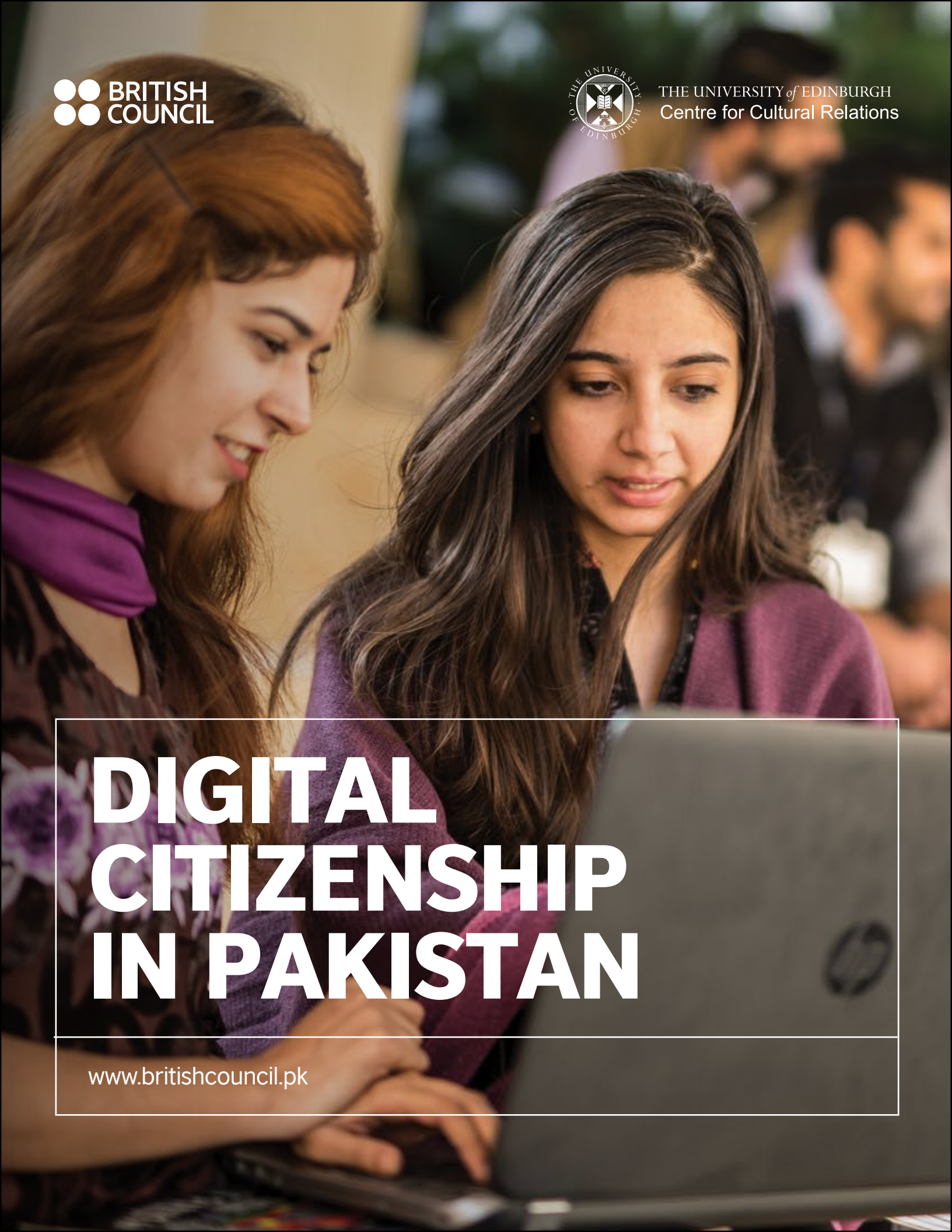


BRITISH COUNCIL

THE UNIVERSITY of EDINBURGH
Centre for Cultural Relations

DIGITAL CITIZENSHIP IN PAKISTAN

www.britishcouncil.pk

DIGITAL CITIZENSHIP IN PAKISTAN

Professor Roger Jeffery
Professor Jon Oberlander
Stuart MacDonald
Dr Feyza Bhatti

CONTENTS

ACKNOWLEDGEMENTS

This report was commissioned by the British Council in Pakistan from the Centre for Cultural Relations, University of Edinburgh.

The research team comprised Professor Roger Jeffery, Professor Jon Oberlander, Mr Stuart MacDonald and Dr Feyza Bhatti for the University of Edinburgh and Dr Maryam Rab, Olivia Swindale, Hasnain Khalil and Daniel Walsh for the British Council in Pakistan. Nielsen Pakistan was engaged in the quantitative fieldwork

The research team is grateful for the assistance of Robin Hill, Clare Grover, Anna Schneider for their input and support.

In undertaking this research and preparing the report, the research team gratefully acknowledges the assistance of all the many individuals and organisations that provided their time, expertise and insight, without which this report would not have been possible.

The interpretations offered in this report are those of the authors and do not necessarily represent the views of the British Council, its officers, or those individuals who contributed to the research.

FOREWORD

Jehan Ara

Jim Booth

Digital and social media in Pakistan are vital for the country's successful development: economically, socially and culturally.

The internet is making the formation of relationships faster, cheaper, and more convenient, due to the radically reduced costs of communication stemming from internet technologies.

This challenges existing models of how countries conduct their business. In order to be trusted, the internet must provide channels for secure, reliable, private, communication, which can be trusted in a mutually understood manner.

The opportunities are enormous, for Pakistan as for other countries.

Nearly three billion internet users worldwide are both creators of information as well as consumers. Websites, blogs, videos, tweets, can all be broadcast and accessed in the largest mass medium imaginable. Audio and video calls and conferences can be set up and received without regard to distance or cost.

The internet allows for what we call "permissionless innovation", where anyone can create and offer a service whether they are in Sindh or Silicon Valley.

Governments can use the internet to deliver services and levy taxes and, in turn, can choose to enable citizens to elect, petition, and oversee their government online improving accountability and helping build social capital.

People's ability to build the internet as a unique, universal platform that uses the same standards in every country so everyone can interact with everyone else is one of the most spectacular, and most hopeful, success stories of our time.

For this to happen, the internet needs to be accessible. This requires government action through appropriate policies that are implemented consistently to give confidence to citizens, businesses and others.

Today, there are both huge risks and huge opportunities in the digital space for Pakistan.

Regulation (driven by the desire for control, security and a wish to preserve traditional patterns of life and thought) could stifle innovation and creativity, depriving young people in particular of the opportunity to drive Pakistan's economy, society and culture forward.

Inappropriate investment in infrastructure and services could enhance the existing digital divide between provinces, rich and poor, urban and rural, men and women, majority and minority populations.

Good regulation, developed inclusively and putting users first, will succeed in enhancing the thriving Information Communication Technologies (ICT) that delivers outstanding levels and quality of mobile broadband, allowing internet access to all parts, and to all the people, of Pakistan.

Users will have access to a wide range of services, educational and business opportunities, which will enhance their prosperity, confidence and ability to take their place as global citizens.

Pakistan has the vision, the ability and the energy to succeed in developing digital citizenship to take the country into the 21st century. The internet is here to stay. This report offers a snapshot of where the country is today. It also offers some thoughts on where it could be tomorrow.

