

# Digitalization in Key Opinion Leader

## Relationship Management:

### An Unmet Need in India



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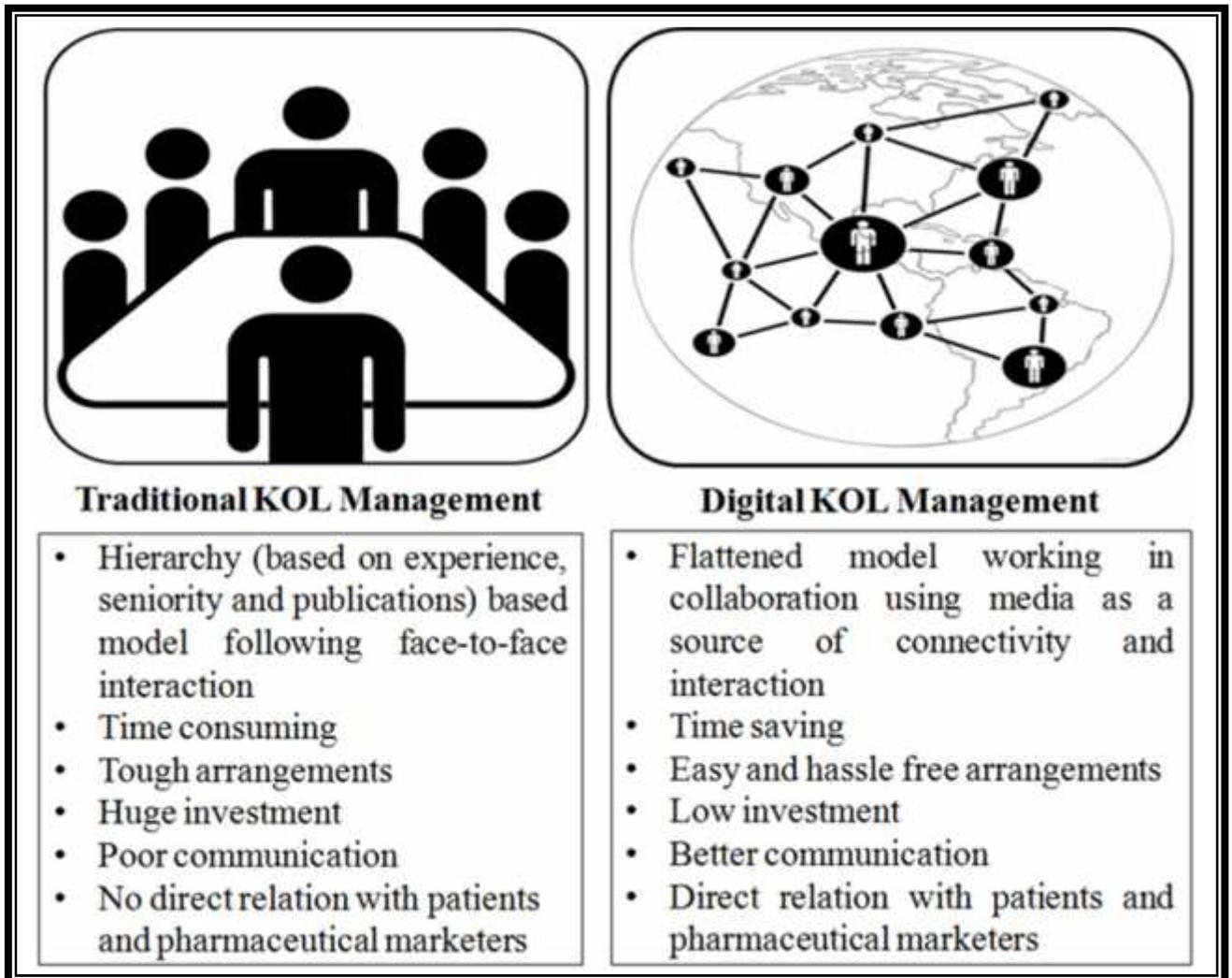
## Introduction

Opinion leadership is a well-defined, comprehensive and rigorous concept that synergizes marketing strategies and practice in the pharmaceutical industries. To attain an effective management and relationship between the research and marketing departments, key opinion leader (KOL) management is crucial [1]. KOLs contribute by transforming their expertise and experience in the field of health care into efficient and productive market focused strategies [2].

Though KOL management is an essential and extremely valuable component for marketers and medical department of a pharmaceutical company, it is undergoing a rapid change [3]. A transformation has been observed in the global healthcare industry over the last decade in the areas of advancement in biopharmaceuticals, medical technology, and surgical procedures. It has been observed that the internet plays a major role in this transformation and influences every aspect of people's lives and the way they work. Besides the internet, the advent of social media and mobile phones has provided an advanced outline to the consumer empowerment. This transformation has led to a change in the traditional relationship between healthcare professionals (HCPs) and pharmaceutical companies and has emerged as digitalization in KOL management [4, 5, 6]. Such a digitalization in sharing product related opinions is the need of the hour and has raised the standards, expectations, and quality of research and marketing strategies in pharmaceutical companies. The difference in traditional KOL management and digital opinion leadership management is presented in **Figure 1**.

**Figure 1: Difference in Traditional KOL Management and Digital Opinion Leadership**

**Management**



Though, the KOLs act as a link between the pharmaceutical companies and the consumers, their role in the Indian market was restricted. Earlier, the role of medical advisors was restricted to training sales representatives and supporting the marketing claims of the product. Nowadays, the growth in Indian pharmaceutical industry, the regulations in marketing practices and regulatory policies, improvement in safety surveillance, and change in regulatory rules has evolved the roles of KOLs in Indian pharmaceutical industry. Moreover, the expansion in their responsibilities has improved the relationships among the companies,

physicians and consumers [4]. However, the concept of digital KOL management in Indian pharmaceutical companies is still in its conception. The present article focuses on the role of digitalization and overcoming the challenges faced by the KOLs. It also highlights the need of digitalization in KOL management in India.

