

An Exploratory Study on Do- It -Yourself Kits

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Abstract: DIY is defined as “activities in which individual engage raw and semi-raw materials and component parts to produce, transform or reconstruct material possessions, including those drawn from the natural environment.” The Practice or hobby of building or repairing things for oneself, usually in one’s own home can be defined as a “Do-It Yourself”. This study will primarily focus on DIY product categories. The DIY Home Tools is actually a combination of small hand tools and power tools put together for the convenience of the consumers. Online presence is driving the growth of the global DIY market. The objective of this study is to understand present online market both outside India and within India along with the potential for DIY Kits .

Keywords: Do-It- Yourself (DIY) kits, Hand Tools, Power tools, combination tools, on-line market

1. Introduction to DIY Home Kits

DIY is defined as “activities in which individual engage raw and semi-raw materials and component parts to produce, transform or reconstruct material possessions, including those drawn from the natural environment” (Marco Wolf, 2015). The act of repairing things for oneself, usually in one’s own home can be defined as a “Do-It Yourself”. A Do-It Yourself kit can be classified into Home repair markets, electrical tools, carpentry tools, plumbing tools, gardening tools, outdoor camping tools, vehicle maintenance tools. This study will primarily focus on the geographic markets and DIY product categories. The DIY Home Tools is actually a combination of small hand tools and power tools put together for the convenience of the consumers.

1.1 DIY culture

In many emerging countries, DIY is not seen as positively as in the West, where it is linked to the idea of pride and achievement.

Value of the DIY market worldwide from 2012 to 2018 (in billion U.S. dollars)

This statistic illustrates the value of the DIY market worldwide from 2012 to 2018. ¹⁷

Year	Value in billion U.S Dollars
2012	30.2
2013	31.9
2014	32.9
2015	35
2016	37.8
2017	40.7
2018	43.7