ACRONYMS AND ABBREVIATIONS

PTA	Pakistan Telecommunication Authority
ICT	Information and Communication Technologies
GSMA	Groupe Speciale Mobile Association
DSL	Digital Subscriber Line
KPK	Khyber Pakhton Khwa
FATA	Federally Administered Tribal Areas
PTI	Pakistan Tehreek-e-Insaf
MQM	Muttahida Quami Movement
PMLN	Pakistan Muslim League (N)
PPP	Pakistan People's Party
AWP	Awami Worker's Party
PEMRA	Pakistan Electronic Media Regulatory Authority
PTCL	Pakistan Telecommunication Company Limited
ISP	Internet Service Provider
USF	Universal Service Fund
CERT	Cyber Event Response Team
SNS	Social Networking Site
ITU	International Telecommunications Union
NGO	Non-Governmental Organization
MIT	Massachusetts Institute of Technology
COMSATS	Commission on Science and Technology for Sustainable Development in the South

KEY FINDINGS

Internet access	Despite the rise in connectivity in Pakistan in the past year, inequalities in access to digital citizenship remain. These are mainly economic, but also social and cultural.
Uses for online and social media	As elsewhere, the main uses were for discussion of sport, politics and popular culture. There were differences in patterns of use between men and women and people in rural or urban contexts. Social media are increasingly important in business, the practice of politics and the development of civil society. There was support for the development of online learning.
Language and culture	Increasing availability of opportunities to use local languages will ease the access of rural people - where growth in smart phone usage has increased tremendously. There are mixed views of the cultural impact, with awareness of new opportunities as well as anxiety about a threat to traditions.
Opportunities and threats	The opportunities for Pakistan are similar to those for other countries: better sharing of information, commerce, social life, digital access to government services, and more opportunities for self-distraction. Technical and regulatory developments are increasing access. Young people in particular are likely to benefit. The main threats come from limitation on access, especially in the rural areas, and the use of 'trolling' against women and minority groups, often accompanied by offline threats to personal security.
Pakistan in context	Pakistan has significantly low levels of internet access, which is consistent with South Asia's general figures. The PTA Annual Report 2015 confirmed that South Asia has the lowest Internet Penetration Level in the world at just 19 per cent. Support for uncensored internet access in Pakistan is lower than in other South Asian countries and was the lowest among all countries surveyed by Pew Research (2014).

ACTIONS AND RECOMMENDATIONS

The success of the internet is rooted in the way it was built and able to grow: an open platform for innovation and sharing of ideas. It is this openness that has defined the internet from the outset and has enabled it to become such a strong tool for positive change through new ideas and services that make a real difference to people all around the world.

An infrastructure strategy should cover cities, towns, villages and communities. This means that planning strategies at federal, provincial and local levels should give priority to making sure there's proper equipment like computers, modems, telephone lines and network hardware available to run what we know as the internet.

The user experience should be central: everyone – regardless of their age, language, income, gender, or physical or mental abilities – can access the applications that run on the internet and have the same experience. This implies an inclusive approach to service design, which the Government can lead as it rolls out online services and transactions.

Competition should continue to be supported in order to lower price barriers and transaction costs at every level from infrastructure investment to service provision.

Pakistan should continue to work to implement internet regulation that is consistent with best international practice and the constitution of Pakistan. Its governance should be based on processes that are transparent, inclusive and driven by consensus, ie the multi-stakeholder approach advocated by the internet Society.

The internet in Pakistan should use best international standards so that everyone can interact with everyone else.

There should be clear guidance on the interpretation of the Prevention of Electronic Crimes Bill in order to ensure that basic rights to privacy, expression and access to content are protected in line with Article 19 of the constitution of Pakistan.

Measures should be taken through education and strategic communications to create a clear and simple ways for everyone - regardless of background - to understand and be a part of the internet.

The Strategic Vision should focus on prioritising resources to the provinces with the lowest rates of internet access via the Universal Service Fund. Our data analysis suggests that the initial focus should be on those provinces with low access rates and high populations:

Province	% of people with internet access
Gilgit Baltistan	0.001%
Baluchistan	1.1%
FATA	2.7%
Khyber Pakhtun Khwa	5.8%

The economic potential of social media should be supported through supply side measures such as skills training, support for online learning and encouraging the development of social media applications for commercial, citizen to government, and other relevant transactions.

As economies move towards being more knowledge-intensive, information-rich activities in which content is created, collected, managed, processed, stored, delivered, and accessed, spread into a broad range of industries, contributing to further innovation, growth and employment. Worldwide, digital content is becoming central to research, health, education and social services, knowledge and cultural services and government. It is also stimulating increased participation and creative supply by users.

There should be a clear commitment to support content development alongside investment in infrastructure. Support should be given to:

- Initiatives aimed at addressing shortages in skills, training, education and human resource development for the creation, distribution and use of innovative digital content;
- Policies that stimulate enhanced knowledge creation, dissemination, lawful use and preservation of different forms of digital

content, (including access to information, research, data and publications), encourage investments in such creation, dissemination and preservation, and encourage global access to content regardless of language and origin;

- The development of online education at every level through high quality, multi-channel courses and programmes which target both academic and practical education, with priority given to literacy programmes and to the skills needed for effective digital citizenship;
- Policies that enhance access and more effective use of public sector information; and
- An initiative to create and ensure an environment that promotes freedom of expression and access to information and ideas while adhering to the social norms of the country. There should be a specific Government-led campaign focusing on practical uses of the internet, linked to meaningful transactions as well as addressing concerns about the impact of internet freedom on traditional culture. It could draw on those aspects of popular and traditional culture which attract people to the internet in Pakistan (cricket, movies etc.) in “infotainment” packages that target those sceptical about the benefits of internet freedom.

INTRODUCTION

This report is about the current state of digital citizenship in Pakistan. By digital citizenship we mean:

*People who use the internet **regularly and effectively on a daily basis** – digital citizens therefore are those who have regular access to the internet, the literacy and digital skills to use it, and can use it freely and ethically to participate in society, political and civic life.*

By access to the internet, we mean access to those digital media accessed by all relevant technologies for digital citizenship including access via PCs and mobile internet technologies, with a focus on social media, i.e.: *online media which share characteristics of participation, openness, conversation, community and connectedness.*

There is a range of such media, including social networks, blogs, micro-blogging sites, wikis, podcasts and content communities[1].

Digital citizenship is important because there are potentially huge benefits to developing countries from the "digital dividends" of using digital technologies. While the technologies themselves have spread rapidly, these benefits often lag behind.

In many instances, digital technologies have boosted growth, expanded opportunities, and improved service delivery. Yet according to the World Development Report 2016 "Enabling Digital Development: *How the internet promotes development,*"[2] their aggregate impact has fallen short and is unevenly distributed.

For digital technologies to benefit everyone everywhere, the remaining digital divide needs to be closed - especially in terms of internet access. But greater digital adoption will not be enough. To get the most out of the digital revolution, countries also need to work on the "analogue complements" i.e. to strengthen regulations that ensure competition among businesses, adapt workers' skills to the demands of the new economy, and guarantee the accountability of institutions.

The benefits of digital technology

Technology development has vastly reduced the cost and increased the speed of all the digital technologies that drive the internet. The result has been lower transaction costs - and often as a consequence, production costs.

The internet makes transactions faster, cheaper, or more convenient. It thus affects economic development in three major, interrelated ways:

- **Better information:** it can help overcome information problems. The emergence of e-commerce platforms has made it much easier for small producers to find customers, and for individuals who cannot use traditional marketing tools like advertising or trade shows;
- **More inclusion:** vastly lower search and information costs create markets. This fosters inclusion—in new and existing markets, in social interaction, or in government service delivery systems. Inclusion for the individual usually means expansion of a market by those on the other side of the transaction, such as a firm or a government;
- **Innovation:** for many internet-based businesses or services, the transaction cost essentially drops to zero because what previously involved routine human labour can now be fully automated. This leads to the enormous innovation—the third mechanism—that is typically associated with the "new economy."

