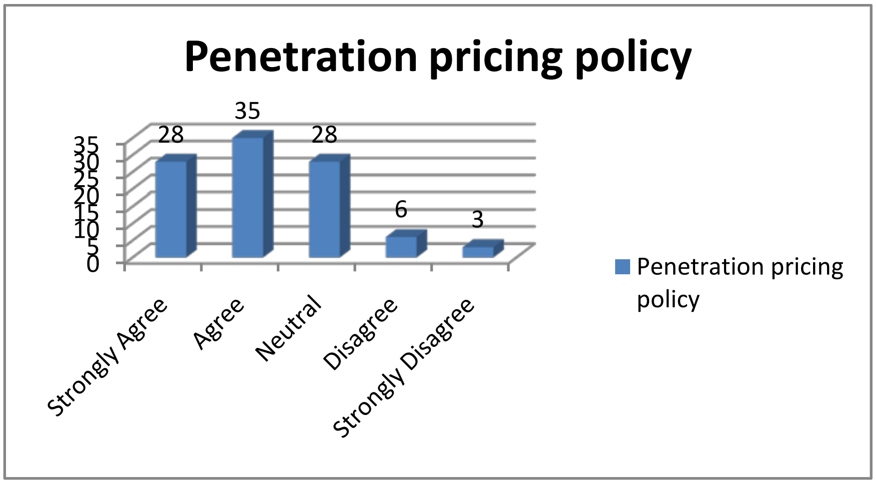

Figure 4.5: Penetration Pricing Policy of ECIL

Data Analysis:

Adoption of penetration pricing policy expresses that only 35% respondents are agrees to this approach, while 28% have opinions of ‘strongly agree’. In this regard, 28% employees are given their responses neutrally, 6% are disagreed to this concept and 3% are strongly disagreed.

4.5.4 Skimming pricing policy would be detrimental to the eventual growth and development of the company

Findings:

	Skimming pricing policy
Strongly Agree	41
Agree	30
Neutral	18

Disagree	7
Strongly Disagree	4

Table 4.4: Skimming pricing policy of ECIL

Data Presentation:

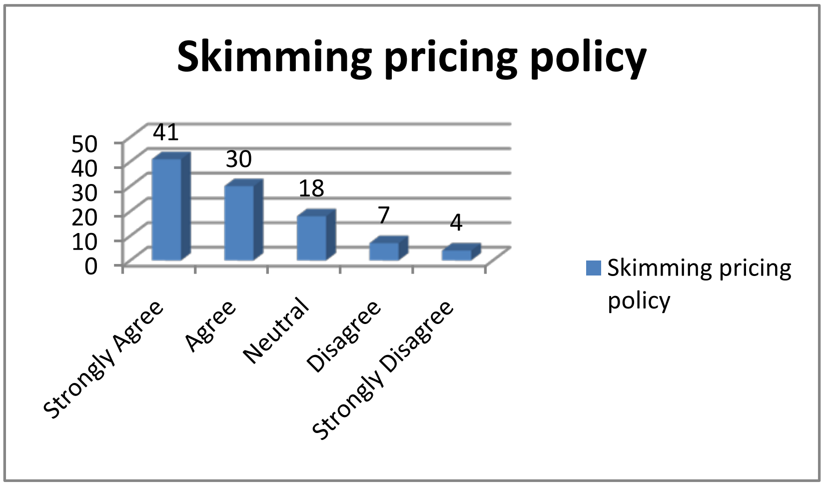

Figure 4.6: Skimming Pricing Policy of ECIL

Data Analysis:

41% respondents strongly agreed that skimming pricing policy at ECIL can be detrimental for the organization and 30% respondents choose to agree this approach. On the other hand, 18% people are neutral, 7% are disagreed and 4% employees are strongly disagreed.

4.5.5 The policy of pricing to sell consistently at a competitive price

Findings:

	Selling pricing policy at competitive price
Strongly Agree	27
Agree	36
Neutral	29
Disagree	4
Strongly Disagree	4

Table 4.5: Selling pricing policy at competitive price

Data presentation:

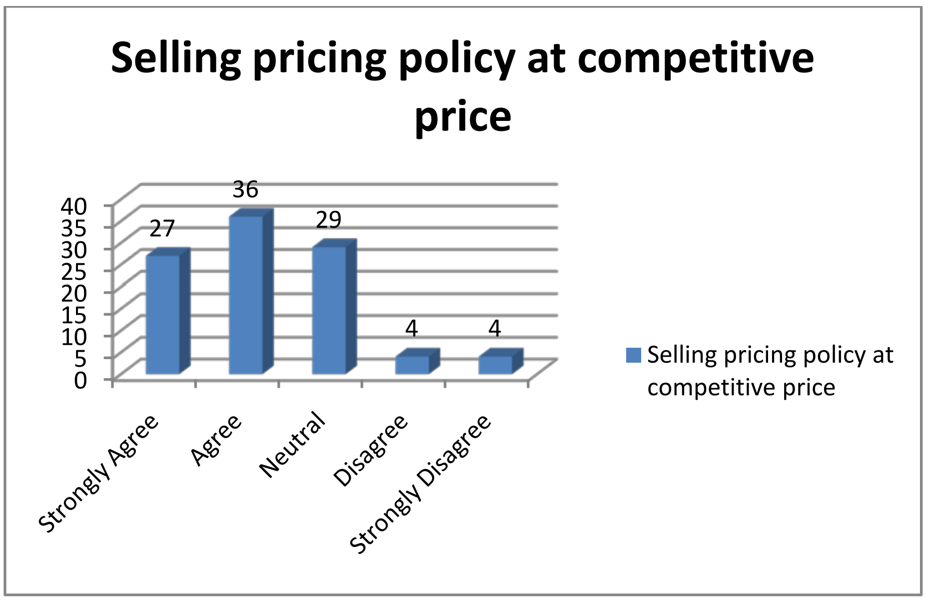

Figure 4.7: Selling Pricing Policy at Competitive Price of ECIL

Data Analysis:

Most of the respondents nodded in agreement which is reflected by 27% respondents who strongly agreed, 36% agreed to this view. On the other hand, 29% people are neutral; Further, only8% respondents are disagreed with the statement.

4.5.6 Standardization or adaption of competitors' price

Findings:

	Standardization or adaptation of competitors' price
Yes	63
No	37

Table 4.6: Standardization or adaptation of competitors' price

Data Presentation

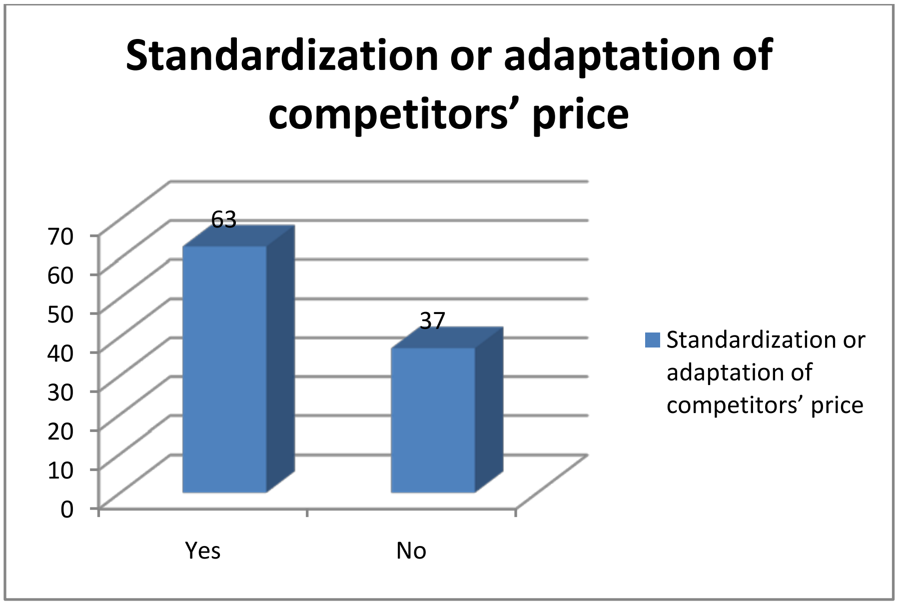

Figure 4.8: Standardization or Adaptation of Competitors' Price at ECIL

Data Analysis:

It is found from the responses of the employees that 63% employees are agreed for the standardization or adaptation of the competitors' price whereas only 37% are not agreed to this approach. So the organization can adopt this pricing strategy to earn their competitiveness.

4.5.7 Devising pricing strategy an important part of company strategy

Pricing strategy is important in the organization as it provides comprehensive coverage accessing pricing, price discrimination, optimal pricing, pricing rule which is implied in monopoly or oligopoly or monopolistic market. Our company follows monopoly pricing strategy as it has high entry barrier and caters only established products. So to determine company strategy effectively, the issue of pricing has a pivotal role which states which pricing strategy is to be exercised, depending on that strategy, company sales and marketing as well as its production strategy will be defined.

4.5.8 The market penetration policy

As a part of growth market strategy, market penetration strategy is emphasized on increasing the sales of existing products and services in the present market. This strategy attracts new customers towards its products. So ECIL diverse products are available in its diverse sectors, ranging from the sector like defence to ISRO. Its huge product line is catered in these sectors.

