Self-Driven Consumer Diagnostics Businesses in National Capital Region (NCR), India

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ABSTRACT

The Indian Diagnostics services market is estimated around $ 3.5 billion. The market has witnessed a considerable growth rate since 2012 ($ 2.5 billion) and it is estimated to reach $ 5.5 billion by 2020. The diagnostic and pathological test market has a potential to grow at a CAGR of more than 17%. Currently, more than 1,00,000 diagnostic and pathology labs including specialized laboratories, laboratories in hospitals and nursing homes, and small testing centres are operating in India. Of these, only about 10 – 12 percent of the market is organized and composed of laboratories with proper accreditation[3]. The research reveals that there is an ongoing shift from unorganized and non-branded providers to the organized and branded diagnostic chains that provide higher quality and reliable services. The present paper attempts to offer insights into the Indian market with special reference to Delhi/ NCR (Noida, Faridabad, and Gurgaon), with regard to: current players in the diagnostics market, the consumer decision making process for selecting diagnostic facilities, and an understanding of consumer preferences and motivators and/or influencers of brand choice.

***Key Words**: consumer diagnostics, self-driven/ preventive diagnostics, consumer perception, consumer behaviour and decision making process.*

Introduction:

The Indian Diagnostic services market is estimated around $ 3.5 billion. The market has witnessed a considerable growth rate since 2012 ($ 2.5 billion) and it is estimated to reach $ 5.5 billion by 2020. The diagnostic and pathological test market has a potential to grow at a CAGR of more than 17%.

Currently, more than 1,00,000 diagnostic and pathology labs including specialized laboratories, laboratories in hospitals and nursing homes, and small testing centers are operating in India (70 per cent offer pathology services and 30 percent provide radiology and imaging such as MRI, CT scan X-ray and ultrasound scan). Test volumes range from 50 to 100 samples per day for one laboratory located in a small town to several thousand samples per day for a major laboratory in a city. Currently, only about 10 – 12 percent of the market is organized and composed of laboratories with proper accreditation[3].

The research reveals that there is an ongoing shift from unorganized and non-branded providers to the organized and branded diagnostic chains that provide higher quality and reliable services. In the future, this market is expected to become more organized and consolidated as the government exerts greater control and as small and independent laboratories become franchisees in the hub and spoke model of the larger players. The healthcare and diagnostics services are experiencing the emergence of both domestic and international players in developing innovative diagnostic tests and advanced healthcare information technology solutions that help improve patient care. This industry is driven by prescription based diagnostics and the focus on self-driven and preventive diagnostics is meager. The Indian Diagnostic Industry has ignored the substantial opportunities that are available in consumer diagnostic sector due to increase in demand driven by rising disposable income, increase in lifestyle diseases, rising consumer awareness and changing regulatory landscape.

It is must for the companies operating in the diagnostic business to understand the Indian consumer behavior before making expansion strategies in this market. The present paper is based on a consumer research conducted to understand the Indian market with special reference to Delhi/ NCR (Noida, Faridabad, and Gurgaon). It is expected that the outcomes of this consumer behavior research will offer insights regarding current players in the diagnostics market, the consumer decision making process for selecting diagnostic facilities, an understanding of consumer preferences and motivators and/ or influencers of brand choice. This will give the market players an understanding of the approaches adopted by various players in seeking a sustainable entry into the business.

It is an accepted premise by the industry that a company must understand the domestic consumer behavior so as to successfully enter into the Indian consumer diagnostic business and also to make concerted efforts to pursue either growth or diversification strategies in the industry; and to meet this objective, many a company invests in conducting highly focused consumer research and understanding the multiple dimensions of the consumer diagnostics business in India. When such as study focuses on a market like Delhi/ NCR (Noida, Faridabad, Gurgaon), one can hope to gain invaluable insights into the market, market players and consumers as well, that can offer insights into the pan-India market as well. As such, the study done and the results obtained, is seen as a critical input in understanding the diagnostic services industry and its constituent players, and consumer preferences and motivators or influencers of brand choice.