Global DIY market value 2012-2018 _ Statistic.htm

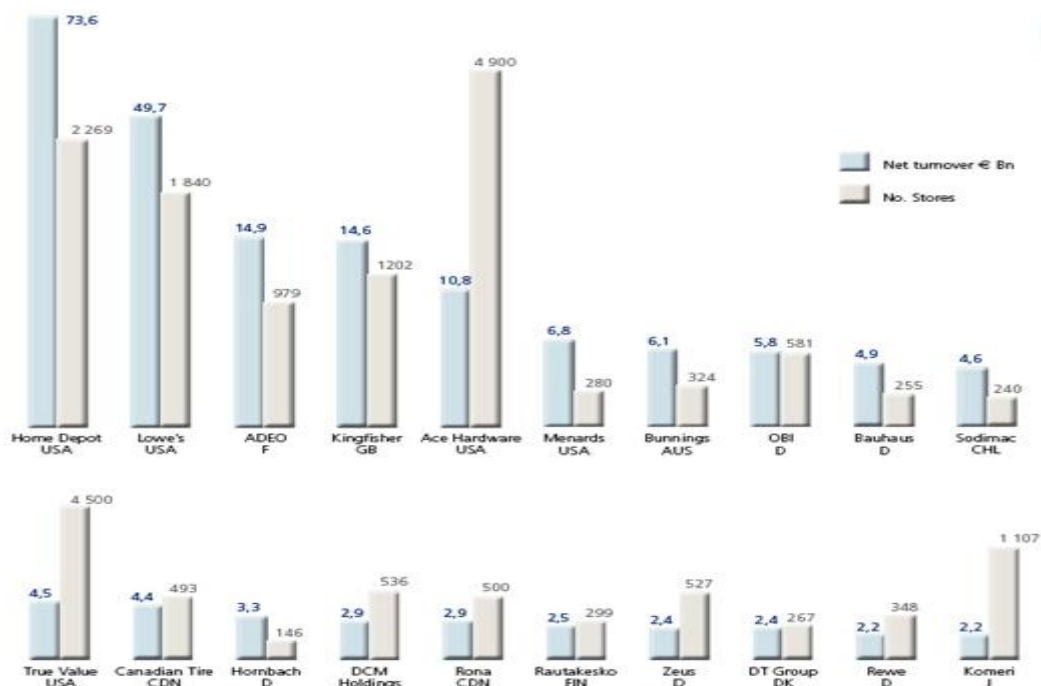
1.2 GLOBAL DIY market

Due to the low popularity of DIY culture in the APAC nations, the market is highly concentrated among Western countries. The American region occupies the largest share in the global DIY market, and holds a share of close to 61% in 2015. The US market holds the largest market in the American region, and this trend is expected to continue over the forecast period 2016-2020. The global DIY market is predicted to grow at a CAGR of around 3% between 2016 and 2020. The DIY market is witnessing growth mainly because of the media presence, be it through the traditional medium such as television or the online presence in the form of video websites or social media. Home improvement activities such as renovating and remodeling one’s home is the largest segment in the global DIY market. DIY market occupies the largest share in United States of

America, because of huge engagement of individuals in DIY activities. It is also observed that a large number of retail stores such as hypermarkets, supermarkets, and specialty stores across the globe have enabled huge growth prospects of the DIY market. These stores assist consumers to seek information on numerous brands, compare prices, quality, design, and then make a decision at their comfort and convenience. Also, with increased brand consciousness among consumers, organized retailers carrying branded DIY products is on the rise among them.⁵

1.3 Growing home improvement market: The main factor contributing to the demand DIY products is the robust growth of home improvement segment. This segment provides enormous opportunities for manufacturers to explore market opportunities. Home improvement remains a top priority as people demand better home space with improved standards of living. A Home is a life-time asset that consumers possess, and hence carry a strong emotional attachment for it.

1.4 Leading vendors in DIY market are Adeo, Home depot, Kingfisher plc **are** Lowe's. Other prominent vendors are OBI, Bauhaus, Kesko, Travis Perkins, Les Mousquetaires and Hornbach
The Top Twenty Global DIY Retailers 2014



Source : European DIY Retail Association, 2015

2. Objectives of the Study:

1. To understand the market for DIY Kits in handtools and powertools
2. To understand the online market potential of DIY kits

3. Literature Survey:

DIY Products

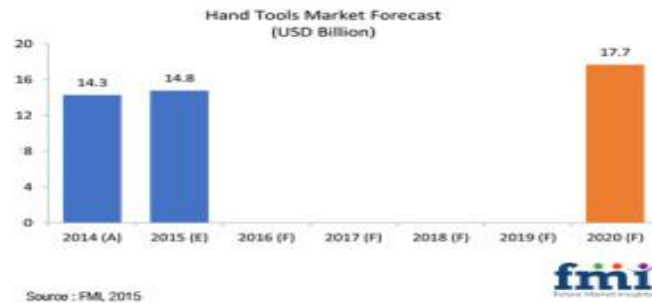
3.1 Hand Tool Industry

A hand tool is a tool which powered by hand (manual labor) rather than by an engine (power tool). Some examples of hand tools are garden forks, secateurs, rakes, hammers, spanners, pliers, screwdrivers and chisels. Hand tools are generally less dangerous than power tools. The American Industrial Hygiene Association gives the following categories of hand tools: wrenches, pliers, cutters, striking tools, struck or hammered tools, screwdrivers, vises, clamps, snips, saws, drills and knives.

Handtools are designed and are applicable in Do-It-Yourself (DIY) projects, like, home repairs, general maintenance, building mechanics, woodworking, and gardening.¹

3.1.1 Hand Tools Market Size, Trends, and Forecast

The global hand tools market was valued at US\$ 14.3 billion in 2014, and it is expected to reach US\$ 15.4 billion by 2016. During the period 2015-2025, the hand tools market is expected to expand at 3.5% CAGR. Demand for hand tools is expected to be supported by small scale industries and home-based projects. Hand tools represented 35% revenues of the overall power and hand tools market in 2015; however, growing preference for power tools is a threat for the hand tools market and it is predicted that by 2025, the hand tools' market share will reduce to 31.1%.²⁹



