

## RESEARCH ARTICLE

## Migration Vulnerability: Role of Digital Media and Internet in Stimulating and Inhibiting Brain Drain

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### Abstract

Considerations like hiked salaries, superior technology, better standards of living, and quality of work life, more unwavering political conditions & demand of skilled professional are attributed as reasons for brain drain from developing to developed countries. Brain drain owing to cross border migration is one of the crucial issues of the globalized world. In contemporary technologically advanced era, digital media and internet has affected our political, social, cultural values. It would be obliviousness if we neglect the role of digital media & internet in connecting cross border communities. This connection has brought change in primordial intensions and value system of people in developing countries to stay or move out of their country of origin to a developed country. There is a dearth of study related to paradigm shift in cross border mobility patterns mediated by digital media and internet. Here, it is an attempt to understand how internet and digital media influences the intensions and priorities to move out from one's own country to foreign location. Role of digital media and internet in stimulating and affecting brain drain is pondered and future directions for studies have been proposed.

**Keywords:** *Values, Brain Drain, Cross border mobility, Internet, Digital Media, Human Capital.*

### Introduction

Extensive literature is available on migration pattern of human capital cross the border leading to brain drain. A number of factors including economic, political, social and cultural factors have been identified as a reason to love or leave a country. Since long; developing countries have faced a problem of exodus of workers cross the border [1-2]. Attempts have been made to curb the problem of migration of human capital by understanding various factors leading to brain drain. However, a dimension in migration studies which is unexplored and seeks our due attention is the role of internet and digital media as enabler or inhibitor of brain drain.

Historically, Human interaction & communication began with the oral or spoken media. With the course of time spreading of information evolved from the oral tradition, to script, to print, wired electronics, wireless electronics and finally digital communication. The paradigm change in message dissemination in recent times has occurred with the introduction of digital media and internet in the early 1990s. This has led to drastic change of communication medium further influencing the reach and control of

the media. Digitization has compressed the distance between different point in space & has led people realize that national and global boundaries has become obsolete [3]. Wider reach of digital media and innovation in modern communication media has changed the way we think, act and live. Hence, it is evident that internet and digital media have demonstrated its effects on each and every aspect of humanity and human values [4].

Information presented and shared on digital media directly affects the development of intercultural relationships in the virtual community through the creation of a network [5]. The migration of highly skilled workers from developing to developed country is often related to factors such as demand of trained and skilled professional in developed countries, hiked salaries, superior technology, better standards of living, quality of work life, and more unwavering political conditions etc in the developed countries.

The various approaches which claim a range of factors as drivers of exodus of people categorically assume that prospective migrants have access to the sufficient

information pertinent and relevant to make migration decisions. Nowadays, online media acts as a significant foundation of information for aspiring migrants and can play an integral role to reinforce the idea of migration [6].

While making migration decision individuals gather information from varied sources namely relatives and friends, previous migrants or social network abroad. However, with the digitalization of communication pattern, digital media has touched and penetrated each and every aspects of our life. An in-depth study of the role of the internet and digital media in the migration process is scarce and seek our attention.

This paper contributes to the literature and theory by exploring role and implications of internet in affecting brain drain intensions. In this article we present an approach that can be utilized to channelize the positive impact of digital and social media in decision making pertaining to migration and mitigate the negative impacts of the same. The future studies can be conducted to empirically explore the stimulating and inhibiting role of internet.

**Table1: Individuals using the internet (In Millions)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
World	1,024	1,151	1,365	1,561	1,751	2,014	2,216	2,459	2,660	2,931	3,207	3,488

Source: ICT facts and figures (2016) retrieved from <http://www.itu.int/en/itu>

Internet is one of the frequently used and obvious sources of information as it help us to connect to people, services and get information about space and place. Whether, it is locating people or places internet is one of the preferred options. Making plans and taking decision to spend holidays, to find employment, and where to move for one's place of residence are all dependent on internet.