Research Methodology :

The major objective of this research was to help one of the major diagnostic service providers of Delhi and NCR region in marketing their services directly to consumers without being overly reliant on prescription based business. The researchers, working as independent consultants, identified following research questions for the purpose of study:

- Who are the major players operating in Indian diagnostic market?
- Who is the target audience for self-driven consumer diagnostics in Delhi-NCR?
- What is the consumption pattern – frequency, type of tests etc. across different types of services?
- How these services are used and what are the key needs that consumers seek to address through their self-driven purchase?
- What is the decision making process for the selection of diagnostic service provider and what all factors influence their decision?

The researchers made use of exploratory research design and data was collected with the help of structured interview. A structured interview survey design was used because it was an efficient way of collecting varied amount of information from the target audience pertaining to the diagnostic and pathology lab preference, motivators and media influencers. The survey design used both open ended and closed ended questions related to research objectives. The field survey was conducted during 2016-17 and results presented early 2018.

The sample design selected for the survey was agreed upon mutually between the project assigned client and researchers, to suit and meet the budgetary and time lines limitations provided, without any bias either towards or against the funding client (the client organization, Quest Diagnostics Services, who assigned the study to the researchers desired that the study is done without any bias towards either the company or to the industry, so as to ensure the research and the findings are bias-free) Eligible respondents were adults between the ages of 25 to 50. The selection of survey respondents was done by convenience sampling. The survey was conducted in all regions of Delhi and NCR. A total of 832 respondents were interviewed with 100 percent response rate towards all questions of the questionnaire. The demographic composition of the sample was as given in Table 1.

Tables and Charts

Table 1: Sample Composition

Composition of Sample (n = 832)			
Location	Age	Gender*	Income (in Lacs)
Gurgaon: 135 Faridabad: 98 Noida: 125 East Delhi: 150 West Delhi: 125 North Delhi: 74 South Delhi: 125	25-30: 324 31-35: 200 36-40: 110 41-45: 90 46-50: 77 Above 50: 31	Male: 633 Female: 199	(i) < than 2.5:177 (ii) 2.5 – 5: 340 5 – 10: 248 10 & above: 67

(Source: Researchers' data)

**According to data the ratio of Female to Male working population of India is 1:3. Thus the ratio of Female to Male is 1:3 (Approx.).*

Table 2: Major Players

Major Players	Geographical Coverage	Business Model	Network	Remarks
SRL Diagnostics	Nationwide	Hub & Spokes (Franchise model of sample collection)	4000 collection centers, 246 network labs and 11 large reference labs and 4 centers of excellence	Invested about INR 450 crore and open 45 new laboratories across India in 2014-15[4]
Metropolis	Nationwide	Hub & Spokes (Franchise model of sample collection)	125 network labs, app. 500 collection centers	Looking to invest $ 8 million to add 35 more labs and 200 more collection centers[5]
Dr LalPath Labs	Nationwide	Hub & Spokes (Franchise model of sample collection)	160 Clinical Labs and 1300 Patient Service Centers	Growing at a CAGR of 25%[6*]
Thyrocare	Nationwide	Hub & Spokes (Franchise model of sample collection)	Centralized set-up in Mumbai and 1200 collection centers	Planning to have a Laboratory in every Indian City with an Airport[7]

**Dr Lal PathLabs enjoy highest brand awareness and share of mind. It is growing at a rate much above the industry growth rate due to its consumer marketing strategies.*