In many, if not most, transactions, more than one of the three mechanisms may be at work. For example, transactions on internet platforms typically involve all three. While the platform running a fully automated service is the main innovation, one side of the transaction often involves a provider of a service, such as a freelance worker in a remote location. For them, it will often be a case of inclusion in an otherwise inaccessible market transaction.

Adapted extract from: http://documents.worldbank.org/curated/en/896971468194972881/310436360_20160263021502/additional/102725-PUB-Replacement-PUBLIC.pdf

[1] See Table 1.

[2] Sourced from: http://documents.worldbank.org/curated/en/896971468194972881/310436360_20160263021502/additional/102725-PUB-Replacement-PUBLIC.pdf

Within digital media, social media platforms play a distinctive role by changing the dynamics of social networks in three main ways:

- They encourage expansion of the scope and density of networks since links are easy to form, regardless of physical distance;
- They speed the diffusion of information between links; and
- They increase the visibility of opinions and some behaviours across the network.

In general it can be said that social media affects economic development by reducing transaction costs, encouraging entrepreneurial activities and helping to identify customers (see above). They can also be used to promote desired behavioural change, e.g. by encouraging people to exercise peer pressure. Social media platforms are also useful before, during and after natural disasters or other crises: to disseminate information and channel requests for assistance. Information flows in all directions, not only from official sources to the population.

The evidence on the role of social media in encouraging social change is mixed and, crucially, country and context specific. People are, on the whole, more likely to share information broadly if they think that by doing so they can influence events or policies. In development contexts, it is worth noting that purpose-built platforms set up by governments and agencies can be more effective than general-purpose social media platforms, particularly when they are used as part of programme delivery eg. to provide services to farmers.

This report considers the position of Pakistan in 2015-16. There is no doubt that the picture is changing fast across all the different dimensions of digital citizenship. We start, however, by examining the level of access to the internet.

CHAPTER 01
ACCESS

Access to the internet is the prerequisite for digital citizenship. Without universal connectivity, at a cost both the country and individual users can afford, the regular access on which effective digital citizenship depends will be impossible.

We review the evidence on access across a range of dimensions:

A. Vision and policy framework;

B. Regulation and accountability;

C. Education and skills;

D. Physical access, infrastructure and technology;

E. The social demographics of access;

F. Barriers to access.

We also draw on our more subjective interview material to create a more nuanced picture based on real experience.

Finally, we compare internet access in Pakistan with the position in other South Asian countries and more widely.

The report starts, however, with a description of the existing policy vision for both infrastructure and for regulation.

A. VISION AND POLICY FRAMEWORK

The Government of Pakistan's Vision 2025 identifies important high-level priorities for ICT in Pakistan.[3]

It also, more specifically, identifies aspects of ICT development that are key to digital citizenship, especially e-governance:

- An important tool for achieving good governance and achieving efficiency gains, increased transparency and improving the citizen interface with Government;
- To support the development of government-to-government, government-to-citizen and government-to-business relations;

Putting Pakistan on the ICT Map

Information and communication technologies (ICT) are a key driver of innovation, economic competitiveness and greater social inclusion. Pakistan Vision 2025 seeks to lay the foundation of a knowledge economy by promoting efficient, sustainable and effective ICT initiatives by bringing industry and higher education together. Due to its young population, Pakistan has strong potential to develop a knowledge-based industry fostering innovation and entrepreneurship.

The vision focuses on IT literacy, and strengthening Pakistan's IT infrastructure. Pakistan will drive wider Broadband internet access, facilitate access to computers, and ensure the requisite education and training in schools to improve technological readiness. Pakistan's information and communication technology (ICT) sector will be revolutionised with the recent introduction of 3G and 4G networks offering huge increases in bandwidth and internet speed.

Pakistan cannot rely on ICT infrastructure development alone. A comprehensive strategy will be followed to create conditions for skills, innovation and entrepreneurship to flourish alongside modern infrastructure. Strengthening data protection and Intellectual Property rights laws will be a key component of this strategy. Introduction of e-education, e-commerce, e-health and e-government, in addition to improving governance, will increase the adoption and promotion of technology in the Public Sector. Pakistan is poised to move to the next level in ICT sector with a very talented youth and workforce. ICT parks will be set up all over the country.

Source: http://www.pc.gov.pk/wp-content/uploads/2015/05/Pakistan-Vision-2025.pdf

[3] Source: http://www.pc.gov.pk/wp-content/uploads/2015/05/Pakistan-Vision-2025.pdf

- To increase the access of citizens to IT tools and to promote greater connectivity;
- Promote active citizenship for improved and more democratic governance; and
- An Open Data Initiative to provide the general public with greater access to public sector data.

ICT is also seen as key to achieving economic growth, acknowledging that the potential of ICTs is not sufficiently leveraged in Pakistan, with a digital divide between rich and poor.

The Ministry of Information Technology leads the planning process, through which the Pakistan Government aims to deliver these aspects of its Vision 2025. The policy framework is set out in the Telecommunications Policy 2015.

The key elements of the Policy are:

Strategic Vision:

Universally available, affordable and quality telecommunication services provided through open, competitive, and well managed markets and ubiquitously adapted to the benefit of the economy and society.

Goals:

Efficient markets with straightforward entry and exit of qualified entities that have sufficient financial resource to invest in and deliver quality services.

http://tinyurl.com/j2agn6h

It is recognised that the benefits of digitalisation can only be realised once there is affordable, universal broadband internet access. In Pakistan, mobile broadband will be the primarily source of high-speed internet access, increasingly demanding fibre backhaul capacity to 3G, 4G and, in the future, 5G cell sites.

In 2015, there were 114.7 million mobile phone subscribers across the country. In July 2015, 11.7 per cent of the mobile subscribers were using 3G/4G services and some companies were reporting increasing numbers of 3G subscribers.[4] According to the numbers reported for December 2015 by GSMA Intellignace[4a] the numer of mobile subscribers jumped to 127.9 Million 19 per cent of whom are using Mobile Broadband (3G/4G) services. The percentage of Mobile broadband users is now higher than Bangladesh and India who both launched these technologies before Pakistan.

The strategic vision and goals are ambitious, but Pakistan is still a long way behind most of the world. Globally, mobile broadband penetration reached 47per cent in 2015, a value that has increased 12 times since 2007.

Key to success will be whether the Government's approach will address regional imbalances in access. These regional disparities are one of the single biggest factors in accounting for current low levels of access. Rural areas represent a significant population share and it remains to be seen whether reliance on the Universal Service Fund will be sufficient to address the higher costs and lack of infrastructure that constrain investment from internet service providers.[5] In the last two years, the Government of Pakistan has initiated programmes to improve rural broadband connectivity using Universal Service Funds. It may also be a case of changing attitudes. As the Spring 2015 Global Attitudes Survey[6] says:

In a relatively short period of time, the internet has become an influential arena for public debates about political and social issues. And around the world, many consider free expression in cyberspace to be a fundamental right.

As access to the internet continues to spread globally, demands for freedom in cyberspace may grow as well. Countries in which a large share of the public reports using the internet

[4] For an example, see: ITU: http://www.itu.int/ITU-D/ict/newslog/Telenor+Pakistan+Passes+5m+3G+Subscriber+Milestone.aspx

[4a] For an example, see: ITU: http://www.itu.int/ITU-

[5] There are signs that the mobile broadband market is responding to the Government's Vision 2025. The advocacy document Realising Digital Pakistan, An internet not for the few, but for the many published by Telenor in January 2016 offers a roadmap based on claims that ICT can deliver all of the aspirations set out in the Vision 2025.