4.5.9 The main factors which are responsible when deciding the prices

The factors which influence in pricing decision are price elasticity, competitors' price, products' price. As ECIL's products are price inelastic, so buyers are not sensitive to changes in its price. Secondly, competitors' price has an impact on firm's pricing decisions. On the other hand, the availability of substitute products affects a company's pricing decisions. Thirdly, the role of government's regulation is relevant to determine pricing of the products.

The result of the above qualitative data is presented below in terms of devising pricing strategy and factors responsible for pricing decisions.

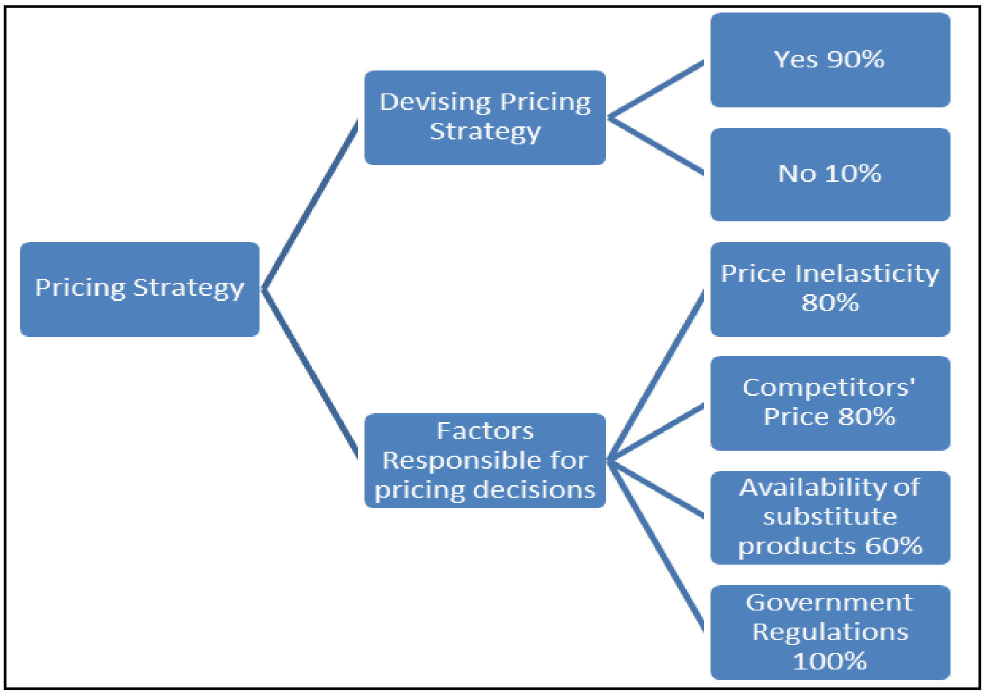

Figure 4.9: Devising pricing strategy and factors responsible for pricing decisions

The figure shows that the respondents have provided their opinions in terms devising pricing strategy, factors responsible for pricing decisions. According to them, 90% people have agreed about the relevance of pricing strategy whereas only

10% have not supported to adopt pricing strategy. On the other hand, pricing decisions are dependent on price inelasticity, competitors' price, availability substitute products and government regulations. The respondents have said that price inelasticity and competitors' price, both are 80% responsible in this context. Apart, availability of substitute products is 60% responsible and government regulations are 100% responsible to determine pricing strategy. The respondents also supported the issue of market penetration policy in this regard.

4.6 Summary of the chapter

This pricing strategy chapter explains the entire landscape of pricing and its issues in the context of ECIL. In the first section, the main theme of the chapter is introduced which shows relevance of pricing in marketing mix, importance and effectiveness of pricing strategy. The next introductory section of pricing strategy entails pricing objective and factors of pricing objective and how it is related to pricing decisions. Various pricing strategies have been discussed ranging from price discrimination strategy to penetration pricing. Further, the role of value based pricing, break-even pricing, competition based pricing, limit pricing and predatory pricing have been analyzed. Various pricing methods are also discussed.

The third section pricing strategy of electronics industry says about the huge influence of this market which is regulated by government and it is catered in the areas like entertainment electronics, electronic manufacturing systems (EMS). The increase of India's electronic consumption has projected its growth also. In this section, Korean companies like LG and Samsung's price discrimination and predatory pricing strategies have been showcased. Apart, the concept of dynamic pricing and its approach has been discussed in terms of its application in the market. The fourth section, pricing strategy of ECIL shows that Porter's five forces strategy which elaborates the organization's threat of new entrants, threat of substitutes, bargaining power of suppliers, bargaining power of customers and competitive rivalry. The data analysis section has presented statistical data which expresses pricing strategy of the organization. It is found from the result that most of the respondents prefer to opt for stable pricing framework, adoption of penetration pricing policy, competitive pricing and detrimental effect of skimming pricing policy. Lastly, the responses from interview questions suggest the relevance of monopoly pricing strategy in the organization, its market penetration policy and variables of pricing decisions.