Chart 1: Frequently taken Diagnostic Tests

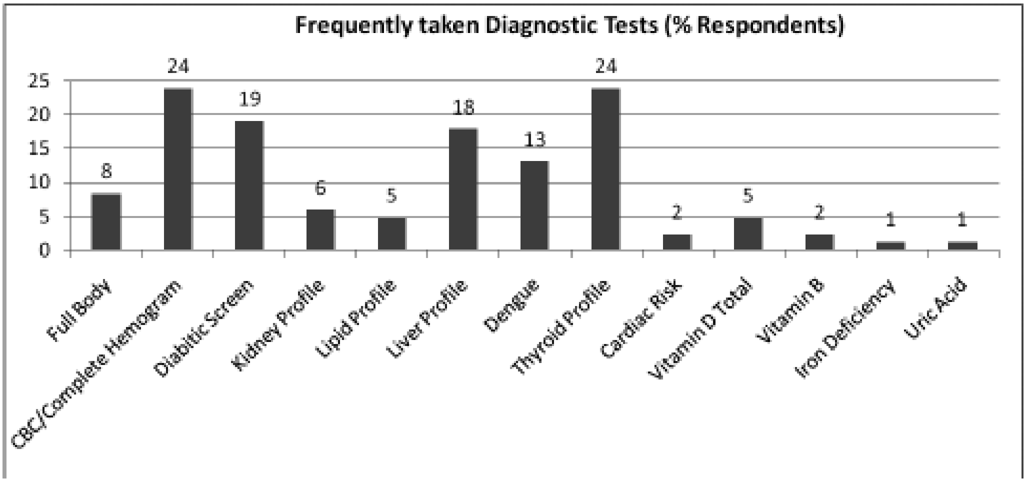
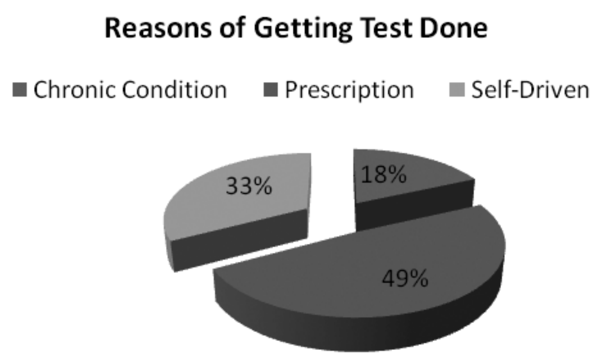


Chart 2: Prescription Vs Preventive Testing



The data analysis was done using simple descriptive statistics (Graphs & Charts) with the help of using MS Excel.

Literature review:

Consumer diagnostics industry in India: According to CII-KPMG Report (2013), the Indian diagnostic services market is estimated around $ 3.5 billion. As per Diagnostic Testing & Technology Report (2013), the market has witnessed a considerable growth rate since 2012 at US $ 2.5 billion, and it is estimated to reach US $ 5.5 billion by 2020. The diagnostic and pathological test market has a potential to grow at a CAGR of more than 17%.

Currently, more than 1,00,000 diagnostic and pathology labs including specialized laboratories, laboratories in hospitals and nursing homes, and small testing centers are operating in India (70 per cent: pathology services and 30% provide radiology and imaging such as MRI, CT scan X-ray and ultrasound). Test volumes range from 50 to 100 samples per day for one laboratory located in a small town to several thousand samples per day for a major laboratory. In a report from Indian Diagnostic Service Market Outlook 2015, only about 10 - 12% of the market is organized and composed of laboratories with proper accreditation.

In the study conducted by Sahoo (2013) it was observed that the diagnostics industry was around 2.5 per cent of the overall healthcare industry and it comprises of around 40,000 independent path labs and more than 60,000 referral labs collection centers. Referral labs mainly using a high class logistics system to obtain their marketing and face value in the market and they are successful doing these with the accurate test results.

Consumer behaviour: According to Hoyer and Maclnnis (2007), 'Consumer behaviour reflects the totality of consumers' decisions with respect to the acquisition, consumption, and disposition of goods, services, activities and ideas by (human) decision-making units over time.'

The complex and unpredictable behavior of consumers, and highly competitive marketing environment has made it mandatory to understand the factors governing consumer behavior towards diagnostics centers for the long-run existence of a company (Sahoo, 2013).