The one way through which internet and digital media stimulates migration is easy and quick access to relevant information about destination country. Due to massive information available on internet it is levelheaded to believe that this new situation is affecting our social life & value system [8-9]. Internet & digital media as a source of information helps in clarifying vague ideas of migration and potential destinations with concrete content and contribute to achieve a sense of security. Thus, the potential

## Internet and Digital Media Stimulates Brain Drain: The Enabling Role

Internet usage and smart phone penetration worldwide is progressive and intensifying. The fact that internet usage and smart phones penetration worldwide is steadily growing shows its implications on each facet of our life. There are around seven billion people (95% of the global population) living in an area that is covered by a mobile-cellular network.

The Mobile-broadband networks (3G or above) has reached 84 percent of the global population. LTE networks has reached to almost 4 billion people (53% of the global population), enhancing the quality of internet usage (ICT Facts and Figures, 2016). With the changes and advancement in technology the migration pattern have also changed. **Table 1** highlights the number of internet users all over the world. This clearly indicates that the internet penetration has increased over the period of time& has become part and parcel of everyone's life. In such a dynamic scenario a special attention is required on the changing value system and behavior of the individual owing to digital era [7].

consequence of decision regarding leaving or staying in a country can also be anticipated. Digital media and internet can be as an important tool for the virtual discovery of place and influence virtual plans for physical mobility. Information search and social interaction on digital media & internet acts as enabler of migration decision [10-12].

The augmented role of web-based place-marketing strategies fascinates visitors, tourists, and migrants [13-14]. This further inspire migration interest and influence migration intentions [15]. However, the desire to move out or return to a country greatly depends on the available information and knowledge of opportunities in other places and lack of information increases the chances of impulsiveness in migration decision [16-17]. Here, internet can be used for retrieving information, assessing migration opportunities [10].Migration decisions are not impulsive rather dwell in an

individual's mind and guides his or her actions for a longer part of one's life.

The migration process comprises a sequence of stages [18-19]. The role of internet is branched out and integrated in a variety of ways at different stages of the migration process. Internet and digital media is crucial in influencing intention to move as it broadens action spaces, relaxes constraints on perceived opportunities and helps in discovering new places [20-21].

Decisions regarding migration and cross border mobility are liable to be integrated with, and therefore shaped by online information access, search and reflection. Internet offers rich, often customized, interactive, simplified and updated information about locations, housing, education, culture, jobs, education, housing, residential areas, and environments in distant places. It also develops and improves our access to social networks. This reinforces our reason to believe that it affects our migration interest, intentions, and action [22].

There is a positive relation between internet use and migration planning [23-13]. Internet provide images for new opportunities and thus motivation to move [16], to change our knowledge, perception and preferences including the decision make a choice to leave or love a country [24].

Virtual communities of people bound together by internet evolution want to engage online with one another. Internet-based technologies has dominated the new business models of the digital economy providing new ways to harvest the talents of innovators working outside the corporate boundaries [25]. Young generation in general is not just acquainted but also experienced in Internet usage with greatly developed online practices and skills.

The another important role played by internet and digital media in stimulating migration decisions is formation of virtual social network. Online Social Networks has become one of the key means of communication through the World Wide Web. Internet use increases in the size of the migrant's and prospective migrants' network [7]. These virtual networks and internet also collects statistical data and use information

about users and thus help in forecasting the increase or decrease of migration flows. It also enables to acquire insights of how migrants chose target country. Expatriates & immigrants barter information through online network, sharing geographical location and thereby facilitate the progress of interaction at any given time.

This leads to exchange of spatial information permitting users to effortlessly find their acquaintances in geographical immediacy. Extensive accessibility of digital maps in concurrence with the large interest of users for knowledge of spatial information led to the creation of Geo-Social Networks where users share personal information and geographical position. Internet access provides information about travel routes and connecting migrants with 'organizational infrastructure' [7]. Digital media and internet play an important role to recognize undefined horizon, and familiarize users with new places and situations [21-26].

Digital media increases openness towards other culture and increases the probability to migrate across the globe. It acts as a door to idealize culture & lifestyle of destination country. Increased exposures to media increases probability to migrate. Virtual network have a motivational effect on potential migrants [27-28-7].