## **KOLs**

### ***History and Evolution***

The idea of innovation and imitation was introduced by Gabriel Tarde, in the 19<sup>th</sup> century, to explain “buyer behavior”. His ideas were, however, brought into practice in the mid-20<sup>th</sup> century, when the idea of KOLs was introduced. The latter followed the research on how the media influenced a mass audience. Hitherto, media such as radio, television, press was considered to directly affect the consumers. However, in 1944, the research conducted on the behavior of consumers changed this perception entirely. So, a two-step flow model of influence was proposed, according to which, media influenced opinion leaders who further influenced their contacts and consumers [3].

Since then, KOLs form an inseparable part of research and marketing. KOLs are believed to act as the gatekeepers for interventions, mode of changing social norms and accelerating the change in the behavior of the respective firm they work for. This could be made more productive by the efficient utilization of the best of the qualities of every individual KOL and profoundly understand their developmental objectives [4].

### ***KOL Management***

The first and foremost step in developing and maintaining a relationship with a KOL is to understand the objective and developmental needs of the KOL. The respective KOL management program must also foster the regulation of plans, objectives, and events during

the changing scenarios of the market. The program should provide a transparency in the management, supporting the compliance with the latest regulatory guidelines. These programs also form a part of effective KOL relationship management (KRM) strategy. KRM strategy further helps to strengthen the links between the field sales, brand management, and medical affairs. It ensures the success of the novel product launch and its market expansion, thus enhancing the business revenue manifolds. The acceptance of the concerned brand and its long time effect on the targeted audience suggested by the KOLs is of utmost importance. It serves as a means to measure the effectiveness of the KRM strategies being implemented [7].

### **Influence Network Mapping: Mapping KOL Relationships**

Traditionally, the KOLs were chosen based on the recommendations of the sales representatives of the company. This approach is used even today, especially in the developing countries. However, this approach is prone to selective bias. Other methods used were number of published papers, citation index, member of reputed societies, and speaker in congress/conferences and most important peer to peer influence.

However, the present era has changed its thoughts and strategy. Today's scenario focuses more on choosing the innovative, budding as well as intellectual KOLs with a valuable voice of awareness, knowledge, and expertise. Therefore, mapping KOL relationship is better known as influence network mapping. Influence network mapping poses as a GPS which serves to identify and locate the best KOLs for a pharmaceutical product. Besides, being the most rapid route for identifying and locating the KOLs in the ranking order, it also investigates publications under the KOLs; their influential positions and roles in committee as well as advisory boards, etc. All this leads to an efficient, comprehensive and robust search of KOLs. KOL mapping acts as a guiding tool which goes beyond laser-like targeting and helps

the pharma-officials choose the right KOL. It helps to gather in-depth knowledge of KOL which serves as an important aspect of the effective marketing of a product. The two major key points involved in structuring a KOL board includes determining the influencing indicators as well as network mapping [8, 9].

### ***1. Determining the Influencing Indicators***

To make a smart and right decision, collating more of information/ data followed by its sorting using appropriate filters and analytics is warranted. It is essential to prepare a questionnaire for choosing the KOL. The questionnaire includes the agenda question, discipline specialization of KOL, the focused area of therapy (diagnosis or treatment, care, *etc.*), congresses, societies, journals, regulatory boards to be focused by KOLs, career phase of KOL (rising star, peak career, or eminent but less active) and skill-set of KOLs.

### ***2. Network Maps***

Another key component for searching the appropriate KOL is network mapping. It is a quantitative approach to identify leaders across the world on the basis of their skills, area of interest, voice, and influence. Moreover, KOLs are pinpointed at each geographic level, *i.e.*, local, regional, as well as national level, so as to reach to the most appropriate KOLs who could prove to be influential among their own communities.

Besides its importance in tracking behaviors, KOL mapping is still critical to gather comprehensive knowledge of the skill, expertise, experience and personal nature of a physician. This serves as an assessment database to choose who and from where would be the best KOL. It is because the adoption behaviors are considered more relevant than a reputed profile in the industry. It can be concluded that KOL mapping requires four essential

functions, abbreviated as “PASM”; P (planning); A (asking); S (setting relevant indicators of influence); M (mapping of KOLs).

Drawbacks associated with influence KOL mapping include improper, irregular and inaccurate updating of KOL database leading to an inaccurate identification of the most meaningful and respected speakers, *etc.* For instance, the doctor has shifted to a new facility, rise/ increase in expertise and experience, *etc.* Updating from time to time is important so as to choose the right KOL for the product. Therefore, well-executed KOL mapping allows a company to use its resources more efficiently as well as choose the right KOL on board [4].

***KOL profiling facilitates KOL management in many ways including:***

1. The software can be developed that contains complete details about each KOL, from their contact numbers to their association with the company and the concerned brand. Central databases of the documents, videos, blogs, publications, and the social networking profiles concerning the KOLs can be created.
2. The creation of a central database with the entire information of each KOL facilitates a secure access from different locations. Alerts can be generated and enforcement laws can be implemented to prevent other companies from approaching the same KOL.
3. Since only the pertinent information about a KOL is documented in the software, so at the time of urgency, the most relevant KOLs can be isolated easily and at the earliest.
4. Real-time report tracking could be maintained by such software, wherein the managers can regularly keep themselves updating regarding the opinions of the various KOLs as per

the changing scenarios of the various aspects (production, use, demand, availability, *etc.*) of the targeted products.