In a survey report of Zhang, Chong and Wang (2014) on community pharmacies in Macau, it was indicated that that local residents take price level as the most important factor in choosing community pharmacy and pay more attention to the product efficacy and quality in choosing products.

Rosenstock (1966) designed a conceptual model known as Health Belief model designed to explain demand for both diagnostic and preventive (self-monitoring) visits to the doctors and hospitals. Rosenstock proposed a relationship between the stage of readiness and intensity of stimuli in terms of communication i.e. if readiness is high even a weak stimuli can work and in case of low readiness a strong stimuli is required. We can interpret this with respect to diagnostic services as well. If a consumer is identified with a disease the prescription of tests by a doctor itself works. On the other hand for developing self-monitoring or preventive diagnostic market, the companies need to improve the readiness level of the consumers towards lifestyle diseases or they need to use intensive stimuli in the form of communication campaigns.

Analysis and Findings: The key analysis based on descriptive statistics is exhibited in the charts below:

Major Players: The organized diagnostic market is equally occupied by major domestic and international participants in India. The desk research revealed that only a few players have a strong network of labs and collection centers in Delhi NCR. Thus for this survey, brands considered in organized diagnostic industry are – Metropolis Health Services, SRL

Laboratories, Dr LalPath Labs, Quest Diagnostics and Thyrocare. These players are chosen on the basis of their collection centers and network of labs operating in this region. Table 2 offers these details.

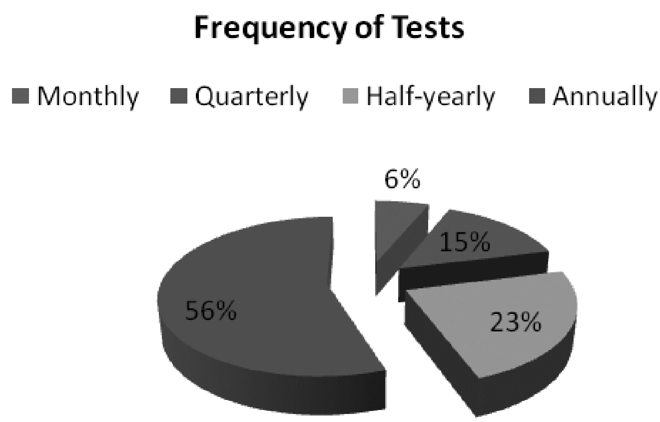
Frequently taken Diagnostic Tests: A shift in the disease profile can be noticed from past decade. Previously, communicable diseases were the biggest health threat. Now, with adoption of some of the negative influences of modern lifestyles, chronic diseases including diabetes, heart disease, and cancer are growing in prevalence—all of which require diagnostic testing.

The data collected from Delhi NCR substantiates above mentioned reasons. 24% of the respondents have taken thyroid and the same number have undergone complete blood count test. 19% of the respondent underwent diabetic screen test and almost a similar number i.e. 18% of respondents had taken liver profile (Chart 1). Most of these tests are routine in nature.

Prescription Vs Preventive Testing: The data further reveals the prime reasons/ conditions which compel people to undergo diagnostic testing. Though the prescription based testing (49%) is the major reason while self-driven monitoring (33%) is also picking up pace in the age-groups of 25-30 and 31-35 years as given in (Chart 2). Thus, the opportunity for preventive diagnostics exists in this region and company has an opportunity to develop its market in this category.

Frequent Health Check-ups: Additionally, majority of the respondents (56%) take diagnostic tests once a year and another 23% undergo tests half-yearly. The percentage of monthly (6%) and quarterly (15%) testing is comparatively low (Chart 3). Thus, the company can devise annual and half-yearly packages for its regular customers. At the same time the company can also educate it's customers regarding the need and merits of frequent health check-ups.