Key trends in the global hand tools market include,

- Hand tools manufacturers are attempting to tap unexplored opportunities in developing regions, where high price and lack of availability of power tools is creating favorable conditions for power tools.
- Asia Pacific and Latin America continue to be lucrative markets for hand tools, especially in countries where power tools have not yet permeated the market completely.³¹

3.1.2 Hand tools in the world market

The hand tool market is estimated to cross 200 million US\$ in India and is growing at an exponential rate of 12% every year. India's foremost advantage is low labor, low cost and easy availability of raw materials. There are more than 2500 manufacturers in India and out of which 95% are in small scale sector catering demand for local markets and export.

Hand tools comprise of general purpose tools (spanners, wrenches, pipe cutters, wood working tools, pliers) watch making tools, goldsmith tools, automotive tools, agriculture tools, industrial tools, garden tools, non-sparking tools and so on.

As customers are becoming more brand and quality conscious, the technological advancement for manufacturing in India requires sophisticated tools and equipment's. Industries like defense, railways, agriculture, automobiles and aerospace engineering are expecting good quality products for ease of operation due to which small manufacturers have upgraded themselves and are now competing with established organized players but the market is still open for high quality hand tools.²⁰

Good quality hand tools manufacturers are now entering Indian market because of growing demand for hand tool equipment's. In order to enter the Indian market, any company should have thorough knowledge about Indian market trends and phenomena in different sectors and for tapping these sectors, one needs to have the right distribution network in place, right target customer. Initiative from government of India like "Make in India" is going to welcome more foreign manufacturers in India.²⁰

3.1.3 Major Players in Hand Tool Industry are Apex Tool Group, Channellock, Inc., Stanley Black & Decker, Snap-On, Klein Tools, Irwin Industrial Tools, Akar Tools Limited

3.1.4 Market Potential Of Hand Tools Market In The World

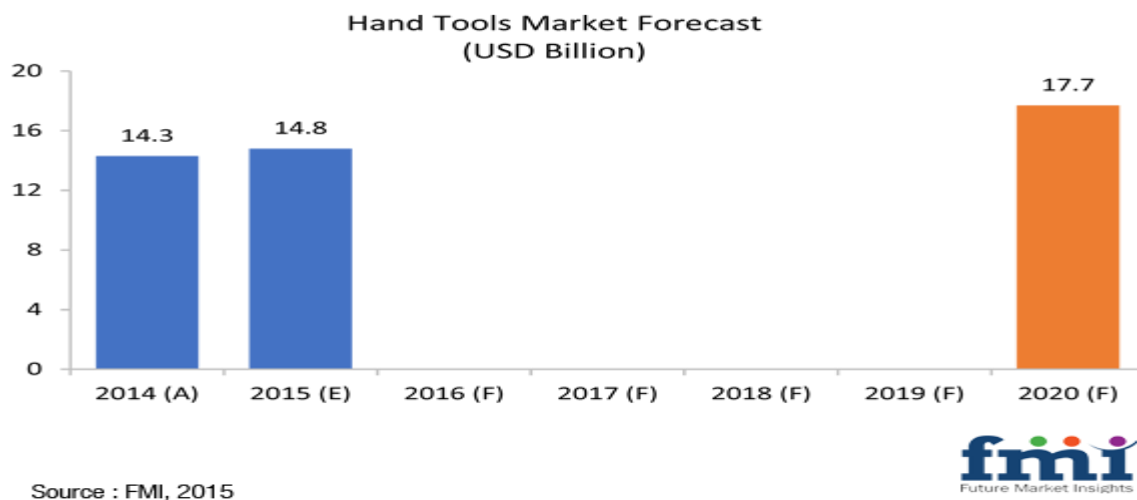
Based on these Market Potential Rates, the top 20 highest potential hand tool markets in the coming years are:³³

Ranking	Country	Market Potential Rate
1	China	0.87
2	United States	0.31
3	Bangladesh	0.15
4	Germany	0.14
5	Bolivia	0.11
6	Japan	0.09