[6] Sourced from: http://www.pewresearch.org/fact-tank/2016/02/23/broad-support-for-Internet-freedom-around-the-world/

also tend to have greater levels of support for internet freedom.

Once people have internet access, most start using it on a daily basis, and most also begin to engage in social networking. And when people have access to these technologies and platforms, they use them to engage in politics.

It can be expected therefore that as access grows, so will support for internet freedom. According to the Pew research, however, Pakistan not only, has both the second lowest rates of access in the sample of 31 emerging and developing nations, but has also scored low on support for internet freedom. However, these studies have used data that may be out of date due to the recent rapid increase in numbers of Mobile Broadband users.

Policies to widen access through the Universal Service Fund (USF)

The use of industry-contributed Universal Service Fund (USF) has played a significant role in bridging the digital divide between urban and rural areas. Going forward, the USF will be particularly important to facilitate universal access to broadband services and applications. The universal access goal of the telecom policy will be to provide available and affordable telephony and universal broadband access to enable e/m service coverage for all currently under-served an unserved people.

http://tinyurl.com/j2agn6h

B. Regulation and Accountability

The Government's vision is for "appropriate regulation" to encourage the development of efficient telecommunication markets. Regulations will aim to promote competition, sector development and migration to new and more efficient methods of delivering services. The regulatory system should also safeguard consumers.

There are, however, concerns about the proposals for regulation in the Policy that are being enacted through the *Prevention of Electronic Crimes Bill*[7], which have been expressed both within Pakistan and internationally.[8] However, the government is of the view that it is in accordance with the constitution of Pakistan.

The opponents of Bill see it as as posing a risk to freedom of expression, the right to privacy, and of access to information in Pakistan. Members of the National Assembly of Pakistan have been urged to take a stand against the Bill by voting against it in its current form.[9]

It is not yet clear what impact the Bill could have on Freedom of Information[10] in Pakistan. The citizens' right to information varies from province to province, along with citizens' ability to hold politicians to account.[11]

C. Education and skills

The most significant skills gap relates to level of educational attainment. It is clear that there is a high correlation between levels of literacy and education and ability to engage as a digital citizen. While a high proportion of graduates (50 per cent) report themselves as unable to use the internet, the proportion is much higher for those who are illiterate. There are also differences in skills at the provincial level, although these are less significant than the differences in educational attainment.

Our research found clear evidence that young people who are currently at school are more likely to have internet access than either those who have finished school or those who have never attended. This appears to correlate with the relatively high levels of internet use for educational purposes.

[7] The National Assembly passed the Prevention of Electronic Crimes Bill, 2015 on 13 April 2016.

[8] See for example: Written statement submitted by the Asian Forum for Human Rights and Development to the Human Rights Council of the General Assembly of the United Nations on 10 June 2015 (A/HRC/29/NGO/98).

[9] https://www.hrw.org/news/2015/12/08/joint-statement-prevention-electronic-crimes-bill-2015-pakistan

[10] Sourced from: https://www.article19.org/resources.php/resource/38195/en/country-report:-the-right-to-information-in-pakistan

[11] Sourced from: http://www.pakistanpressfoundation.org/2016/01/kps-rti-act-2013-secures-first-position-with-73pc-score/

[12] Source: http://www.pbs.gov.pk/sites/default/files//pslm/publications/PSLM_2014-15_National-Provincial-District_report.pdf

As it stands in Pakistan, 68 per cent of men and 45 per cent of women are literate.[12] People who can read and write are much more likely to access the internet than those who cannot. It is interesting that despite the difference in literacy rates between men and women, access rates were broadly similar. In fact, an analysis of internet access rates revealed that there were no significant differences between different ages, genders or whether users were based in rural or urban communities. The important differences were in relation to province and educational level.

Interview evidence confirmed that high illiteracy rates and an inability to communicate in English were two of the main barriers that led to digital exclusion in Pakistan. Exclusion due to illiteracy was only partial, however, due to the availability of memes, pictures, and videos.

This was confirmed by an interviewee, a prominent social media activist:

"...groups are not formally excluded, for example most of the contents in social media is in English so people who cannot communicate in English are excluded."

There was a clear difference in skills level between the 15-18 age group and those in their late twenties. This suggests that young people are acquiring the skills they need to access and use the internet.

Interestingly, there does not seem to be a significant skills gap between men and women: very similar proportions of respondents from each gender said that they did not have the necessary skills.

In rural areas, no doubt reflecting disparities in infrastructure, a significantly higher proportion of the population reported that they did not have the skills to access and use the internet.

D. Physical access, Infrastructure and Technology

Although recent developments in the telecom sector have increased the geographical and rural spread of the internet in Pakistan, internet penetration is still very low and there are enormous differences in access rates by province as well as a range of other factors.

Telecom Sector

Access to an effectively functioning telecoms infrastructure is crucial to internet access. The regulatory framework aims to attract investment, and there are signs of positive developments. According to the Pakistan Economic Survey 2014-15, telecom revenues in the last six months of 2014-15 (the most recent statistics available), amounted to Rs.299.0 billion (around £2bn) which made the sector very attractive for further investment.

Third and fourth generation mobile internet services were launched in Pakistan in July 2014, since when the internet landscape of Pakistan has changed substantially. Within a year of the launch, the number of internet users jumped from 3.8 million to 16.9 million. The number of mobile internet users reached 13.5 million by mid-2015, currently providing 80 per cent of the internet services across the country. Although mobile broadband access is still very low, it is rapidly increasing with the number of users reaching 24 million in December 2015.

The acceleration of internet access in 2014-15 following the roll-out of mobile broadband is the most dramatic statistic, but it is worth noting that while the number of households with DSL connections continues to increase, other technologies have either plateaued or are in decline.

While there are a number of other factors that affect levels of access, the difference in access rates between provinces is particularly striking.

There is a very significant, and likely related, difference in reported internet access between those living in urban and rural contexts. Access to the internet is much less common in households where there is no access to an electricity supply.

Although the overall internet penetration rate has increased substantially over the last year, the majority of participants in our study talked about continuing issues with physical access to the internet, particularly in rural areas, as well as in certain provinces.

The barriers to access were related both to a lack of fixed or mobile internet coverage, and to the unaffordability of services and devices.

This was confirmed to some extent by interviewees. One senior figure with an overview

of internet policy in Baluchistan reported that while there was "enormous" use of social media there among young people, access, and therefore usage, was limited to the urban centres. It should be noted that according to the Government of Baluchistan, the urban population at the time of the 1998 census was only 23.8 per cent, but that today it is likely that the proportion living in urban centres has grown.[13] The same source also drew attention to special features of Baluchistan including its physical size and low population density, making it expensive for telecom companies to invest there and leading to high internet costs for users. However, the government has now focussed on providing ICT services in Baluchistan using USF money. Similarly, another interviewee, a senior official in a leftist political party, drew attention to the cost barrier to internet access for working class people living in slums, as well as to geographical (regional) differences in access to basic facilities such as clean water, let alone the internet.

E. Social factors

Economic status is very important; access to the internet is very closely related to income levels. Average per capita annual income in dollar terms recorded a significant growth of 9.25 per cent in 2014-15 reaching a level of $1,512 (158,313.83 PKR)[14]. Those with annual incomes of between 25,000 and 100,000 PKR enjoy the highest rates of internet access. Access rates are much lower for people on lower incomes. Unemployed people looking for work are more likely to have access to the internet than the economically active (waged employees and the self-employed) while students are the group who have the highest rates of access.