Chart 3: Frequent Health Check-ups



Brand awareness for Diagnostic Labs: When the respondents were asked about their awareness for a particular brand and its associated characteristic, it was found that Dr LalPath enjoy, the leading position with highest awareness (52%). SRL stood at number two position with 22% brand awareness rate. Quest Diagnostic lags far behind with just 5% brand awareness (Chart 4). This may suggest that the client needs to explore appropriate consumer marketing measures to build further upon its brand awareness and brand recall among the consumers.

Key brand associations across Brands: Key factor of brand association for all the labs considered has been 'popularity'. Substantial number of respondents (42%) associate Dr Lal with 'being popular' (Chart 5). This brand association of being popular can be attributed to the huge advertising spend done by Dr Lal.

An equal number of respondents perceived SRL laboratories as 'being trustworthy and providing quality services' (26% each); Metropolis is perceived high on 'quality of service' with 33% favorability. Apart

Chart 4: Brand awareness for Diagnostic Labs

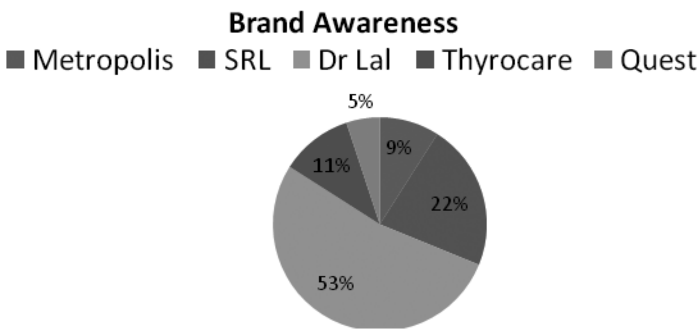
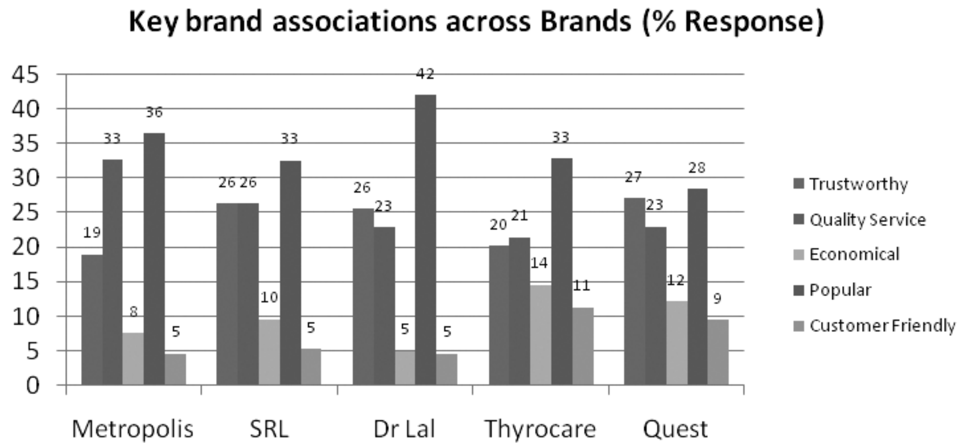


Chart 5: Key brand associations across Brands



from other factors, Thyrocare is perceived slightly high on 'being economical' and 'being customer friendly' amongst others with 14% and 11 % respectively. Quest is perceived as 'being trustworthy' with 27% responses.

Preferred Diagnostic Centers: The research suggests that amongst the existing branded/organized players, Dr Lal Path is the most preferred diagnostic center by the respondents. The reason of preference can be linked to its popularity (Chart 6). Significant number of respondents preferred local/unorganized players for their diagnosis.

Recommendation and source of recommendation for choosing diagnostic center: The possible reason for the preference could be attributed to recommendation from different sources (Chart 6). Further, when asked for source of recommendation, majority of the respondents (79%) with their doctor's recommendation (Chart 7-a, 7-b).

Motivators for Diagnostics Center Preference: The research further investigated the motivators for preference of diagnostics centers on following grounds- Source of communication, Convenience, Quality of Service and Price.