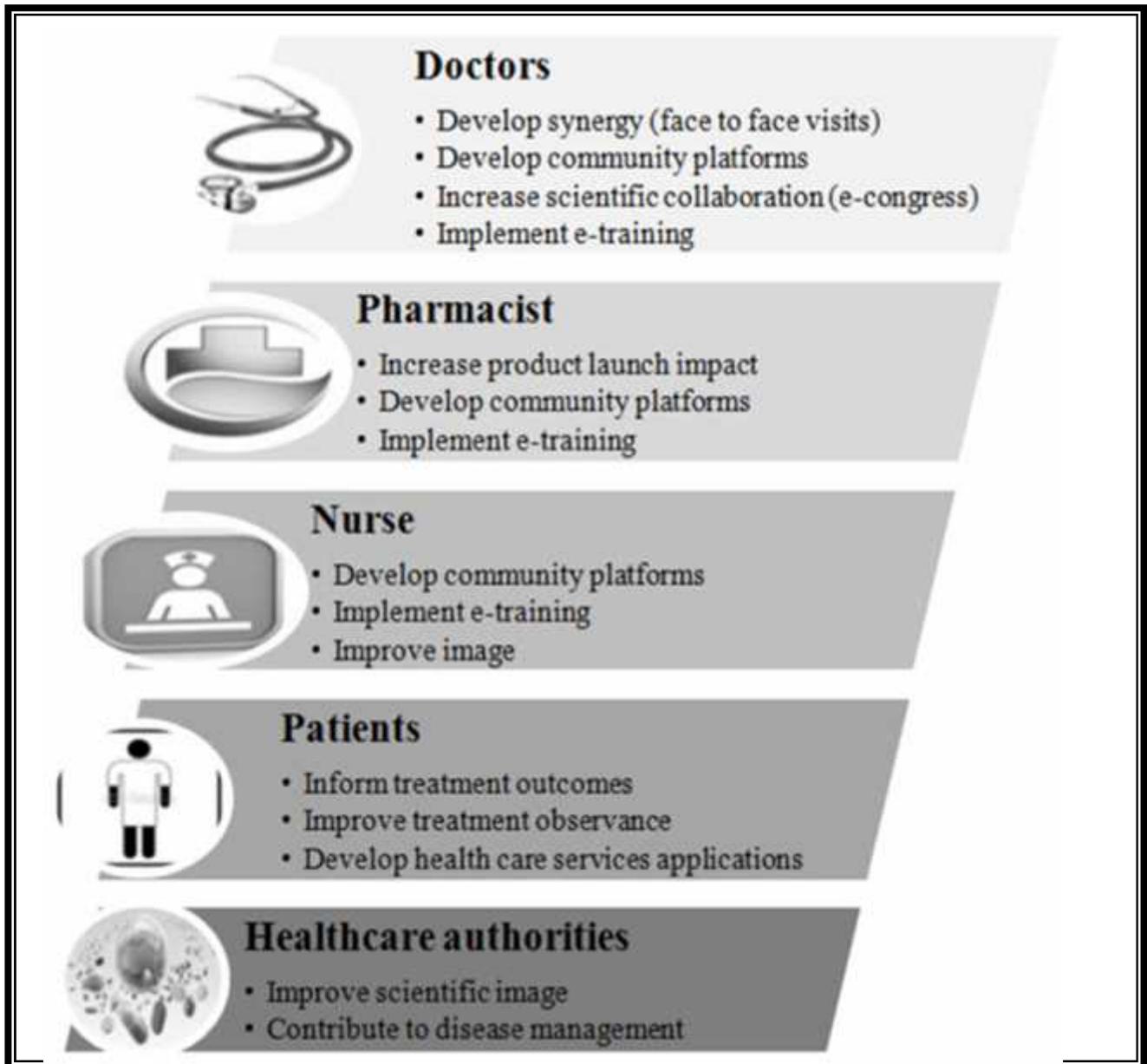
### **Digitalization in KOLs**

Digitalization includes the conveyance of digital information (data or content), business facilities across a number of channels and devices, and mechanisms used for data delivery such as websites, mobile applications, and social media. Approximately, >50% physicians are seeking internet help for medical manifestations, clinical guidelines, treatment criteria, and courses and standard of treatment. This transformation has led to a change in the traditional relationship between HCPs and pharmaceutical companies [4].

The need of digitalization in KOL emerged when there was a chaos as well as mismanagement observed in the conventional KRM strategies. Establishment as well as following an unreliable way to keep track of the KOLs and their relationships with the companies is the major loop hole associated with traditional KOL management system. It might lead to mismanagement where different teams of the pharmaceutical company might approach the same medical expert for guidance. This would cost any company millions of dollars during marketing, in addition to the compliance issues [7].

The healthcare experts are also becoming digital opinion leaders (digital KOLs) who support the pharmaceutical companies as well as the consumers through various digital channels, hence provide a better platform for transferring medical information [4]. Such a transformation to “digital platform” enables the players to provide better customer services and consequently strengthens brand image (**Figure 2**).

**Figure 2: Services Provided by Digitalized Key Opinion Leader Management**



Digital KOLs have provided a valuable medium to marketing teams in connecting with people. Social media enables KOLs to become more widespread in the medical marketplace, hence poses as an essential marketing tool for healthcare companies. It provides a value to a

drug that brings a change in the way they were developed and commercialized in the past [5, 6].

Many factors are responsible for strengthening the role of digital KOLs in the pharmaceutical world. The most prior among them is the identification and employment of digital KOLs or KOLs with digital skills. Their role among targeted peers can be strengthened more when tools for digital engagement can be provided by the companies. The digital engagement tools comprise organizing online meetings, arranging secured online chat, and conducting a closed or protected conference among peers. All these tools aid in strengthening the role of digital KOLs [6]. There are two major aspects that favor digital KOLs in today's hi-tech world.