While men are more likely to have internet access than women, the difference is less than expected and is not statistically significant. It appears that people aged 15-26 are more likely to have Internet access than people aged 27-10. The differences don't quite reach statistical significance, although the 19-22 and 27-30 age groups might show more significant variation with bigger samples. It is clear, however, from the comparison of young people in urban and rural contexts, that it is the urban young who are the most likely to have internet access with access rates more than twice the national average. By contrast, young people in rural areas are around four times less likely to have access to the internet, though they are still more likely to have this than older people. There seems to be more difference in access rates between men and women in urban than in rural areas, although in neither case is the difference significant.

Young children are more likely to have internet access than others, including graduates. This could reflect other findings about the use of the internet for education. Possibly the most significant factor which will determine whether someone has access to the internet is which province they live in. The difference are large and statistically significant. The internet is most commonly accessed at home, although mobile access follows close behind.

F. Barriers to access

Kenneth Keniston of MIT[15] identified four digital divides in access to digital media of which two are directly relevant to this report on Pakistan. In addition, there is the important question of the whether there is a strong gender divide in levels of access to the internet in Pakistan. Our research found no statistically significant difference in *rates* of access between men and women (and that this was the case in both urban and rural areas), but that there *were* major differences in both use and perceptions.

Economic

Cost was seen as a barrier to internet access. There was some difference in perceptions of cost between men and women, with women more likely to see it as a barrier. Surprisingly, the internet was more likely to be seen as expensive by those living in urban settings. It is hard to explain this finding as the cost of access is undoubtedly proportionately greater for lower income households in rural areas. As would be expected, young children without access to resources or income are more likely to see internet access as expensive.

[13] Sourced from: http://www.balochistan.gov.pk/index.php?option=com_content&view=article&id=1271&Itemid=100430

[14] http://www.finance.gov.pk/survey/chapters_15/Highlights.pdf

[15] Andrew W. Mellon Professor of Human Development, Emeritus, in the Program in Science, Technology, and Society at the Massachusetts Institute of Technology.

There are differences in cost of access by province, but these differences do not seem to explain the different access levels in each area. There is one province – Sindh – where the cost of internet access is seen as much higher than elsewhere. The reasons for this are unclear and cannot be explained in terms of internet tax rates; while the tax cost to consumers in Sindh is 18.5 per cent, this figure is slightly lower than the tax costs in both Punjab and KPK (the other provinces with the highest rates of tax).

Despite current costs, the majority of participants in our study were optimistic that digital access would increase in the coming years. The attributed this to an increasingly competitive telecommunications sector, which was gradually reducing the costs of smart phone and internet packages.

A representative of one of the most active telcos in Pakistan confirmed that his own company was developing "smartish" phones with 3G packages, which were lighter, less expensive and more affordable. Other companies were doing the same. This would, in his view, help to increase internet penetration in Pakistan.

- **Economic:** The first divide is that which exists within every nation, industrialized or developing, between those who are rich, educated, and powerful, and those who are not.
- **Linguistic and cultural:** For people who speak no (or little) English, the barriers to the Information Age are almost insuperable. All widely-used operating systems require some knowledge of English or one of the 'Northern' languages. Thus, in practice, unless Pakistanis know English, which most do not, computer use and Internet access are effectively out of the question. Therefore, it can be argued that there is no market for non-English language software or culturally relevant content.

http://web.mit.edu/kken/Public/PAPERS/Intro_Sage.html

Linguistic and cultural

Language: Urdu and English are spoken and understood in the literate community, who comprise 60 per cent of the total population in Pakistan. The remaining 40 per cent of the country rely on their regional language to communicate - there are more than 70 such regional languages spoken in Pakistan; more people speak Punjabi than Urdu nationwide.

Speakers of all first languages are most likely to access the internet in English, followed by Urdu in Roman script, ahead of Urdu. The number of people able to access the internet in other languages is very small. This clearly represents a barrier for those who can use neither English nor Urdu, but as Urdu is the official language of Pakistan and both Urdu and English are very widely used, it is hard to quantify how important this barrier is.

A waste of time? The research asked people they deliberately chose not to access the internet: did they see it as a waste of time? The results suggest that this option was mostly relevant for those who have had the opportunity to try the internet (the older amongst the young adults with good education). There was little difference in attitude between men and women, but it is worth noting that urban respondents were significantly more likely to see the internet as a waste of time than were those from rural areas. Interestingly, as educational levels rise, there is also a rise in the proportion of those who regard the internet as a waste of time.

Family disapproval: There are clear signs that families have concerns about allowing access to the internet. The figures are predictable – younger people (and, to a lesser extent, women), are less likely to have family permission to use the internet. More surprisingly, families in urban contexts seemed more concerned, perhaps because they were more familiar with the internet. Ostensibly, it was also surprising that more educated people were more likely to face restrictions. This could be because only people who are educated enough to know how to use technology are in danger of not being permitted to use it - for others the topic would be less

[16] Andrew W. Mellon Professor of Human Development, Emeritus, in the Program in Science, Technology, and Society at the Massachusetts Institute of Technology.

likely to arise. There were also clear differences between provinces. For the provinces where we had enough respondents to form a sample, a clear divide emerged between Punjab and Sindh where levels of restriction were lower than average, and KPK and Baluchistan where levels of restriction were significantly higher than average.

Gender: The research suggested that geography (where you live), economic status, age, level of educational attainment and literacy all played much more significant roles than gender. It was likely, however, that the statistics were hiding more subtle truths.

A range of interviewees, from the different perspectives including of regional level internet policy, academia and a digital media agency, all agreed that gender was a very significant issue in access to the internet and that this was due to the persistence of the view, even in more developed parts of the country, that it was not acceptable for women to have cell phones. In some areas where traditional patriarchal social structures and attitudes are still the norm, the situation is even worse, and the risks to women can be great – some women had even been killed. There was a view that as costs come down and cell phones and internet access become more common, the risks to women would also increase. This was generally seen as more of a problem in rural areas, but the provinces of Baluchistan, KPK, FATA and interior Sindh were identified as posing particular challenges.

Other published research has also confirmed that there are gender differences. Where access exists, men tend to be heavier internet users than women, with women spending less time online. Women also tended to access the internet from home, while internet cafes were their least preferred location, due to cultural barriers and limited accessibility for women.[16]

During interviews when the participants were asked about the impact of internet and social media on women, almost all of them talked about both the positive and negative influences.

On the positive side, social media provided a space for Pakistani women where they could be present and visible. It also challenged the existing gender norms by allowing women to interact with their male counterparts. These were seen as particularly important for a country like Pakistan where women's mobility is restricted and cultural norms do not always support young women's interaction with men.

Interviewees confirmed that despite the difficulties, social media offers opportunities for women to empower themselves, not just socially, but in terms of business and education.

There were very positive views from the private sector (a former head of a major IT company and a tech developer) that the internet gives women more access to information in their homes so the conventional challenge of not being them go outside is been replaced. Specific applications such as WhatsApp have changed a lot of lives in terms of interacting and engaging, as they enable sharing of rich visual and audio (not written) content like videos, audios and voice messaging. Social media also give women more power, and a lot of girls are doing businesses online and, of course, they can also make purchases online.

Similarly, from representatives of an NGO and a major political party, there were strong endorsements of the potential of social media to empower women to express themselves as active participants in society. As social provides spaces where women can interact, and their opportunities to work as professional journalists are limited, they are using social media to act as citizen journalists and to comment on public affairs. Despite the fact that there are limits to public expression, social media is a space where women can achieve presence in civil society. This participation is currently online, but the view was expressed that over time, it will translate into offline empowerment.