Chart 6: Preferred Diagnostic Centers

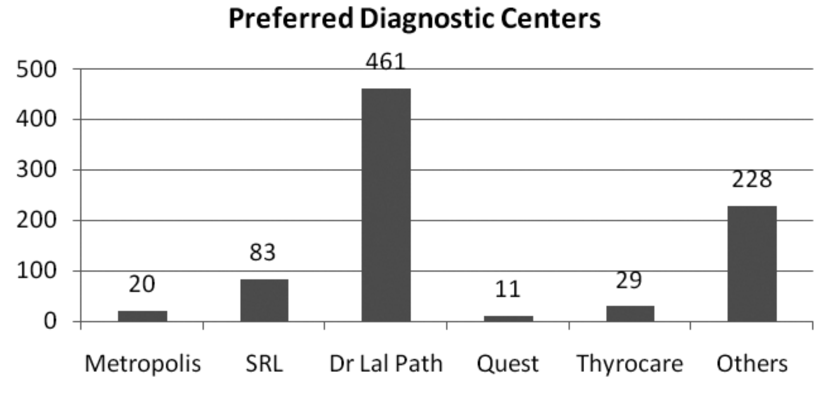


Chart 7: Motivators for Diagnostics Center Preference

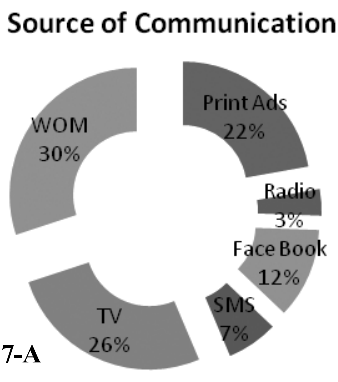


Chart 7-A

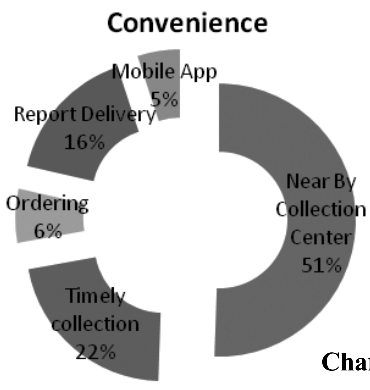


Chart 7-B

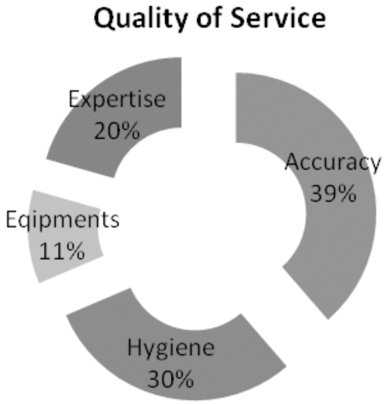


Chart 7-C

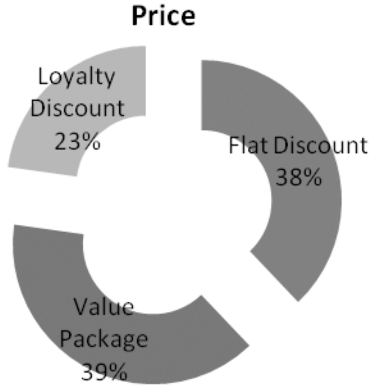


Chart 7-D

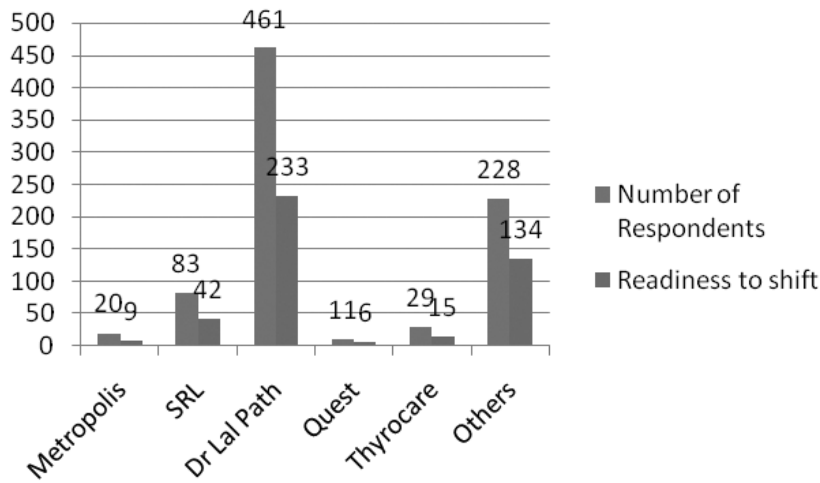
Source of Communication: With reference to source of communication, it was found that the Word-of-mouth (WOM) was the most preferred source of communication, followed by television and print ads (Chart 8-a).

Convenience: Due to the busy schedules and hectic lifestyles, nearby collection center and timely sample collection were given major importance by the respondents (Chart 8-b).

Quality of Service: The anticipated factors of the diagnostics industry are accuracy of report, hygiene of the diagnostics lab followed by expertise. Not surprisingly, the research also substantiates the same (Chart 8-c).

Price: The growing awareness of health risks and preventive measures calls for value packages (39%), wherein respondents can go for multiple diagnostics tests at discounted prices. Another 38%

Chart 8: Consumer Willingness to Shift



of respondents shared that they will prefer flat discounts. The company also has an opportunity to capitalize upon its loyal customers by providing them loyalty discounts (Chart 8-d).

Consumer Willingness to Shift: Despite having a preferred diagnostics center, more than half of the respondents (53%) were willing to shift their preferred diagnostics lab. No particular diagnostics center enjoys extra-ordinary loyalty as each of them had around half of their consumers willing to shift (Chart 9). It was interesting to note that the users of the most preferred Dr LalPath Lab were also ready to shift (app. 50%) if provided with better choice. After analyzing the stated reasons to shift, it was found that consumers are looking for:

1. Better Customer Service
2. Low Prices
3. Accuracy
4. Better Deals/Offers/Discounts
5. Convenience

