



## New Product Development

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### ABSTRACT :-

New product development (NDP) is the process of bringing a new product to the market place. This could involve repositioning of existing product at low prices, or making improvement in the existing product or adding new product items to the exiting product line, or for that matter, taking up a product line which a totally new to the organisation or new to the world market. Many of the researcher show that in 70 percent cases related a new product involves changes within current product line of a firm and in 30 percent cases there are new to the organisation.

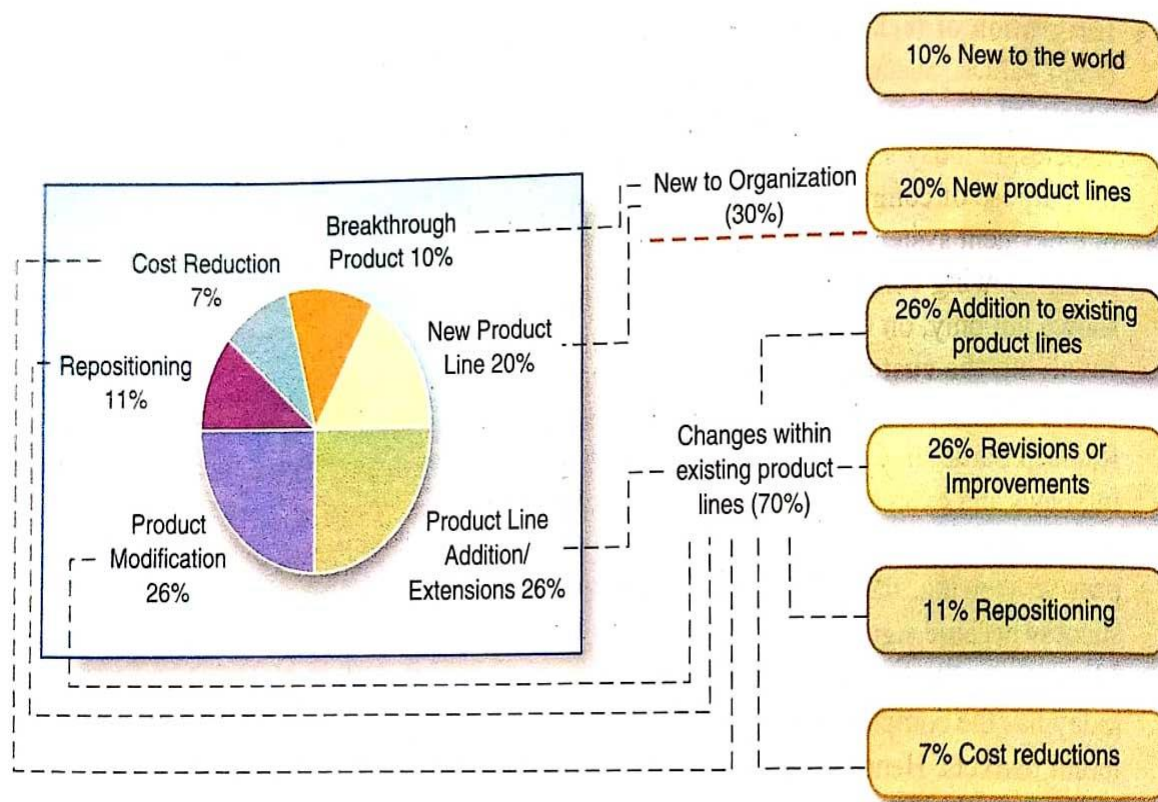
### INTRODUCTION :-

A new product is any product which is perceived by the customer as being new. New product are the lifeblood of an organisation. Innovative business thrive by understating ments, and developing new products that meet and exceed their customer's expectation and keep them satisfied for long time.

### NEW PRODUCTS CAN BE

Product that you business has never made or sold before but have been taken to market by others. Product innovations created and brought to the market for the first time. They may be completely original products or existing products that you have modified and improved. However, a new prodcut development is risky and many new products fail. So further we will study that how a new

product can be developed in the market and which factors affect on its developing and its roles in the market. A diagram is also shown to explain a new product development in brief.



## REVIEW OF LITERATURE

**PHILIP KOTLER, & GARY ARMSTRONG (2014)** conducted a study on 'New Product Development' in which The new product development highlight the important activities needed to find and develop the important new product giving through a set of step. Successful new product development also requires a customer centered, team-based and systematic effort, strong planning and latest R & D technology.