While the overall effect on women is positive, there are risks to women due to their lack of internet experience, from cyber-crimes, stalking or the misuse of their information by people with wrong intentions. There are also concerns about multiple identities, impersonation and trolling.

Interviewees from NGOs and an academic identified some of the specific risks, but also highlighted positive action that is being taken to reduce them. One particular problem relates to Facebook, which is by far the most popular

[16]. Sourced from: http://archive1.diplomacy.edu/pool/fileInline.php?IDPool=1338, Arzak Khan, Factors influencing broadband adoption and digital content consumption in developing counties: A case from Pakistan.

social media platform in Pakistan, and that is the use of multiple accounts. People create multiple accounts for a number of reasons, but principally it is done to keep friends and family separate – to keep male friends away from female relatives. It is also the case the some men use multiple Facebook accounts, posing as women to trick friends, extort money by extracting information from women, which they then use to blackmail them, or meet real women.

Another abuse, identified by an interviewee from a prominent NGO, is that of "cyber armies" who attack specific people online. In the interviewee's opinion, this has a particularly negative impact on women who are subject to online harassment, which can translate into offline violence.

While such problems are very serious, another interviewee from the Digital Rights Foundation was more positive about the potential to educate women in colleges and universities about cyber harassment:

"We have recently launched a campaign with the name of "Hamara Internet", it has a focus on young women who use technology, mobile and internet. In Pakistan whenever women face violence, harassment, stalking or threats, they usually distanced themselves from technology as they see no remedy, they don't know about the privacy, security and safety. We go to colleges and universities and we do some sessions on "safe online spaces for women" in which we discuss about cyber harassment and at the same time we teach them about different tools through which they can use technology in a safer way. We have covered most of the universities in Lahore and Peshawar and our next target is Islamabad."

As noted by the United Nations Broadband Commission Working Group on Broadband and Gender, these gender effects are important as access to the internet is a matter of fairness and opportunity for women. It can also enable women to increase their productivity, access new markets, improve their education, find better jobs, and contribute to the innovation economy.[17]

Political exclusion was mentioned as a growing concern by almost all of our respondents. The research identified surveillance and silencing of non-populist communities and groups based on religion, political views, sexual orientation and/or ethnicity. The blasphemy laws were seen as restrictive and there was some evidence that internet freedom had reduced between 2011 and 2014.

Prospects for change

The interviews identified real optimism. In addition to the increasing affordability of smart phones, there was evidence that the Urdu language and to a lesser extent regional languages were increasingly being used for communication on social media.

A media source said that in his view, the two main barriers to internet access were language and

> The social media is growing exponentially in Pakistan. The two main barriers in Pakistan were language, as not so many people speak and understand English and the other barrier is access to the technology and the Internet. I think the first barrier has been broken with the introduction of Urdu blogs, portals and websites. The second barrier has also been broken as a smart phone of under Rs. 5000 is available in the market. With both these barriers broken, this country is going towards the social media explosion. - **(FK)**
>
> People say that Internet is for the urban class but they are wrong. I belong to village in interior Sindh called Dadu so whenever I go there, I find them playing these latest songs on their phones and I would ask them where you did get them and he would say that a guy in town takes 10 rupees to upload about 100 songs to the mobile phone through his Pentium-2 computer. - **(AGP)**

[17] Sourced from: http://www.unwomen.org/en/docs/2013/9/doubling-digital-opportunities-women-and-girls-in-it

cost. The first was broken by the increased use of Urdu blogs, portals and websites, and the second was coming down thanks to the arrival of cheap smart phones. More anecdotally, a musician spoke of how people in rural areas – in his case interior Sindh – were able to access the latest songs on their phones. A village industry has grown up whereby the one person with the songs on his computer charges a very small fee to upload them to other peoples' mobile phones.

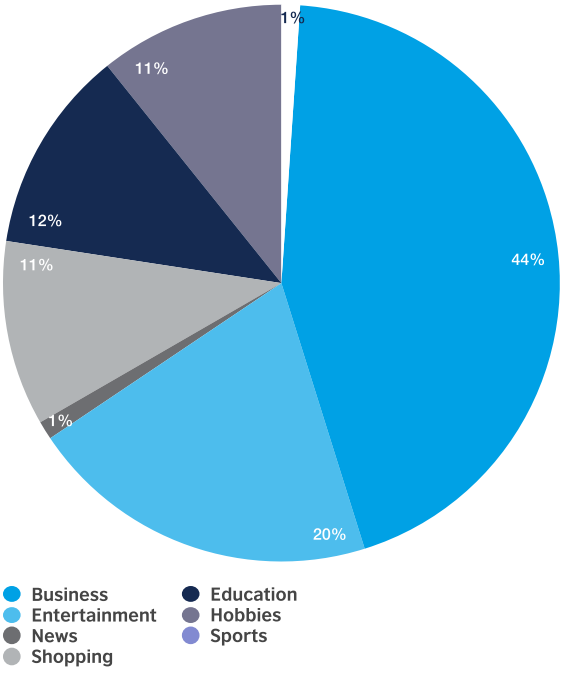
CHAPTER 02
USES OF DIGITAL MEDIA

Evidence of levels of access and participation in digital media are not enough in themselves to allow us to say whether digital citizenship is effective. We also need to look at what people do with and through digital media, at what they can now do that they could not do before, and how digital media are perceived and understood.

This is crucial in contexts where digital media are already being used, particularly in politics, journalism, education, business, entrepreneurship and civil society and where they are being rolled out for the first time, often challenging traditional ways of life and thought through the potential they have to connect people to others across the world, for good or ill.

The following broad areas of use were identified:

Figure 01: Broad area of use of Internet



Effective digital citizenship depends on regular access to the Internet. Levels of use of the Internet/social media among the population are very low in Pakistan. There is a clear gender divide, with men some 3 times more likely to access the Internet every day than were women. Both were significantly more likely to use the Internet on mobile devices than on PC. Younger people were more frequent users of the Internet, with the largest proportion of users accessing the Internet every day. while urban dwellers were much more likely to be daily users than those in rural areas.

The pattern of social media use in Pakistan shows that regardless of education level, gender or age, Facebook is the most frequently used social media site. This is unsurprising, but what is more unexpected is the popularity of Google+ compared to other countries (globally, Google+ has struggled to gain popularity) across the spectrums of education, gender and age. The popularity of Google+ in Pakistan has been noted in the past, as it offers a privacy setting on gender – so users can decide who sees what gender they are.

Uses of the Internet

Overall, people use the Internet for entertainment, education, hobbies, sports, news and politics. There are gender differences in use. Women are significantly more likely to use the Internet for education and hobbies, while men are more likely to give priority to news and, especially, sports. This report considers areas of use most directly relevant to digital citizenship.

Politics: (see chapter 3). There is a clear correlation between Internet/social media use and political participation. Some political parties have sophisticated social media operations. In the May 2013 general election, social media were used as a tool for campaigning and mobilisation for the first time in Pakistan. Young people are actively engaged in the creation, consumption, production and dissemination of political content and report a growing sense of individual freedom and social connectedness. The emergence of the PTI has catalysed change.

News and current affairs: There is growing competition between traditional and social media (see Chapter 4). Social media provide a space for alternate voices and they expose issues not covered in traditional media, e.g. for Baluchistan. Social media are increasingly seen as a strong complement to traditional media – they enable quick responses to events with visual materials, and facilitate the sharing of information across borders.