This also provides an insight to the company that it can either capitalize on industry hygiene factors such as accuracy and economy or can craft a niche for itself by differentiating on better and friendlier customer service. However, this requires to be explored further.

Another 47% of the respondents were not willing to shift from their current preferred lab on account of:

1. Loyalty
2. Satisfaction

Key Consumer Expectations from a Diagnostics Lab: When asked, what is more important from a diagnostics lab, a significant number (62%) preferred home collection over discount offers (Chart 10). This again may be attributed to a 'money-rich' and 'time-poor' orientation.

Impact of Advertisements: The research also explored the impact of advertising on consumer decision making process with respect to diagnostics services. The respondents were asked to recall the ads they have seen in the recent past, to share the information regarding the call to action mostly used by them to collect information and to know if ads motivate them to go for a test and how advertising influence, their lab selection (Chart 11).

Advertisement Viewership & Brand Recall: A large majority (622) of respondents have seen the diagnostics lab advertisements in recent past and when asked to recall the brand were able to do so. As indicated earlier, Dr Lal benefits from the highest mindshare followed by SRL (Chart 12). It's quite possible that Dr Lal Path Lab's benefits from high top of mind brand recall without having expanded the level of resource required reaching this level of popularity.

Preferred call to action: Surprisingly, significant number (44%) of the respondents prefer to visit the address to know more about the diagnostics center advertised (Chart 13). A good proportion of the respondents also prefer to either call the number or visit the website.

- Almost half (46%) of the respondents visit a collection center or call for home collection after a trigger generated from the advertisement.
- A large majority (71 %) of the respondents said that they were motivated to get a diagnostics test done after seeing an advertisement or promotion.
- Another half (45%) of the respondents shared that they are guided by advertisements while selecting lab.