**RAJAN SAXENA (2009)**, published "New Product Decision" in which New product need not means only the technological advancement but also include the competitive market, cultural and social background, cost, risk and benefits to business and as well as customer. New product development is searching, Collecting and after evaluating also implementing new idea in the existing product or new product.

**ASHOK JAIN & VARUN JAIN ( 2014)** published under '*New product Development Process*' in which he stated that a new product is defined as totally new market, replaces an existing product or significantly, broadness the market for an existing product. It satisfy the customer's changing needs and requirements due to change in marketing environment and customer's lifestyle by providing the utility of latest product. and for this it is needed to upgrade the product and product technologically advanced products keeping in mind their sales and profit motive.

## EXPLANATION ON TYPE NEW PRODUCT DEVELOPMENT

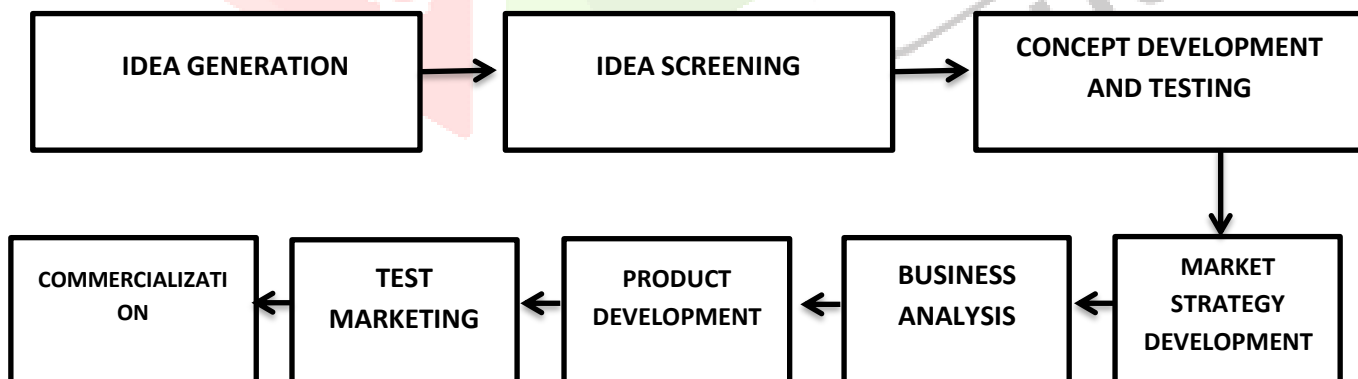
### DEFINITION:-

According to William J. Stanton, M.J Elzel and B.J. Waler.

"By new product we mean original products, product improvements, product modification and new brands that the firms develop through its own research and development efforts."

In the light of above definition it is explained that a new product is anything which is perceived as such by the consumer or with which the firm has no previous experience. So for this ideas can be generated and after that the best idea is implemented with due to deeply study and researchers in form of a new product in the market.

It can be completed in form of fully process which is explained as under:



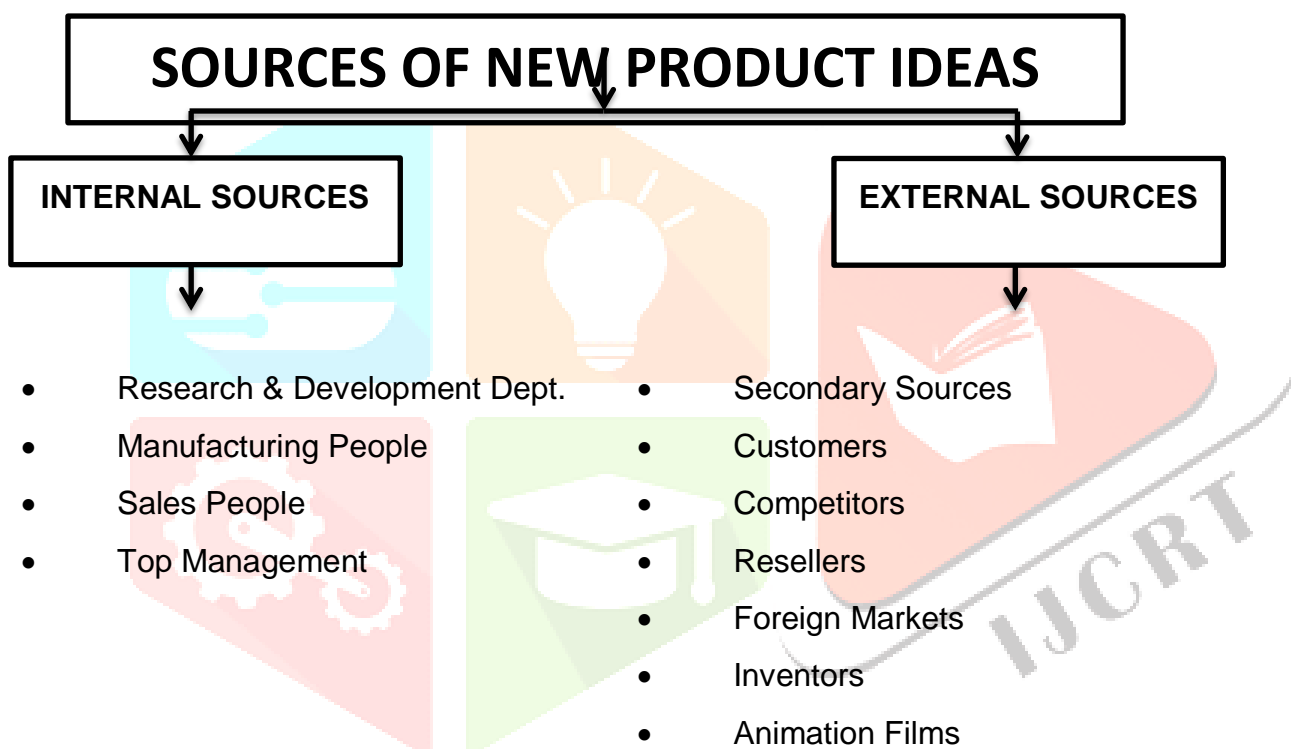
**New Product Development Process**

## THE NEW PRODUCT DEVELOPMENT PROCESS

### 1. IDEA GENERATION :-

The beginning of a successful product is creative idea. The very first step of new product development process is the generation of product idea. It means “fusion of a perceived need with the recognition of technical opportunity” When a technical opportunity is recognised to satisfy this need, a new product idea is generated.

Major sources of new product include internal sources and external sources such as customers, competitors, distributors and suppliers and others. These are as under:-



**A. Internal Idea Sources** :- Using internal sources, the company can find new idea through formal Research & Development. However in a recent study, Only 33 percent of companies surveyed related traditional R & D as a leading source of innovation idea. In contrast 41 percent of companies identified customers as a key source, followed by head of company business unit (35 percent)

**B. External Idea Sources** :- Companies obtain good new product idea from many of external sources in which some are explained as under:

## 1. Competitors :-

Competitors market strategy also give a lot of information about new product. It is true that new product development are kept as a secret and it is difficult to discover them before time. But other marketer can get some information indirectly from the competitors employees, salesman, suppliers, resellers and even customers.

For example – The Danish based LEGO group, maker of the classic LEGO plastic bricks that have been fixture in home around the world for more than 60 years, systematically taps users for new product idea and input.

## 2. Customers:-

Most of the original data or information can be obtained from customers with the purpose to complete their expectations also. The company can analyses customer's questions and complaints to find new product that better solve customer problems.

For Example – The Danish – based LEGO group, maker of the Classic LEGO plastic bricks that have been fixture in home around the world for more than 60 years, systematically taps users for new product idea and input.

## 3. Distributers & Suppliers :-

The companies can collect many ideas from distributors and suppliers. These are more close to the market and can pass along information about customer problem and product possibilities. Supplier can tell the company about new concepts, techniques and material that can be used to develop new product.

## 4. Secondary Information :-

Industries department and other govt. agencies publish lists of available licenses and new products development, which provide clues for new product ventures. Most of the business magazines and newspaper have a new product section, which provides important information about new product.

## 5. Foreign Markets:-

Foreign markets also can provide idea to company about new product like Germany – steel and cars- wine, Italy – Leather products, Japan- Electronic products India – Tea and Coffee. In this way, for new product idea one can visit the foreign markets.