Ranking	Country	Market Potential Rate
7	Thailand	0.09
8	Ecuador	0.09
9	Kyrgyzstan	0.08
10	Vietnam	0.07
11	Azerbaijan	0.07
12	Lithuania	0.06
13	Malaysia	0.05
14	South Korea	0.05
15	Peru	0.05
16	Canada	0.04
17	Jordan	0.04
18	Mexico	0.03
19	Australia	0.03
20	Spain	0.03

3.1.5 Future Scope of DIY Market of Hand Tools

According to FMI Report 2015.



3.2 Power Tool Industry

A power tool is a tool that is activated by an external power source and mechanism. Common power sources include steam engines, direct burning of fuels and propellants, or even natural power sources like wind or moving water. Tools driven by animal power are not considered as power tools.⁹

Power tools are used in industry, in construction, in automation, for housework tasks such as cooking, cleaning, gardening and for other purposes such as driving, drilling, cutting, shaping, sanding, grinding, routing, polishing, painting, heating and many more.

Global demand for power and hand tools will increase at a CAGR of 4.7% by 2025 to US\$ 67 billion. Demand for power tools will overtake hand tools and account for nearly 69% of overall revenues of the power and hand tools market by 2025. Preference for power tools is more prominent in developed regions as compared to developing regions.¹²

3.2.1 Power Tools Market Size, Trends, and Forecast

The value of Power tools market was US\$ 26.2 billion in 2014, and it is expected to touch US\$ 29 billion by the end of 2016. The macro-economic factors driving the growth for power tools is the resurgence in

the housing sector, surging automotive sales in emerging markets such as Asia Pacific and Latin America. Demand for power tools is also directly proportionate to urbanization and infrastructure development, such as transportation and related maintenance services that require the use of power tools. As demand for consumer electronics is emerging rapidly, manufacturers are under immense pressure to deliver finished goods in a real-time scenario.

Key trends in the global power tools market include, that Power tools are fast outdistancing hand tools in both developed and developing regions. Low-priced power tools are witnessing high demand. China-based manufacturers are fast gaining control of the market, owing to their competitive pricing and wider range of offerings. Presently, China is the largest exporter of power tools globally.¹⁴

3.2.2 Major Players in Power Tools Industry :

Robert Bosch GmbH (Germany), Stanley, Black & Decker, Inc. (U.S.), Emerson Electric Co. (U.K.), Makita Corporation (Japan), Actuant Corporation (U.S.), SKF (Sweden), Techtronic Industries (China), Hilti Corporation (Germany), Danaher Corporation (U.S.) and Hitachi Koki Ltd (Japan).

3.2.3 Major Competitors in Power Tools

Some of the major companies operating in global power and hand tools are Actuant Corporation, AIMCO Corporation, Allied Trade Group (ATG) Stores, Alltrade Tools LLC, AMES Companies, Ancor, Apex Tool Group LLC, Atlas Copco AB, Black & Decker, Stanley Black & Decker, Bosch (Robert) GmbH, Channellock Incorporated, Chervon Holdings Limited, Chicago Pneumatic Tool, Danaher Corporation, Daniels Manufacturing Corporation, Del City Wire, DEPRAG-Schulz GmbH and Company, DeWALT Industrial Tools and E&R Industrial Sales.

3.2.4 DIY Trend & Price Concerns Expected to Present Growth Opportunities

In industrialized developed countries, power tools are expected to generate maximum demand from professionals. However, rising DIY trend is expected to create demand for hand tools, but manufacturers will have to search for growth avenues in emerging nations, where construction budgets are a challenge for adoption of power tools.