Firstly, the company's stakeholders are sometimes influenced by those individuals who were otherwise not characterized as opinion leaders earlier; secondly, the recognition of healthcare experts who can influence their peers' opinions and employment of digital tools. This must not discourage pharmaceutical companies from employing traditional KOLs, but, should provide an extra dimension to these companies in planning the engagement of digital KOLs.

Basically, there are three steps for collaboration of digital KOLs. These include identification, engagement, and activation. This is the similar aspect as with employment of traditional KOLs also, but the difference lies in the involvement of digital platform [10]. The successful implementation of digital KOLs will lead to a transformation in organization setup, focus on clients, enhancement of organization's potential and revenue related apprehensions [11].

#### ***Digital KOL Management: Advantages***

Nowadays, the realization of online KOLs by pharma companies is on the verge. For example, the Spain based global Life Sciences company, Sanofi serves the doctors for professional

development *via* digital channels. They provide free training programs to HCPs who are keen to utilize the internet, social networks and other digital tools for business development [12]. The digitalization helps the pharmaceutical companies in building new business models and allowing an improvement in achieving competitive advantages [11]. In the past, the primary research was taken more into account and thought to be a way to gather drug product messaging direction. Involvement of digital KOLs eliminates any kind of respondent biasness, which otherwise was faced during primary research. The delineation of a scientific community for a particular disease state leads to exclusion of usage of prescribing patterns. With the use of internet, consumers can be effectively targeted and influenced [4, 5]. Moreover, digital KOLs help health care system in creating communities for investigators and other HCPs; develop well-focused, relevant and high-impact medical education programs; assist a pharmaceutical company in expanding clinical trial awareness; help companies to establish trustful relationship with physicians; and maintain as well as improve KRM. Besides, the digitalization will improve acquisition rates and return on investment (ROI) [13].

### ***Digital KOL Management: Challenges***

The associations and regulators of various pharmaceutical industries have formulated guidelines for the implementation of digital and social media channels. The one among them is Swedish pharma association (LIF), which has drafted a detailed document for addressing the social media usage and related ethical guidelines for companies. These documents aid companies for assessing suitable usage of social media in a correlation to Swedish pharma's ethical rules (LER). The members of Turkish pharma Association of Research-Based Pharmaceutical Companies (AIFD) have developed guidelines for digital communication and

digital marketing practices. These guidelines provide assistance in websites meant for the corporate sector, consumers, HCPs, marketing and social networking. Another UK based self-regulatory body, namely, The Prescription Medicines Code of Practice Authority (PMCPA) provides regulation on The Association of the British Pharmaceutical Industry's (ABPI) Code of Practice as well as administers the practice of social media and digital communication tools. Similarly, Food and Drug Administration (FDA), the US based guideline regulates traditional communications regarding medical treatments. The guidelines focused on usage of pharma and social media, and evade the requests for unwanted data (such as electronic media or social media requests) for "off-label use" [14]. The traditional communications related to medical treatments have been largely regulated by FDA, while the regulations for usage of internet and social media are still in their developing stage. This, in turn, haphazardly affects healthcare communications and marketing when there is demand (general) for use of digital platform, and social media (particular). Although there is a lack of guidance from FDA, pharmaceutical industries are getting more involved in the usage of digital platform (internet and social media). FDA held a meeting in 2009 (November) for the promotion of pharmaceutical products *via* digital platform in order to draft guidelines and it came into process by March 2013. Due to the development of these FDA and Pharmaceutical Research and Manufacturers of America (PhRMA) guidelines, the relationships with the physicians are been heavily regulated. The pharma companies are not only dealing with these KOL management issues but, also they are handling challenges across functional groups (from medical research to marketing of a drug) for making these relationships efficient and more collaborative. They are also ensuring that it does not create any kind of additional challenges or conflicts of interest. There are many circumstance-related limitations associated with FDA

guidelines in its draft stage. It does not address the request for standard drug manifestations or for medicines that are yet to be approved thereafter [15, 16, 17].

Besides this, the relationship between pharmaceutical companies and social media also involves many challenges such as in the identification of adverse events, strategies to cope up with these adverse events, and effective FDA approved guidelines for patient engagement. Still, the marketing *via* social media has a great opportunity [5]. The major issues faced by the pharmaceutical companies for transforming into digital involve the kind of a business model that could be incorporated for strengthening digital services; evaluating the needs of HCPs and patients and addressing them; use of digital services for performance augmentation across the organization; adherence to guidelines, regulations, ensuring compliance; and the extent up to which pharmaceutical companies are getting innovative [18]. There is still a need for new research to understand more about the digital footprint in pharma companies.

### **Virtual Advisory Board (VAB)**

One of the major aims of medical affairs in the near future will be to help the patient to avail and utilize the optimal medical treatment. This will require the skill to demonstrate the medical use and benefits of products to practitioners and payers throughout the lifecycle of the product. Depending upon the needs identified by the company, advisory boards can act virtually at any step of product development [19]. Advisory boards have evolved as an important part of the pharmaceutical landscape since a long time. They help in providing companies with valuable and important expert opinions on different topics ranging from ensuring thorough regulatory submissions to clinical trial protocols [20]. However, an effective advisory board meeting/ conference requires satisfactory investment in their

operations and resources. Traditional advisory boards require companies to invest a large amount of money and energy to ensure the arrival of advisors. There are rich travel and accommodation expenses, in addition to the brand team's time out of the office [21, 22].

Various pharmaceutical companies are working together to develop a cohesive advisory board strategy and functions that involve the best groups suited to hold the responsibility of coordinating advisory boards and ways to achieve a useful deliverable out of a board meeting. As with any part of the pharmaceutical industry, even advisory board meeting strategies are evolving with the changing time [5].

A digital platform for VABs is acting as a new and budding domain to the life science as it prevents the complications associated with the conventional strategies, which results in a more cost effective and more efficient meeting [20]. However, there is a debate about their overall worth.