The unemployed people who had too little information about the job and job opportunities abroad and were dependent on support of family, relatives and local communities, can now find out opportunities easily. Jobs are advertised on internet internationally and across border which can increase likelihood of geographical mobility or obviate such avenues. Ease & possibility to keep in touch with family also prompt the decision to move out of home country [15]

Internet & digital media also provide ease of settlement to migratory population. Information related to major motives of migration such as employment, housing, education, life style & leisure activities are easily available on internet and help in adjustment [29]. Support and help extended by social contacts in the host environment has long been acknowledged as decisive for expatriate adjustment. Internet technologies including digital media are altering the way individuals form social contacts and support.

These technologies have the potential to offer expatriates, new sources and means for accessing social support.

To sum up as identified in the above literature and mentioned by [7] the major roles of internet and digital media in stimulating brain drain intensions are

- Increases in the size of the migrant's network of migrants and prospective migrants.
- Strengthening the existing social ties.
- Internet reinforces the pull-factors such as information about job opportunity, housing, education, life style and leisure activities.
- Moderates the upshot of 'intervening obstacles' or hurdles.
- Information about map, travel routes and connecting migrants to the destination.
- Precisely predict the increase or decrease of migration flows and insight of how migrants chose target country.
- Lowering of the risk and costs of migration
- Facilitates adjustment.

### **Internet and Digital Media Immobilizes Migration: An Inhibiting Role**

Undoubtedly, internet has blurred the geographical boundaries and facilitated cross border mobility. Virtual connectivity has provided new form of mobility substituting migration. Videoconferencing, online data exchange, others means of interaction without actually traveling the distant places has reduced the scope for international travel. International visits can be easily substituted with online & virtual interaction thus reducing the chances of migration. Role of internet in brain drain intensions largely depends on focus of use, type of support and reliability of information shared online and on digital media.

The objective of media should be clear and transparent communication but if media try to promote racism, ethnicity leading to decisions which are not based on real facts. Uncontrolled usage of internet information can be misguiding and adversely affect migratory population. It has been observed that sometimes information shared on internet & digital media sometimes accelerate sensitive issues such as xenophobia, stereotypes & ethnic hatred [20] which can make or mar the image of

destination country. Digital xenophobia is one of the issues that have cropped up with digitalization of media. Xenophobia is defined by the Oxford dictionary as 'a strong feeling of dislike or fear of people from other countries'<sup>1</sup>. Xenophobia has its roots in not accepting the 'differences' in human beings that can be defined by nationalities, race, sex or culture. According to [30].

Dissemination of unfiltered incendiary messages on digital media and social media platforms allows hateful messages to become more widespread. The appearance or progress of modern technologies has amplified the connectivity of the world in the social, political and economic arena. The United Nations, in January 2015 issued a report on xenophobia which states that hate speeches and provocation to hatred are on the rise in many countries across all continents.

These hateful messages are frequently passed on and propagated through digital media and internet. Digital media has undoubtedly created a new space for minority groups to take part in the debate and discussion in public forum. Accessibility and rapidness have provided a fertile ground for spreading hateful content too. Hate speeches on digital media and internet take on numerous shapes and are propagated. Sometimes highly organized hate groups are formed to influence a group of followers against a targeted group often belonging to a particular race, gender, ethnic or religious group [31].

Migration and intension to migrate is affected by xenophobia and violent action in a host country Migration intentions to South Africa have been affected substantially after violent attack & xenophobia [32].

Access to internet and social groups through digital media thus play an important role at the home country and sometimes advice of awareness against the risks associated with migration to host country and adaptability [33-34] emphasized that digital media and internet have changed the pattern of xenophobia rather created a second layer of xenophobia where attacks and reaction to foreigners are no just limited to casual talks in real life but has developed an online

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<sup>1</sup><https://en.oxforddictionaries.com/definition/xenophobia>

culture. Active conversation on digital communication pattern, viral nature of communicative actions, comments shared by group of people across the globe makes the phenomenon expansive and tends to bring dire consequences. People have become xenophobic on virtual world due to anonymity, lack of inhibition on online communication. Such type of online communication built an image of a country of a place in the mind of immigrants and definitely influences their decision to stay back or leave home country.