Some parties report a generational effect: their older members stick to traditional campaigning approaches even as their parties are increasingly engaged (and feel compelled to be engaged) with citizens through social media. Parties also reported a darker side to social media, in that they can be used for defamation and disinformation. There is a challenge for the parties from an increase in transparency; how can they encourage their members to use social media while controlling its inappropriate use?

Learning: It is a strategic aim of the Higher Education Council to encourage the take-up of online learning. There are already 1.8m students actively engaged, but more needs to be done to overcome barriers to participation. There is also a strong correlation between being in education and Internet access. Students are particularly frequent users of the Internet. Use of the Internet for news is clearly related to education, and perhaps even more to age and participation in society, with a very high proportion of those who had left school (91%) using the Internet. Education is also, predictably, of most interest to those who are currently at school.

Economy and business: Use of Internet or social media for economic purposes is still very low, but there has been growing use of social media for the promotion of start-ups and women entrepreneurs. Many interviewees recognised that the technology sector is the easiest sector in which to start businesses. Techies set up incubators, and create community spaces. This is important for helping to reduce youth unemployment.

Low levels of use reported for transactional purposes, whether for business or shopping, are contradicted when people are asked whether they have ever used the Internet or a smart phone to buy or sell goods. Some 22% of people have used social media in this way. The highest proportions of people who have done this are those who have never been to school, are women, live in urban contexts and in their early 20s. In all cases, the proportions of people using the Internet and social media to buy and sell goods, and to transfer money, are higher than the overall proportion of comparable users – and this is true in both urban and rural areas.

Culture: The impact of online media on culture is seen as mixed and contested with many individuals being in two minds. A good example is in relation to language. The revival of local languages through their use on digital media is positive, but standards of language use are also seen to be declining. In a more general sense there is anxiety about the perceived loss of Pakistani values and traditions, yet paradoxically this is combined with concern about growing conservatism.

Civil society: Social media increasingly act as a space for debate and mobilisation. Disaster response is particularly important where social media are seen as having the credibility needed to mobilise philanthropy, through information sharing and co-ordination. They are also seen as a valuable platform for fundraising, training and awareness-raising.

What people talk about on social media

Social media in Pakistan are overwhelmingly used to talk about cricket and politics. An analysis of the top 10 hashtags on Twitter, as a way of identifying the topics of discussion, showed that cricket was by far the most popular subject.

Patterns of use vary between men and women. The top 3 topics for men (in order) were movies, sport, and current affairs, while for women they were religion, movies, and current affairs. However, levels of interests were similar in relation to religion, human and minority rights. When analysed along a rural/urban split, there were broadly similar levels of interest in movies and religion, but less interest in sports, human and minority rights in the rural areas.

The differences in use were less obvious in relation to communication with friends and family. Interestingly, women were more likely than men to buy or sell goods online.

While social media are mainly used to share views on movies and sports, there is clear evidence of relatively high levels of interest, regardless of educational level, in religion and politics.

Topics of interest differ between men and women. Overall, men report themselves as more likely to share views on a range of topics than women. It is not clear why this is the case. Women like to discuss religion and movies, while men like to talk about movies and sport. The proportion of men and women who talk about religion is similar however and while men are more likely to talk

about current affairs, it is the third most preferred topic for both groups.There was no difference in the preferred topics discussed in urban and rural areas. Movies, sports and current affairs dominated in both areas.

The only noticeable trend in relation to age is not surprising – current affairs climbs steadily as a topic from around 40% to around 50% between the ages of 15 and 30 as people are more actively engaged in society. Levels of interest in other topics fluctuate a little but stay remarkably constant.

We also looked at the patterns of Internet use by device. There was no significant difference between devices used by men and women. Overall more young people access the Internet by mobile devices. There were no significant differences in patterns of use with the 5 categories of entertainment, news, sports, hobbies and education dominating.

CHAPTER 03

POLITICAL PARTIES AND THEIR USE OF SOCIAL MEDIA

The general elections in May 2013 witnessed the emergence of social media as a tool for electoral campaigning and mobilisation in Pakistan. This was also the first time in Pakistan when all mainstream political parties utilised social media for political campaigning at varying levels.

While political party representatives, particularly PTI and MQM, during their interviews mentioned that they considered social media to be an effective tool to communicate with their electorate after the US elections, political parties' utilisation of social media was also partially attributed to violent attacks during political rallies and death treats received by the candidates.[18]

The results of the elections were surprising for those who did not see social media as an effective medium for political campaigning. In addition to recording the highest turnout since the 1970s in all provinces, FATA and Islamabad Capital Territory (55% compared to 44% in 2008), the political landscape of the country changed significantly with the emergence of the PTI as the third national party securing the second highest number of total votes, in addition to winning a province (KPK) and seats in other provinces.

Two of the mainstream political parties associated their initiation of political campaigns through social media to US presidential elections, while two others talked about the need to show some presence online particularly since some parties were very active online.

One interviewee from the PTI, identified the 2011 PTI gathering in Lahore as a game changer. The event had a huge coverage on both traditional and social media, generating a "phenomenal" response. That was the point at which the party realised that it needed a social media strategy.

The PTI was also seen by interviewees from other parties (PMLN and PPP) to be leading in its use of social media:

"Since PTI came in, social media became more popular in terms of politics. Punjab government started their own social media twitter account, the chief minister started his own twitter account in the recent years. Social media is not been able to reach rural youth so our target was the urban youth where our competitors existed."

"As far as the social media is concerned, PPP is a little behind the PTI and some other parties, most of voters in the constituencies are from the rural area. In the past we never concentrated on the social media but right now we cannot ignore the fact of social media… there are a lot of things going against the PPP because we don't have that much presence on the social media so this forced PPP to come on this front."

Neither the PTI nor the MQM talked about any specific efforts to increase their followers or convince party members to be active on social media. PMLN and PPP interviewees, on the other hand, were concerned about not being able to convince party members to join and be active on social media. As a solution they developed quasi-systems: PMLN formed district level groups that would share the party activities on Twitter and PPP appointed a focal person:

"Social media has a huge impact but unfortunately only a few of our members are active on the social media. The party (PMLN) wants to be active but there are representatives who don't believe in social media because they are not from this generation, they believe that going out and meeting people have more impact and as a result more votes. 60-70% of our party people don't use social media; they are shy being on the spotlight. People who use social media are between the ages of 30 and 40. We tried to convince the senior leadership but they

[18] S. Ahmed & Skoric, 2014; McKenzie, 2013

hardly have a time even to pick up their phone calls. Now, we made a group in every district across Pakistan and those groups constantly tweet about the party's achievements. It is not very effective but we are building up on it. We have very small number of followers but it will increase eventually."

PPP has a lot of volunteers and supporters working on the social media individually but few months back we tried to gather them at some point. We announced a focal person for the social media who is constantly in touch with me or some other member representing social media.

Interviewees from the PTI and MQM described very strong social media network systems, which were supported by applications like Whatsapp, Viber and SMS. Party members discussed, decided, and sent hashtags when they wanted a topic to trend. This also indicates that most of the trending topics were not organic, but were actively promoted by the parties.

A representative of the MQM described how the party uses hashtags as a way or organising content for campaigns:

"We have a system which is called CERT (Cyber Event Response Team), we have got heads of different regions in that group, we decide on which hashtag to be launched on which campaign, based on that hashtag we agree with our leadership along with a little summary of the event. The hashtag will be given to different region or unit heads and those unit head will disseminate further to their workers and within 5 to 10 minutes it will reach to all. We also sent them an SMS through which they can reach to their twitter and Facebook".