Basically, a digital VAB is composed of a group of experts from one or several countries, *i.e.*, digital KOLs, who use a single digital platform to share their opinions [23]. The real benefits of these VABs are cost and convenience. According to a report by Cutting Edge Information on advisory boards, it was found that national clinical advisory boards in North America cost an average of \$78,000. An asynchronous VAB is found to cost around \$15,000 to \$25,000 [22].

Due to this digital platform, agency partners can focus on higher value content and communication services, instead of managing pocket and logistical details. These digital collaboration programs provide flexible engagement of busy thought leaders when it is best for them from their home or office before rounds and appointments, or after work. Advisor also appreciates the ease and opportunity to participate in thoughtful dialogue and sharing of

clinical insights with their peers. A digital platform also provides an opportunity to connect with peers, as well as the sufficient time to give more thought to their answers before they contribute to the discussion [20]. They sharply focus on a finite set of questions and stimulates a movement of thought that can be most provocative in stimulating a broad-ranging discourse [23].

Apart from this, they are often involved in international trials and they regularly attend and speak at international conferences using digital media. Using digital management strategies, they eagerly share their new experiences and new ideas locally or internationally [24]. The VABs involving government payers are also useful from a government affairs standpoint to help companies to deliver better value to the government as well as to the patients [5]. Still, some advisory board members may prefer face to face communications and the social media style may not resonate with them [22].

An effective and digital VAB acts as a valuable tool which provides informed guidance to pharmaceutical organizations on various business aspects. To maximize the ROI, it is important for leaders to develop their advisory boards appropriately and spend optimal resources. It is also important for pharmaceutical professionals to ensure that the quality of meetings and the dialogue with the board is excellent [12].

### **Indian Pharmaceutical Industry: Lack of KOL Digitalization**

India is one of the biggest pharmaceutical platforms with an annual turnover of more than 11 billion USD. There are many Government policies, such as Drugs and Cosmetics Act (1940), Drugs Policy (1986), Indian Patents Act (1970), Drug Price Control Order (1995), Pharmaceutical Policy (2002), Indian Patents (Amendment) Act (2005), which are playing an

important role in regulating the Indian pharmaceutical industry [25]. Despite a number of acts which have been established and implemented to control and promote the growth of Indian pharmaceutical industries, Indian pharmaceutical industry is still in its infancy. The major reason contributing to the same is the lack of awareness and willingness to change or upgrade as compared to other countries.

There are many disadvantages associated with the Indian pharmaceutical industry which are hindering its smooth journey towards digitalized platform:

### ***1. Rural India***

It has been reported that about 20 million of the Indian population have an access to internet, whereas more than that cannot connect on the web. As per the Indian statistics (2015), out of the total Indian population (121.1 crores in 2011), 83.3 crores (in 2011) are residing in rural India.[26] In the nation with more than 10 billion people, about 750 million people are residing in 637,000 villages with no internet connectivity or disturbed internet connectivity. It accompanies poor infrastructure, with no or very less electricity and low bandwidth.

Moreover, the poverty/ low-income status and a high illiteracy rate of rural Indians does not allow people to buy computer systems and internet connections. As per the Times of India (dated Feb 3, 2016), there are only 9% mobile internet users in rural India [27]. This is one of the major drawbacks for Indian pharmaceutical companies in engaging and managing digital KOLs [28].

### ***2. Conventional Perspective of Indian Health Care System***

The health care system is striving hard to provide satisfactory medical treatment to the consumers. There are certain online applications to connect and approach various doctors such

as Epocrates, UpToDate, Read by QxMD, DynaMed Mobile [29]. However, no such online application is available to access KOLs. The Indian regulatory authorities associated with the health management have been working below the threshold to optimize the KOL management strategy.

It has been reported that more than 50% physicians consult internet services for various purposes including medical indications, clinical guidelines, treatment patterns, courses of therapy, treatment standards [30]. Still, a major percentage of physicians are reluctant in using the internet and other digitalized sources for gaining knowledge and updating it.

Moreover, the health care departments in most of the parts of the country are even not willing to transform from manual methods to the computerized methods owing to their habit of working manually on papers. The contributing factors such as the high cost of connecting the rural areas through the internet and the infrastructures required to do so are also not met easily by developing countries, such as India [31].

### *3. Lack of Education and Awareness*

The citizens of developing countries such as Brazil, China, India, Mexico, and Russia seek internet assistance more for getting health information as compared to citizens of developed countries. The outlined reasons may be higher costs involved in consulting a physician or medical professional offline or face to face.

It has been reported in a study conducted on outpatient clinics of India that only 62% patients seek physicians help after getting information from the internet and 28% of them prefer the second opinion. Nevertheless, the people of developing countries face pitfalls while usage of

internet for health information due to availability of the US based online information and that too in English and sometimes insufficient and erratic health information is available [32].

The main barrier seen in the adoption of KOL digitalization in India is illiteracy in general as well as illiteracy associated with information technology (IT) or use of computers/ mobile phones, *etc* (IT illiteracy). According to a report by United Nations Development Programme (2009), the literacy rate among Indian population was noted to be about 66% which is a much lower estimate as compared to other countries (literacy rate: >90%) included in the Bupa Health Pulse 2010 survey [31, 33].

For enabling online access to health information, it is essential to have an internet framework. India, being one of the developing countries has still a lot more to attain; approximately nine in 10 people in India are devoid of access to the internet. While other developing countries such as Mexico, China, Brazil, and Russia tend to have approximately, 27.2%, 31.8%, 37.8%, and 42.8% people to have access to the internet, respectively. The circumstances are even more critical in India. A survey conducted on about 15,000 of the rural population of India by Internet and Mobile Association of India (IAMAI) has reported almost 84% people to be incognizant about the internet.[33] Lack of proper education, awareness among Indian people about the digitalization of KOLs is deemed responsible for the truncated utilization of digital KOLs in the pharma world.