Another important dimension affecting migration is promotion of stereotypes and racism by digital media and internet. Migration decisions being affected by racism, migrants develop a tendency to migrate to a country on the basis of these racial prejudices and stereotypes [35]. There exist a relation between media coverage and migration perception in different countries [36]. There are few incidences where information related to a country or a community is inspired by prejudice and myths [4].

*Whilst the media's stereotyped images of immigrants are expressions of racist mentalities, lack of professional ethics or, sometimes, just plain ignorance, such images are also part of political battles and the fight for specific power interests..." Giovanna Campan*

If media bias would exist, it can engender manipulation of people opinions. As mentioned by [36]

*Facts and figures are somehow deemed less relevant when it comes to highlight the role the media plays in reinforcing stereotypes and prejudices about the migrants.*

Sometimes internet and digital media tend to use a terminology to describe minorities that gives offence to minority communities and create negative association. They also reinforce stereotypes of minorities by unreasonably emphasizing race or ethnicity even though if mentioning it is not required. Unsophisticated language and stereotypes while dealing with the issue of Immigration can cause significant damage to community relations and perception about destination country [36]. Feedback from the settled migrants can be another important factor influencing migration decisions. In some

cases settled migrants perform gate keeping or gate closing behaviors in order to discourage subsequent movement. Information shared by settled migrants through digital media and virtual network can largely affect the perception of prospective migrants and can be far away from reality and facts. Such information cannot be expected to show the real and fair picture of destination country.

Use of digital media as a tool of political expression against migrants is another hurdle affecting brain drain decisions. This also results in spoiling of image of a country and also aggravates inter-cultural conflicts [4]. Information propagation through internet & digital media is sometimes influenced by country politics and bias [36]. For instance, Arabs use the internet as their political forum [37]. Similarly anti migrant's consensus is created in the media, can be combination of stereotypes and negative portrays mobilized and directed by political authorities [36]. With the advancement of technologically and digital revolution the politically expression has also changed. Few political groups use memes to spread anti-migration post on internet.

As mentioned by Segev, Nissenbaum, Stolero, & Shifman [38] Internet memes are "groups of digital textual units created and distributed by many participants, which are bound together by two forces: (a) a shared quiddity which is specific to each family, constituting its singular essence; and (b) more general qualities of form, content, and stance that draw on the conventions of the "meme culture."

Internet memes have become a mean of communication and convey of culture of a country or community. Memes have become a rapid tool of communication which is consumed quickly in an age saturated by Information overload. Undoubtedly, Memes are the most noteworthy cultural phenomenon of our time [39]. The way migration is covered and framed in the National media including digital media are important determinants of natives' perceptions and decision towards immigration [36].

Through, the above mentioned review of literature on role of digital media following factors have been identified as stimulators or inhibitors for cross border migration (Figure 1)