## 6. Other Sources :-

- (i) Industrial consultants, trade associations, advertising agencies.
- (ii) Technical university, engineering colleges, govt. research laboratories and private research organisations.
- (iii) International trade fairs, exhibitions and technical collaborations etc.

## 2. IDEA SCREENING :-

After idea generation the next step is to be follow as idea screening. Though a company may turn to different sources for new product idea and with it all one not equally productive. So it is that stage of NDP that spot good idea and drop poor ones as soon as possible.

It is like selecting best plants in a garden. Because product development cost rise greatly in later stages, so the company wants to go a head only with those product ideas that will return maximum profitable products with lonest cost.

One marketing expert proposes on R.W.W. (“real, win, worth doing”) new – product screening frame work that ask three questions. First, Is it real? As there a real need and desire for the product, and will customer afford it? Is there a clear product concept and will such a product satisfy the marked? Second, can we win? Does the product offer a sustainable competitive advantage? Does the company have the resource to make such a product a success? Finally, as it worth doing? Does the product fit the company’s overall growth strategy? Does it offer sufficient profit potential? The company should be able to answer yes to all thee R.W.W. questions before developing the new – product idea further.

In last we can say that idea screening is screening new – product ideas to spot good ideas and drop poor ones as

### 3. CONCEPT DEVELOPMENT AND TESTING:-

After idea screening an attractive and detail idea is completed with following in meaningful consumer terms. For this it is important to distinguish between a product idea, a product concept and a product image.

- (i) **Product Idea :-** A possible product idea that the company might offer to the market.
- (ii) **Product Concept :-** An elaborated version of the idea expressed in meaningful consumer terms.
- (iii) **Product Image:-** The particular picture that consumers acquire of an actual or potential product. This stage include two sub- terms concept development and testing.

#### **Concept:-**

Concept may emerge related to mango juice bottle as for example.

**Concept I:-** Fresh fruit juice for children and adolescents, as a health supplement at breakfast time.

**Concept II:-** Fresh bottled fruit juice for the young as a fun, thirst quenching, refreshing and nutritious health drink to be had at any time.

**Concept III:-** Fresh bottled mango juice for the young and grown ups as a fun, thirst quenching and refreshing beverage to be had at any time.

**Testing :-** It calls for testing new product concept with group of target consumers like.

- (i) To measure the need level of the consumers.
- (ii) To measure the consumer targets and purchase frequency.
- (iii) To measure the gap level between the new product and existing products in the market. The greater gap the higher in the need level.
- (iv) To measure the perceived value. The higher the perceived value, the higher will be the expected consumer interest.

#### **4. MARKET STRATEGY DEVELOPMENT :-**

It is that stage of the NDP on which the product idea is completed on before of customers, but it has to be analysed that how much it will be effective in the market. Now the marketer make study about the various marketing strategy related pricing, market area, sales policy, profit goals. Overall it include three parts as:

(i) First part describes the target market; the planned value proposition; and the sales, market share, and profit goals for the first few years.

##### **For Example:-**

Target market is younger, well – educated, moderate – to high – income individuals, couples, on small families seeking practical, environmentally responsible transportation. The car will be positioned as more fun to drive and less pollution than today's internal combustion engine or hybrid cars. The company will aim to sell 50,000 cars in the first year, at a loss not mere than \$ 25 million.

(ii) The second part of the marketing strategy statement outlines the product's planned price, distribution and marketing budget for the first year.

(iii) The third part of the marketing strategy statement describes the planned long run sales, profit goals and marketing mix strategy.

##### **For Example:-**

We intend to capture a 3 percent long run share of the total auto market and realize an after tax return on investment of 15 percent to achieve this, product quality will start high and be improved over time. Price will be raised in the second and third year if competition and the economy permit. The total marketing budget will be raised each year by about 10 percent. Marketing research will be reduced to \$ 60,000 per year after the first year.

#### **5. BUSINESS ANALYSIS :-**

Business analysis refers to analysis the sales, cost and profit project of the business with the purpose to implement them in the business. In another way it is analyzed whether our business has enough efficiency to implement the marketing strategy and also customer expectation. It is also called the feasibility study of the business. This study involves the following:-



- (a) Estimation of demand in the target market, at difference price levels.
- (b) Forecasting sales, based on demand estimation and competitive analysis.
- (c) Estimating the cost of serving the market segment, taking into account cost of transportation, warehousing, margins required by trade to market the new product, promotion expenses and sales force cost (if additional sales force is required).
- (d) Based on the cost and anticipated sales revenue, calculating the break – even price and sales volume.