#### ***4. Lack of the Sunshine Act in India***

Financial relationships between physicians and pharmaceutical companies are common and can include everything, right from complimentary meals to consulting or speaker fees and direct research funding. These financial relationships have many positive outcomes in the

context of consulting and research funding. However, they can also help in the development of conflict of interest, biasness, misleading or suboptimal promotional activities and the misconduct of medical research, training, and practice. To avoid this and bring a transparency in the system, Section 6002 of the patient protection and Affordable Care Act (ACA) of 2010 has been established which is also known as the Physician Payments Sunshine Act (PPSA). The Sunshine Act seeks to bring greater transparency between industry and physicians relationships while maintaining the balance between the positive contributions to research innovation, and education and the negatives associated with conflicts of interest. It requires pharmaceutical companies to report the Centers for Medicare and Medicaid Services (CMS) regarding payments or other transfers of value such as meals, travel reimbursement, and consulting fees, to ownership and investment interests in manufacturers held by physicians as well as their immediate family members and participation in preclinical research, clinical trials, or other product development activities [7, 8]. The CMS compiles the reported information and post in a publicly accessible database [9]. The Sunshine Act also brings challenges to pharmaceutical manufacturers and affects their efforts to conduct speaker programs and advisory boards. Moreover, only 32% physicians think that the Sunshine Act may reduce their participation [30]. As companies need to fulfill certain requirements to report all spending on physician-related activities, the disclosure of legitimate transfers of value can be misconstrued. Not only the companies have more control in their payments to opinion leaders, but institutions and doctors are increasingly thinking to associate with industry. This could lead to potential damage to the public's perceptions of the companies' intentions. Companies need to maintain their priorities and plans to accommodate for this new public reporting. The Sunshine Act acts as a catalyst, as companies are re-evaluating their

approaches to KOLs, to turn into digital collaboration as an alternative for engaging them earlier and more effectively [1, 6].

Besides understanding the need of the hour, India has not been able to establish any regulations or guidelines which might help in controlling and lubricating the journey of KOL digitalization.

### ***5. Others***

Other reasons contributing in hindering the digitalization movement of India are varied languages used in India. Since most of the programs are in English language but majority of people in India are not able to understand it [31].