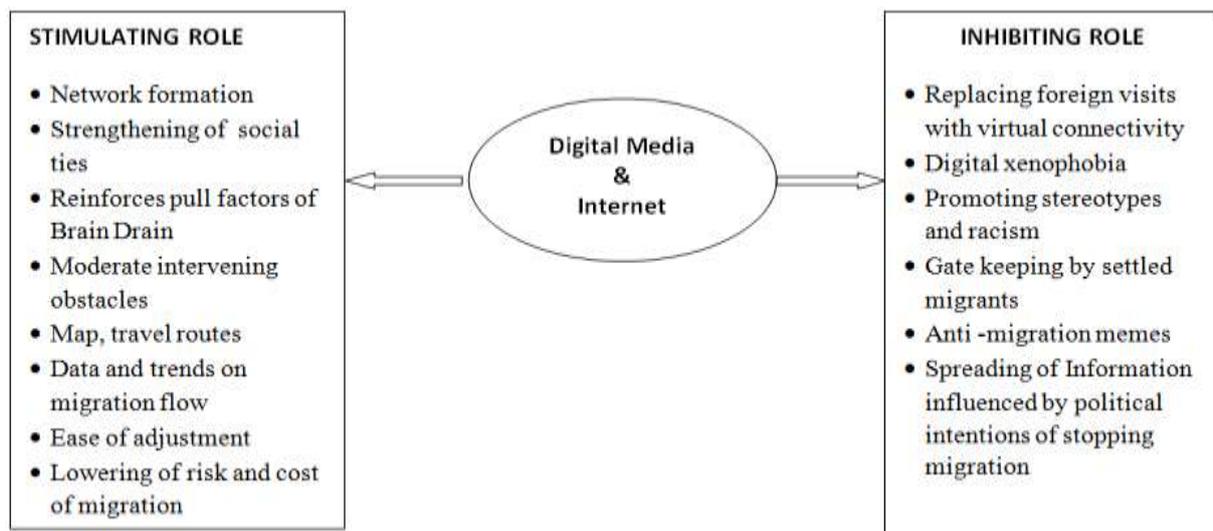


Figure1: Stimulating & inhibiting role of digital media and internet

Sources: Designed by authors in line with Review of literature

## Conclusion and Discussion

In this digital media age, online practices are perceived to play a dynamic role in shaping migration decision. The Internet and digital media plays a vital role in the stimulating migration decision by being the principal and dominant source of information related to labour markets, education, university courses, and political, social and economic environment. A dearth of study has been identified regarding role of digital media and internet in migration studies.

The previous studies related to migration pattern are either focused on at inspiration stage only (Thulin, E. and Vilhelmson, B. [17] or have just highlighting the motivating role of media. [36]. In current scenario when digital media and internet has penetrated our political, social and cultural values. Issues related to brain drain & cross border mobility will remain unsolved we neglect the role of digital media age in connecting cross border communities.

This paper is a contribution to the theory and literature related to brain drain intension in the era of digitalization. Online searches and digital media affect learning and image building about places and can both stimulate or hinder migration decisions.

Overall, the study identifies two dimensions. The first dimension concerns the enabling

role of internet and digital media in stimulating migration decision. Internet and digital media increases the geographical scope by extending the possible migration area and number of destination. Through the accessibility to these media even vague dreams of far-away, foreign places can be quickly validated. The information shared through virtual network makes migration decision easier. The enhanced prospects to foresee the future consequences of a certain move has increased openness to think above migrating to previously strange places. Internet and digital media thus plays an important role in stimulating of dreams and thoughts, which leads to the concrete migration plans. Faster access to information facilitates a faster decision-making process. Augmented virtual access to pertinent information eases the friction of migration decision-making, that is, the time between migration intentions and the final decision to make a move [40].

The second dimension of the present article is inhibiting role of digital media and internet when it is used as a platform of open and unfiltered communication. The information if not reliable or biased can misguide or misrepresent the perception about a community or country. Some ethical issues concerning digital media and internet that affects migration decision such as xenophobic viewpoints and stereotypes effectively strip the humanity away from migrants and mar image of a destination country or community.

The ways in which migration is represented can considerably outline the associated political agendas, social policies, and popular opinion. Tendency of Gate keeping, political expression, racism, ethnicity and biased opinions are major challenges.

It is also clear that digital media and internet are playing a significant role in shaping both the consequences and effects of exodus of people. The intermingling of migration and media communication raises important questions about the competence for digital media and internet to help or hinder efforts to minimize discrimination and polarization in increasingly diverse societies. With the rise of more affordable and efficient communication systems, one can carefully discover remote and inaccessible lands. This allows for the distribution of information to huge and varied communities, often in real time.

However, in such a situation ethics will play a role to guide the action of prospective migrants in right direction. According to Aufderheide [41] the skills and knowledge

required to use media to keep away from such practices are commonly referred to as, media literacy. Media literacy is a capacity to access, retrieve, analyze, evaluate and create media in a variety of forms. Media literacy and how digital media are designed and used by people can have important blow on the public's ability to contribute to critical and open discussion online and bring positive outcome for the same.

Based on the issues discussed in the present article future studies can be conducted to empirically assess how media is playing a role in triggering brain drain. Also assessment of role of digital media & internet in inhibiting brain drain can be conducted and study related to role of digital media and internet in influencing burning issues such as xenophobia, political expression or stereotypes and their role in migration decision with a mediating role of digital media can be conducted. The present study will be helpful in bringing new dimensions to migration studies & studies related to digital media age [42-51].

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