To estimate sales, the company might look at the sales history of similar products and conduct market surveys. It can then estimate minimum and maximum sales to assess the range of risk. After preparing the sales for cast, managers can estimate the expected costs and profit for the product, including marketing, R & D operations, accounting and finance costs. The company then uses the sales and costs figure to analyses the new products financial attractiveness.

## **6. PRODUCT DEVELOPMENT :-**

After business analysis and market analysis the marketers decide the product, strategy which will be implement finally in the product and for presenting it in the market as like product quality, price cost, profit, sales policy, product design, branding, packaging, labeling etc.

In another way, we can say that this stage where the product ideas now move from the concept and design board to R & D and manufacturing for physical development

Often, products undergo rigorous tests to make sure that they perform safely and effectively, or that consumers will find value in them. Companies can do their our product testing or outsource testing to other firms that specialize in testing.

### **For Example:-**

New Balance's wear test program engages consumers throughout the product development process to field test new shoe designs under real-life conditions. Consumer testers attend the New Balance Tester School to learn how to analyses the fit, function, and durability of their assigned test shoes. As they test shoes over an eight – weak period, they log on the their wear test account and complete online surveys and feedback forms documenting their experiences with the test products.

## 7. TEST MARKETING :-

The new product is now tested on four parameters : trail, first purchase, adoption (repeat purchase) frequency and the product is sold to the selected consumer in target market before going to the great market. If feedback come positive then the selected product is launched in market otherwise it is rejected.

Test marketing gives the marketer experience with marketing a product before going to the great expense of full introduction. It lets the company test the product and its entire marketing targeting and positioning strategy, advertising, distribution, pricing, branding and packaging and budget levels.

The amount of test marketing needed varies with each new product. Test marketing can be high and it takes time that may allow competitors to gain advantages. When the cost of den doping and introducing, the product are low or when management is already confident about the new product, the company may do little or no test marketing.

## 8. COMMERCIALIZATION:-

Commercialization means finally introducing new product in the market. It comes out when the product is used by selected customer in target market in form of sample and even result comes in effective way then the product is launched finally in the entire market.

So it is last step in introducing the new product.

**For Example :-** Introducing Mc coffee in the united states, Mc Donald's spent \$ 100 million on an advertising blitz that spanned TV, print, radio, outdoor, the internet etc. Under commercialization stage three points are needed to involve in study as:

- (i) Time – When to launch?
- (ii) Place – Where to be launch?
- (iii) Strategy – Which market strategy to be implement in target market?

## **FACTORS AFFECTING THE NEW PRODUCT DEVELOPMENT:-**

Your product designer will be responsible for utility, usability and raising the user's experience on your site. Despite this, there are a number of factors that are beyond the control of your designer. All these factors will influence the success of your new product. They include the following.

**1.) Senior Management Support :-** The support of the company top management is essential for the success of your project. Without it, you won't get the resource and financial budget to implement the development phases. While your design team can not force the top management to support the program, however they can persuade the management to support it.

**2.) Market Orientation:-** Your market orientation analysis should guide you on how to meet the needs and wants of your customer. The market research should keep you identify your customer user needs and how you meet them.

**3.) Technology:-** It is imperative that you use a technology that your market can resonate with. Whereas the design team may not have the final say on technology budget allocation or appropriation, they should influence the choice of your development team.

For instance, a multi – million dollar software or hardware requirement may make your product inaccessible to small consumer. However, it may not be an insurmountable hurdle for the large corporations.

**4.) Knowledge Management :-** The market research and analysis data will be helpful to your design team. But if the marketing team is hesitant to share the data, the entire company will not benefit from its analysis. Your company should, therefore, work on ensuring that any data and information is accessible by all.

**5.) Government Policy:-** Government is itself an important factor affecting the new product development. Because govt. policy for industrial development may be occur in any way for the marketer as like GST, Exim policy, Discount policy etc. If these are framed in fever to business and market then it will give productive result otherwise it will also increase as cost of product or decrease the production output level.