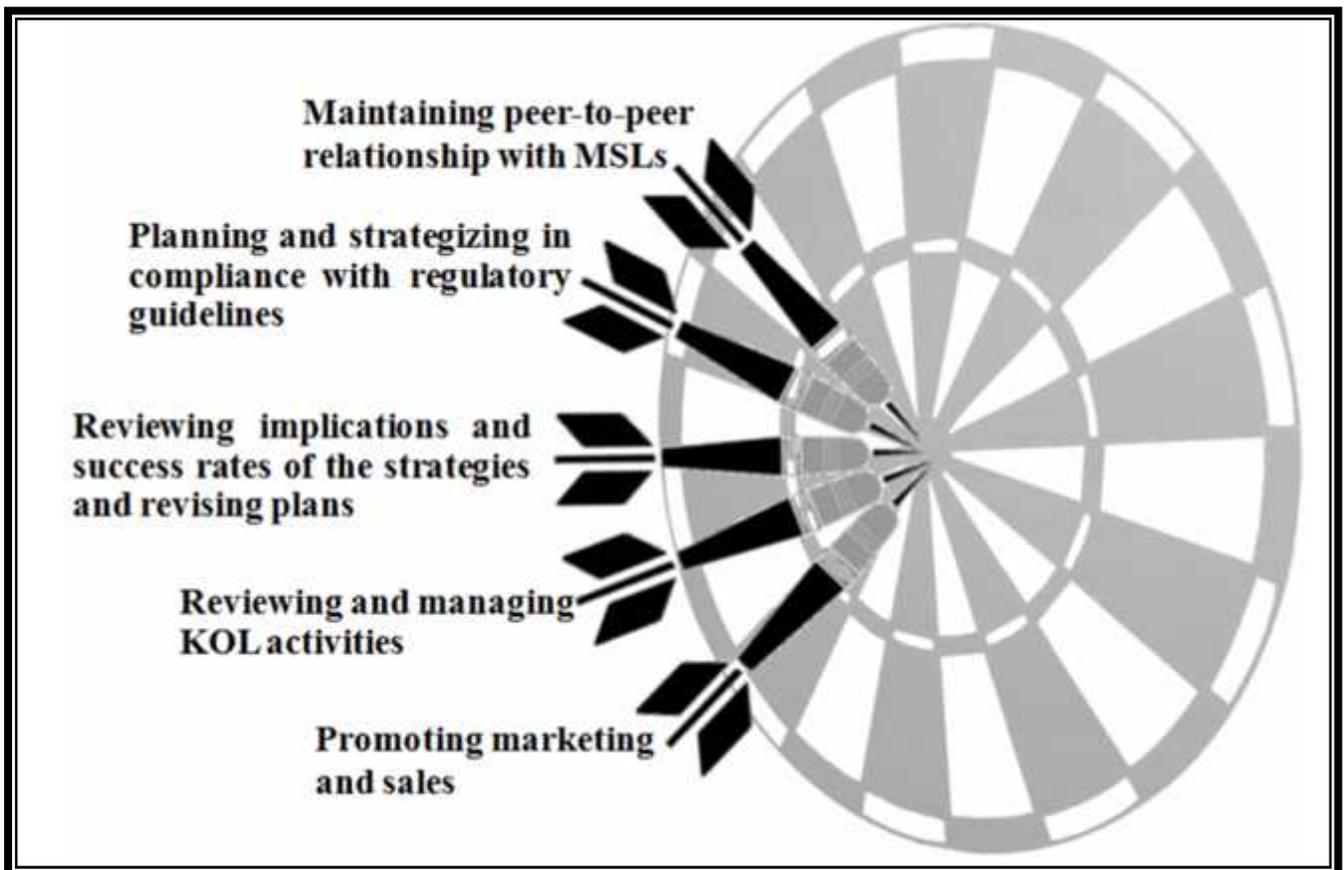
### **Discussion**

The specialists, *i.e.*, physicians, senior doctors, and HCPs, *etc.* are the product marketing advisors as well as the brains behind the screen who assist pharmaceutical companies in selling their products, thereby are known as KOLs [22]. As KOLs play a vital role in the progression/ success story of a product from the laboratory to the consumer, they have ultimately emerged as an individual business discipline. The management, well described as KOL management, involves effective as well as an efficient approach to organize, conduct, execute and manage collaboration among the skillful and experienced physicians [3].

KOLs and the marketing department of a pharmaceutical company are closely entangled where KOL management extends a support in promoting a product [2]. An IT enabled model of KOL, *i.e.*, digitalization in KOL management has emerged as the need of the hour so as to meet the challenges of a present scenario such as the need of swift information transfer, busy schedule, high expenses, *etc.* KOLs, being the most experienced and skillful in their field can

promote products of the companies by educating the medical and scientific department associated by making them aware of the pros and cons of the latest medical therapies. They may also arise a need of a novel product, modes of action, function, and usage of the drugs under target (**Figure 3**).

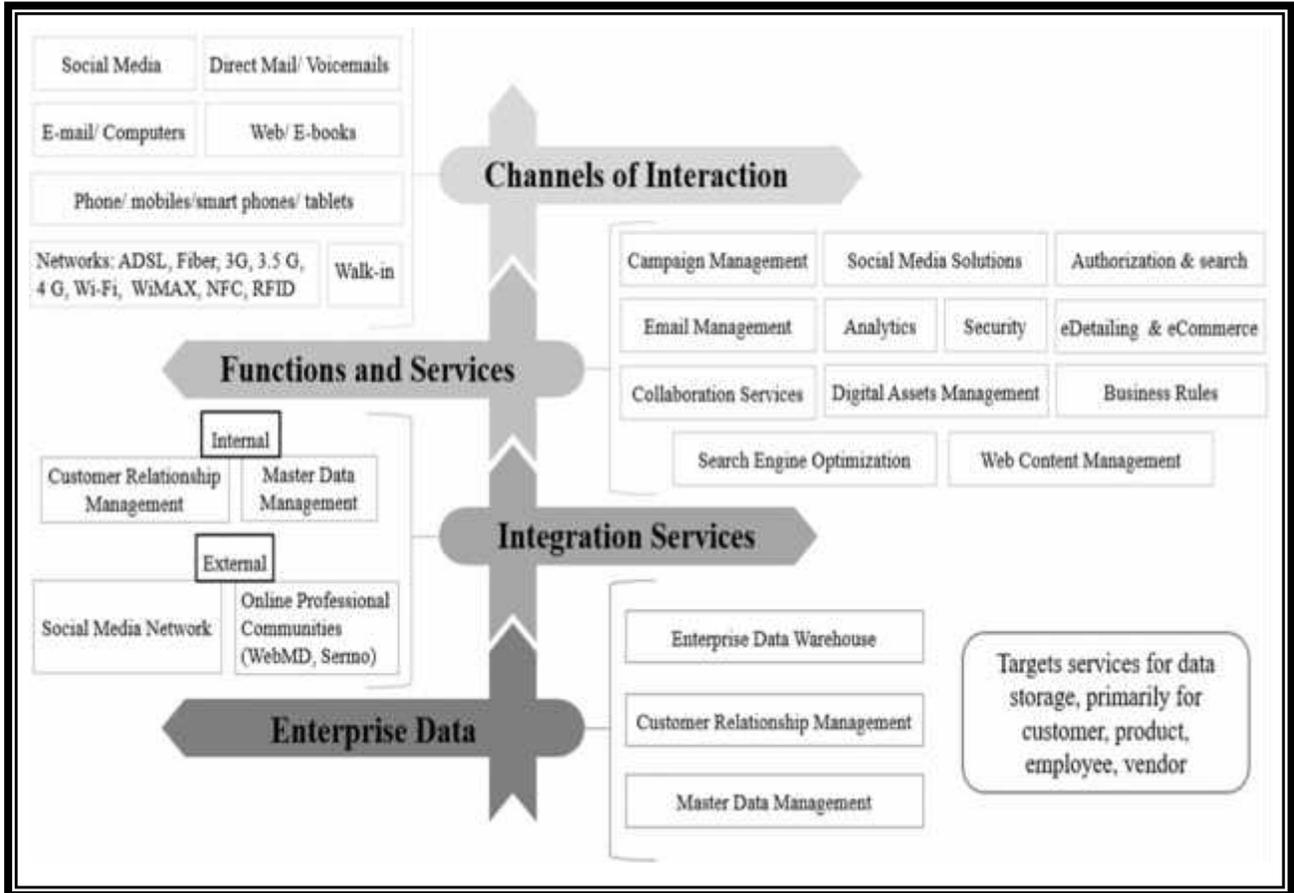
**Figure 3: Role of Key Opinion Leader**



However, the major road-blockers for pharmaceutical companies in using digital communication strategies is the use of traditional communication methods by many pharmaceutical companies. The restrictive regulations and modernization in the healthcare system create obstacles for the pharmaceutical companies following conventional systems. They face cultural, creativity as well as compliance challenges which restrict their steps moving towards digitalization [12]. The main building blocks of digital marketing that need to