4. Online Retailing as driving force for the growth of the global DIY market

The boom in online retail is set to play a key role in the expansion of the DIY market globally. Online players are rapidly entering the e-commerce space with plush websites and product offers. Organizations such as IKEA, Wayfair, and Ashley Furniture Industries have already entered the e-commerce space for selling their products online. In the UK, top DIY retailers like Maxwells and Range are taking baby steps to improve their online presence. Screwfix, another top DIY retailer in the UK has already started a nationwide online delivery service, while B&Q, the biggest online DIY retailer in the UK, also launched 'Click, Pay & Collect' on over 14,000 products with the release of its new portal, **diy.com**. This market trend is expected to significantly expand the DIY market by 2020.

4.1 Major Online Global Players selling DIY Home Kits are Amazon , EBay, Alibaba

Amazon is the largest and the world's number one e-commerce store, with an user friendly interface. The features of this company are affordable rates, quick and fast delivery and large assortment of items in various product categories. It also caters to products in the Hand Tool and Power tool category. It is the leading E-tailer with more than 107 Billion US Dollars net sales in 2015, it has more than 304 Million active customer accounts worldwide.

Ebay is the second-largest e-commerce store in the world. It is also a platform wherein a customer can not only buy products but also sell one's products.

Alibaba.com is also used for global trading for buyers and sellers. This website is very popular in China and Asia. The concept behind alibaba.com is building a bridge between suppliers and buyers.

4.2 Major Domestic Players selling DIY Home Kits are ShopClues and Tolexo

ShopClues is one of the very few online marketplace that sells DIY Home kits in product categories such as Home repair, gardening, garage repair, etc. *Major Brands Selling DIY Tool Kits On Shopclues* are Bosch ,Pigeon, Jackly ,Stanley, Black & Decker, Eastman, Sonata, Eveready, Samsan, Taparia etc

Tolexo is an Indian online player that was registered in 2014. Though new, it is major player in the DIY Home kit market with a wide range of Hand tools and the Power tools section. *Major Brands selling Hand Tools on*

Tolexo are Taparia, Stanley, Ambitec/Ambika, GoodYear etc. A good example is the Asian Paints Home Solutions Services.

5. Research Methodology

The type of research used is Descriptive research and is based purely on secondary data research.

6. Data analysis

DIY Market – An Indian Perspective

6.1 Profile of the Hand Tool Industry in India

The production of hand tools is primarily carried out by small-scale industry with limited investment of Rs.50 million. The small-scale industry has a total investment of about Rs. 5000 million and gives a livelihood to approximately 25000 workers. The hand tools manufactured include hand tools like spades, shovels, mattocks, etc. used in agriculture. Other tools include hand saws, files, rasps, pliers, pipe cutters, spanners and wrenches, wood working tools. Tools for specialized uses are watch-making tools and goldsmith tools, vices and clamps, anvils, tools for turning, milling, grinding, sharp edge tools, etc.¹⁹

6.2 DIY Market in India

The DIY market in India is at a very nascent stage and there are certain differentiating factors that differentiate the Indian market from the western markets. The most critical consumer perspectives or expectations that influence DIY adoption are unique needs, physical labor, cost savings and status or pride of Doing-it yourself. A semi-DIY model was proposed wherein a DIYer takes up doing activities as a hobby, either by choice or physical labor. Some of the potential DIY studies identified that up-gradation of DIY services and customizable toolkits can be highlighted as an important feature to promote DIY in India.¹⁹ Since labor is very cheap in Asia and China, middle-class families tend to hire or outsource work instead of doing it themselves. Hence, this limits the power tool companies to sell DIY products in these countries and therefore the market for DIY is small. Home Depot closed all its stores in China in 2012 which negatively affected the companies that continue to operate big box stores in that country.¹³

6.3 Behavioral Perspective

Do it Yourself for many years has been perceived as a staple element of the spare time activities of many households. One of the aspects of increased consumer interest in DIY is the growth of home ownership and income along with the developments in tools materials and techniques.