## **ROLES OF NPD IN DIFFERENT WAYS:-**

- (i) New product development also promote the business of marketer and so on sales and profit.
- (ii) It improve the life style of consumers and increase their knowledge to use the variety of new products.
- (iii) It also increase the commission of intermediates.
- (iv) It increase the world area to the researcher. because a lot of data collection is done by researchers.
- (v) It make the task of salesman easy and effective.

## **CONCLUSION:-**

After great study of new product development process it is realized that new product may return positive result. but it will be possible when the marketer have enough market experience, money and great researchers on new product. When the customer's Survey and market researching data is collected then it will go on in positive result and even increase market size. But it may be failure when the data collected is not trustable and market researchers do not give accurate data.

So for the purpose to get profitable result, a marketer has to research deeply with customers, salesman, competitors and marketing strategy.

## **RESULT AND ANALYSIS :-**

Post 2000, there has been a spurt in new product introduction in almost all product categories. These include cell phone, cars, motorcycles, watches, garments, home products, consumer entertainment electronics and white good like refrigerators. The introductions have not just stopped at the tangible product level, but also extended to services.

Third party maintaince services, environment friendly hotels and restaurants, health clubs and spas have been launched in the India marekt post 2003.

Example of some company's product are shown as under.



Automobile & Car Manufacturer...

**TATA MOTORS**  
Connecting Aspirations



Our milestones are a reflection of our commitment to this enduring journey.



1945

Manufacturing of locomotives and other engineering products



Automobile & Car Manufacturer...

**TATA MOTORS**  
Connecting Aspirations



Our milestones are a reflection of our commitment to this enduring journey.



1975

Indian roads discover the Tata 1210 semi-forward model

Automobile & Car Manufacturer...


**TATA MOTORS**  
Connecting Aspirations

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**TATA**

Our milestones are a reflection of our commitment to this enduring journey.



**1998**

Tata Safari - India's first sports utility vehicle launched

Automobile & Car Manufacturer...


**TATA MOTORS**  
Connecting Aspirations

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**TATA**

Our milestones are a reflection of our commitment to this enduring journey.



**2005**

Launch of India's first mini truck -Tata ACE

Automobile & Car Manufacturer...


**TATA MOTORS**  
Connecting Aspirations

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**TATA**

Our milestones are a reflection of our commitment to this enduring journey.



**2014**

Launch of Tata Armoured Personnel Carrier (APC) Left Hand Drive (LHD)

### Chevrolet Optra NY Edition—Designed for the World

Poetry on wheels, that's the new Chevrolet Optra NY Edition. No other car combines sheer luxury, stunning looks, awesome power driving pleasure like the Optra NY Edition.

Optra NY Edition's new features like the all new American Style Grille, Anti-lock Braking System with Electronic Brake Force Distribution, Climate Control System and dual airbags offer a combination of style, comfort, control and peace of mind. In addition, features like Noise Reduction System (TNRS), an All Wheel Drive Independent Suspension (AWIS), plush leather interior and Sunroof make the Optra NY Edition a pleasure to drive. in India and the world.

### Chevrolet Optra NY Edition Automatic—For Effortless Drives

The Chevrolet Optra NY Edition also comes with an option of an automatic transmission. It is like having no gears and having ever the same time.

Its transmission system electronically measures the engine load and the road speed to shift the gears accordingly. Which leaves you to concentrate on what you like the best.

Simply zip in and out of traffic, without ever bothering with clutch or gear. Feel the thrill as the car responds perfectly to your ever and enjoy the glances of envy that come your way. Take a test-drive today. And experience for yourself the exhilaration of driving the next generation luxury car.



The screenshot shows the Chevrolet website interface. At the top left is the GM logo and the Chevrolet logo with the slogan "For a special journey called life." Below this is a navigation menu with links: Tavera | Optra | Forester | Cars by Budget | Compare Cars | Dealers | Financial Services | Contact Us | Te. A secondary menu includes: Awards | Reviews | Media Gallery | Downloads | ePost Card | Making of Chevrolet | Bowling. The main content area features a large image of a silver Chevrolet Optra NY Edition sedan. To the right of the car image is a vertical list of menu items: Chevrolet C, Style, Interior, Power, Controls, Safety, Sunroof, Colours, Features & Specifications, Reviews, and Contact Des. Below the car image is the text "Chevrolet Optra NY Edition". At the bottom of the screenshot, it reads "New Product Introduction by General Motors in 2004" and "Source: http://www.chevrolet.co.in".

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