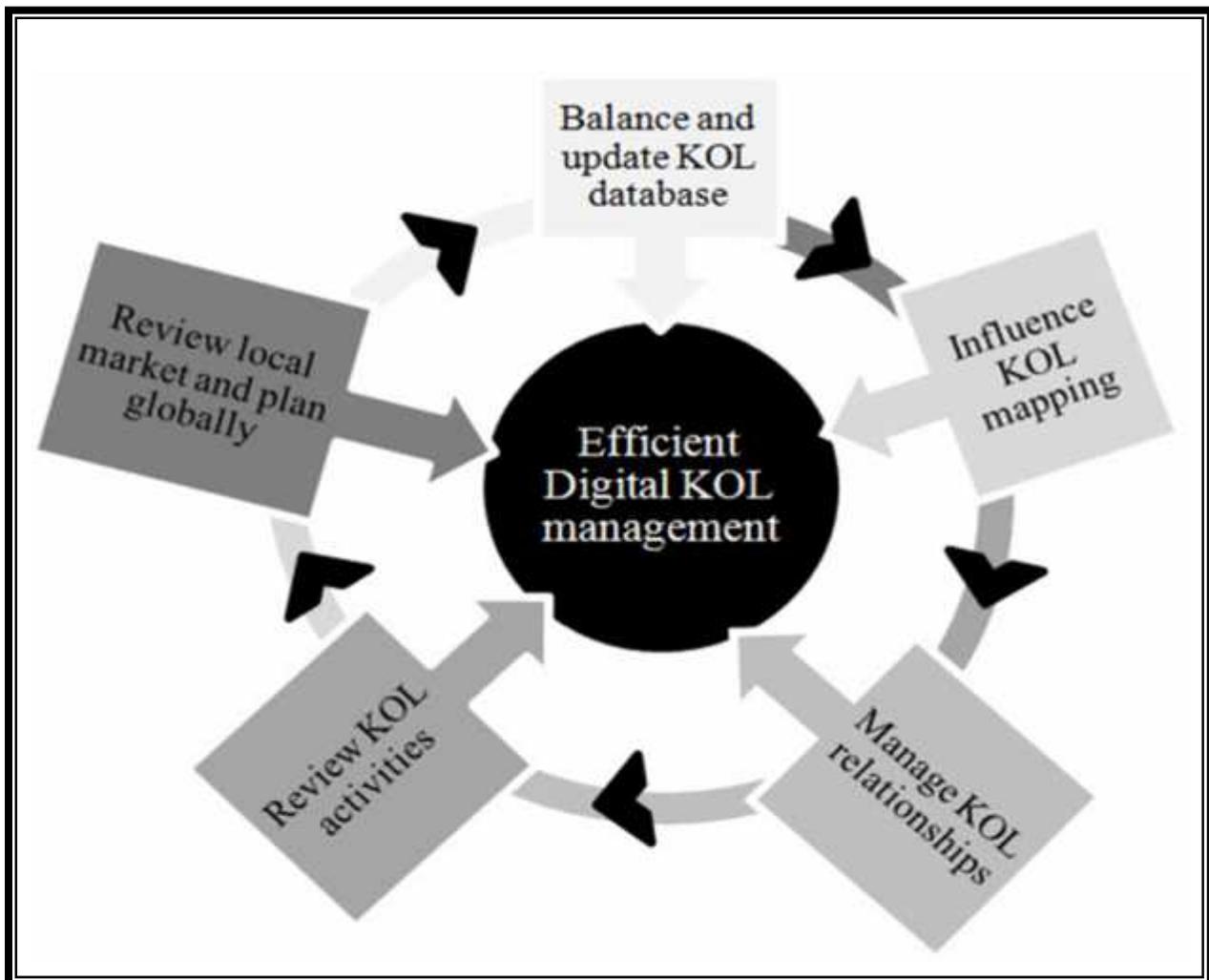
be considered by pharmaceutical companies are digital or communication channels, digital functions and services, integration services, and enterprise data (**Figure 4**).

**Figure 4: Five Major Building Blocks of Digitalized Pharmaceutical Companies**



To achieve the successful digital pharmaceutical strategy, the contributors need to think cross-functionally to understand and invest as per consumers' needs as well as to maintain long-term relationships. They should also assess new opportunities and build in-house digitalization so as to work error free and ensure long-term adherence to developed strategies. To understand digital regulations is also warranted so as to limit the chances of breaching [12]. Five lucrative practices involved in the efficient digital KOL management are presented in **Figure 5**.

**Figure 5: Concept of Digitalized Key Opinion Leader Management System**



The Indian pharmaceutical sector has shown a significant growth from \$6 billion in 2005 to \$18 billion market in 2012. It is expected to reach \$45 billion by 2020 [12]. Though, digital KOL management has evolved as an enhanced, integrated, cost effective and hi-tech model and that many leading pharmaceutical companies have their future plans to accept and utilize the approach, but India is still untouched. The continuous evolution and improvement in the research and marketing have not been able to influence the nation. Moreover, various other countries have been following some guidelines concerning the remunerations, and progress of KOLs, such as the PPSA in the US, the 2011 and 2013 edition of the ABPI code of practice in

UK, *etc* [11]. However, India is lacking such guidelines. It has been reported by Sovani, 2014 that Indian Medical Association (IMA) has also laid down some norms which regulate gifting and remunerating the physician and concerned medicos for educational services rendered during the research and marketing of the product [6]. There is still a need to regulate and revolutionize the pharmaceutical market so as to overcome the challenges associated with the traditional KOL management.

### **Conclusion**

The evolved roles and responsibilities of KOLs has raised the standards of pharmaceutical research and market. Moreover, the digitalization has a synergistic role to play in the medical affairs. However, Indian pharmaceutical companies are still at the threshold. Therefore, digitalization of KOL management system is highly warranted in India so as to meet and compete with the international companies.

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