Until now, studies of the Do-It-Yourself (DIY) market have been confined to only advanced market economies, while developing countries were ignored. A study by (Anjula Gurtoo, 2010) begins to bridge this gap by conducting a survey of 500 households in India, a developing country characterized by cheap and surplus labor, and a different cultural environment, this article investigates whether it is possible to distinguish DIY consumers in the same manner as in Western nations as 'reluctant' or 'willing' DIYers. The analysis found that in India, DIY consumers can be concurrently both willing DIY kit users doing so for pleasure (the choice model) or seeking self-identity from the end-product (post-modern theory) and at the same time reluctant DIYers doing so out of economic necessity reasons (economic determinism model) or due to the lack of appropriately skilled labor (a market failure model).

Results also reflected cultural connotations to the respondent perceptions. The multiplicity of reasons, in consequence, shows that no one theorisation of DIY consumers' motives is universally relevant but all theories are sometimes valid. As such, a new typology of DIY consumers' motives has been inductively generated which is theoretically integrative. The results conclude on the need to move beyond using one theory and treating the others as rival competing theories, for a comprehensive explanation of DIY. DIY products require a certain level of understanding on how to use it. Hence, the customer has to be skilled to use the DIY kits independently (Anjula Gurtoo, 2010).

According to a report by the European DIY Retail Association, Retail has transformed and there are some big changes taking place in the industry. The Big change that is happening is, Customers are becoming very powerful and want more control. Presently, in most parts of the world, DIY customers are highly involved in the purchasing decision. It has been observed that in Germany, majority of the consumers purchase DIY products online, and within which Male population being the dominant shopper. In Finland, research suggests that young people are more involved in the daily household chores reason being the continuing recession and

hence being conscious about how they spend their money. DIY Retailers are adapting the Retail store format unlike the traditional retailers. They are experimenting with softer concepts, more space for home furnishings, Screens to project DIY products, focus on gardening tools and decorative accessories (Association, 2015). Traditionally, the home improvement and maintenance category was viewed as a more male dominant section, but recently times have changed and women are increasingly participating in the home maintenance by getting involved in DIY activities. It is reported that according to the Home improvement giant Lowe's women initiate 80% of the Home improvement projects and are outpacing men in DIY activities and DIY spending (Marco Wolf, 2015). Keeping this aspect in view, DIY retailers are changing their concepts and strategies to best suit the women shoppers. Perhaps, it is astonishing to recognize that one of the world's leading DIY Retailer Home Depot has failed to do business in the Chinese market because it could not identify the women perspective while designing and merchandizing their stores (Marco Wolf, 2015).

Another perspective to look at the increased share of people getting involved in DIY activities is Creativity and social motivation. Customers are more than willing to express their creative instincts such as "Design It Yourself Products", handmade and customized objects to gain recognition in the social environment (Steven Chen).

(Dean, 2010) identified leading motivational factors that encourage customers to take up DIY activities, these include saving money, saving time, control over the procedure, a feeling of accomplishment, meeting the expectations of others, lack of trust in service providers. There are also certain enabling factors that ensure that the customers are in a good position to process the DIY activity. Enabling factors include necessary equipment, facilities, knowledge and skill, and perceive time to perform the task.

7. Recommendations

- To sell the DIY kits on the major online sites like Amazon, E- Bay, Alibaba . Hence a major shift for the company which is currently in the brick and mortar format to the click and portal.
- There is a possibility that in major sites because of the clutter of similar products Akar tools might not get visibility. Hence they can try highly frequented sites like Modcloth, Flipkart, Snapdeal, etc.who do not sell DIY products.
- Another approach could be to sell on related websites into the area of Gardening, Housing, Furniture, automobiles etc.
- A tie up with TV channels with programs on gardening, Home repair, Vehicle maintenance etc., for generating awareness.
- Middle east and Africa are the growing markets in DIY
- Since the Indian market is predicted to grow at 17% there is a lot of potential for DIY products
- In countries like India where the concept is still in a nascent stage videos and training and Demos to educate the consumers can be created.
- Promoting it as a spare time hobby.
- Hand tool kits have a lot of scope in Developing economies especially in the Tier two cities where power shortage and intermittent supply could be a problem.
- Customization of DIY kits.
- Introducing new and innovative combinations of Tools in the DIY kits

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