Preferred Medium: When asked about the media consumed by the respondents, it was found that being an audio-visual medium; Television is obviously gaining maximum attention (Chart 14). Given smart phones and internet penetration, online medium is also a close second.

Recommendations and Conclusions:

- The Indian diagnostics market is poised to grow at a CAGR of 17% & above. This opens the consumer market for branded players. Further shift is noticed from unorganized/ non-branded diagnostics labs to organized/ branded labs. Thus, thus is the right time for the diagnostic companies to build self-driven diagnostic brands by communicating directly to end-users.
- Tests such as full-body wellness, thyroid, liver, CBC, Diabetic, lipid etc. tests are most frequently taken by respondents as self-driven monitoring/ preventive check-ups on annually and half-yearly basis. The respondents in the age-group of 25-30 and 31-35 and in the income bracket of more than 5lacs per annum are more inclined towards self-driven diagnostic tests.
- A large majority of the consumers preferred a based on recommendations and Doctor's recommendations play an important role. However, availability of collection centers and local promotion has made Dr Lal Path Labs to enjoy significant mindshare and brand recall among consumers. This suggests that the companies aiming to gain a mind share in self-driven diagnostics should develop a communication program directed at consumers.
- The research revealed that television is the most consumer media but diagnostic companies can also make use of radio and digital channels in reaching out to their consumers.

References:

Anwesha Sahoo (2013). A short study on the patients' attitude towards Indian diagnostics industry. International Journal of Advanced Scientific and Technical Research, 4(3), 396-400

Chaudhary, D. (2014, October 30). A hit with investors, Dr Lal PathLabs opts to go the IPO way. Forbes India. Retrieved September 27, 2016, from

CII-KPMG, (2013) A Report on Excellence in Diagnostic Care, CII, New Delhi

Dhavan, A (2015), 2015 Healthcare Outlook India, Delloitte Touche Tomatsu, Bengaluru, 2015

Hoyer, W.D. & MacInnis, D. (2007). Consumer Behavior. Houghton Mifflin. USA

http://forbesindia.com/article/big-bet/a-hit-with-investors-dr-lal-pathlabs-opts-to-go-the-ipo-way/38907/1

http://forbesindia.com/article/hidden-gems/thyrocare-technologies-testing-new-waters-in-medical-diagnostics/41051/1

http://www.forbes.com/sites/anuraghunathan/2015/02/25/metropolis-chain-of-diagnostics-labs-pushes-for-growth-across-india-and-africa/

http://www.thehindubusinessline.com/companies/srl-diagnostics-to-open-45-labs-invest-450-cr-this-year/article6145752.ece

https://www.rncos.com/Market-Analysis-Reports/Indian-Diagnostic-Services-Market-Outlook-2015-IM418.htm

Indian Diagnostic Service Market Outlook, RNCOS (2015). Retrieved September 28, 2016 from

Irwing M. Rosenstock. (1966). Why People Use Health Services. Milbank Memorial Fund, 44, 94-127.

Lawrence H. Wortzel. (1976). The Behavior of The Health Care Consumer: A Selective Review. Advances in Consumer Research, 3, 295-301.

Mao Yu Zhang, Wai Kuan Chong, Hao Hu and Yitao Wang (2014). Pharmacy-perceived consumer preferences: A survey of community pharmacies in Macau. Journal of Medical Marketing, 14(1), 41–48.

Pandit, V. (2014, June 24). SRL Diagnostics to open 45 labs, invest 450 crore this year. The Hindu Business Line. Retrieved September 25, 2016, from

Path.org, (2013), A Report on Landscape Analysis of the private sector diagnostic Services in India, submitted to National Institutes of Health, PATH, Seattle, USA

Raghunathan, A. (2015, February 25). Metropolis' Chain of Diagnostics Labs Pushes for Growth across India and Africa. Forbes Asia. Retrieved September 25, 2016, from

Thakur, A.S. (2015, September 10). Thyrocare Technologies: Testing new waters in medical diagnostics. Forbes India. Retrieved September 27, 2016, from

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