The PTI also described how the party makes use of hashtags on Twitter and combines that with other media to set the agenda:

"Recently we launched an SOP which says that a hashtag is to be aligned with party policy. It is event based, for example, the recent judicial commission is going on these days and there are sessions every day, so our hashtag was "Anwar Mehboob exposes rigging". The hashtag is always aligned with party line, the team proposes it, I approve it and then it is launched, then our volunteers across the world bring it to the top. We also have a WhatsApp group, we discuss the hashtag, feedback comes in and then we post it on twitter".

Political parties were using social media for a number of reasons varying from political campaigning to social causes. These were:

- Political campaigning;
- Political mobilisation and/or protest;
- Live mainstreaming of party events;
- Countering other parties;
- Sharing political agendas and policies, and getting feedback, and
- Getting attention within the party

In addition, parties used social media to promote social causes and, occasionally, to defame opponents.

A representative of MQM explained at length the importance of social media to his party, to counter what the party saw as negative propaganda, conspiracy theories and disinformation. It was also seen as important as a way to get the message out and present the party's side of the story:

"I have got more than 6000 friends on Facebook, mostly party related people. I took advantage of that situation and disseminated the information, ideology, aims and objectives of my party. In Pakistan our party has suffered a lot since the 1990s, various propagandas, state operations, targeted killings, extra judicial killings, arrests and what not. At that time the media wasn't free, the print media was mostly controlled. It opened up in 2002-03. This was an opportunity for us to speak up and try to clear up whatever is being built up against us. Social media for a political party like us is very important... Social media is very useful but at the same time it can be used as a propaganda tool, it can then be used to clarify and to give your opinion in an easier way and without any restriction. Social media is an integral part of the politics now... Right now there is an operation going on against us but we are trying to build our image by countering the negative propaganda. All of the propaganda has been exposed on the social media, if social media hadn't existed, none of this could have come out. It would have been the same situation we were facing until the 2000s. People are getting awareness because of the social media... If the

social media is able to influence an opinion and is able to convert few minds or at least to let that mind think about the other side of the story, to counter the conspiracy theories then that is an effective social media for us. The Karachi incident was put on the MQM by the PTI leaders as the Ismailis voted for PTI and it is our job to counter such type of nonsense claims, we are trying to explain that MQM is a political party and we have nothing to do with those killings… Basically we are spending much time on countering the attacks but my countering gives a lot of messages as I am attempting to clear their minds and to understand the other side of the logic".

There are a number of challenges reported by the political parties. Principally, they felt that they needed to convince party members, particularly older members with more traditional views, that social media could be as effective as traditional methods.

They are also very aware of the need to control their followers and prevent them from trolling their opponents. Trolling and threats through social media have become common in Pakistan to an extent that political parties are developing codes of conducts for their members. Most of the journalists/social media activists we talked to mentioned being harassed online when they criticised political party leaders, the government or other prominent groups or people.

CHAPTER 04

SOCIAL MEDIA AND TRADITIONAL MEDIA

Social media seem to be overtaking traditional media – both newspapers and radio – in popularity in Pakistan. The constant availability of online media is also a factor, with the standout number the proportion of people who use social media every day compared to other media – even radio, which is also constantly available.

As people get older, they are more likely to read a newspaper every day. This is in contrast to social media users whose usage tends to peak at an earlier age then decline. Men read newspapers much more frequently than do women. Indeed men are 7 times as likely to read a newspaper every day. The difference is much less marked for radio, perhaps reflecting that radio listening can be a shared experience. While women have similar levels of access to social media than men do, they are much less likely to use them. Newspapers and social media are also both more urban phenomena than radio.

Social media have changed the ways in which news is gathered, consumed and disseminated in Pakistan. What makes social media of particular interest to traditional media (TV channels and print media) and journalism, is how social media have become an influential tool for guiding the news channels and breaking news in the country.

Traditional media have become more dependent on the social media, and people are increasingly using online sources and social media for news. All large newspapers now have a digital section, and the major media groups have a strong presence on social media, particularly on Facebook and Twitter (give the table on media groups and their presence).

Our research confirmed that traditional media were still being used in Pakistan[19] but there was growing competition between traditional and social media. The amount of and speed of information shared on social media creates both competition with, and dependency on, social media for traditional media.

Most of the people we interviewed talked about social media being a strong complement for traditional media, from which TV channels benefit extensively. As representatives from traditional media and the PTI explained:

"As far as news is concerned, social media is faster than the traditional media. The mainstream media will give you the history or a background of an event whereas social media gives you the immediate report or reaction. The mainstream media is now provide more wider picture to the immediate event happened on social media".

"The headlines in the news channels are picked up from the social media. If Imran Khan or any other politician tweets about something on twitter, they would make it a breaking news on the news channel. The old ways of sending the press release to all the media units and then making report out of it, is gone now. Twitter is now being considered authentic medium and one of the main mediums to communicate".

"Social media benefits TV. Social media helps anchorpersons and producers to get their ratings. The anchorperson research on social media and select their topic from the tweets and the posts and later on they produce their show from the inputs provided by the social media".

Sound Bites from the Interviews

There is also a competition in terms of the coverage: geographic coverage as well as the issues that are usually do not get enough attention on the traditional media.

The social media is a great challenge to mainstream media. Having alternate voices count, or even having them at the first place is a difficult job in Pakistan... Mainstream media has a very narrow focus... You would see that citizens' voices portal, Pak Voices, coming online. People from Gilgit-Baltistan - nobody even heard about them before on Internet - people from KPK, Baluchistan, FATA – are using the Internet to voice their concerns. Portal will add to the existing network of social media. They are running a video chat and use social media to get their concerns online.

(AD- journalist, social media activist, NGO)

[19] fig. uses of social media compared to traditional media on page 62

Whenever you are going to say something about the military establishment, no Urdu media will cover you up, only BBC or sometimes Dawn and Tribune. We are working in the slums of Islamabad but no media is covering us, for them it's nothing to have half a million homeless in the heart of this country. Whenever our party leaders are being invited by a TV channel for a show, it's shut in the middle. So social media is the only place where we speak whatever we want. - **(FD, AWP)**

There is a huge blackout regarding Baluchistan issue on the mainstream media, people from Baluchistan who want to highlight their issues, social media is helping them a lot to raise their voices. It includes Facebook, twitter, blogs and different websites. Their blogs and websites have been blocked by the authorities but they cannot do anything about the social media. These groups are using social media a lot and effectively to raise their voices. Facebook, twitter and video sharing websites play their role where the mainstream media is missing. - **(NT, NGO)**

Even with the presence of several TV channels, there were certain internal stories which were brushed under the carpet or which were hidden behind the iron curtains, exposing those stories would have not been possible before the emergence of the social media. It was not possible for the general public to give someone's story to the conventional media and they would telecast it but social media has done it so easily. (FD in, PEMRA)

The headlines in the news channels are picked up from the social media. If Imran Khan or any other politician tweets about something on twitter, they would make it a breaking news on the news channel. The old ways of sending the press release to all the media units and then making report out of it, is gone now. Twitter is now being considered authentic medium and one of the main mediums to communicate. - **(IN PTI)**

Using social media as a source of information creates a number of challenges for the traditional media. It necessitates an editorial monitoring and verification, which adds to the responsibilities of the traditional media journalists/reporters before broadcasting or publishing.

As a senior News Director and columnist explained:

"Biggest challenge is anybody can join and say anything... In the case of Pakistan, misinformation, wrong deliberately planted information is common. So, you have to be careful about what is right and what is wrong. Strong editorial judgement is required especially from Pakistani [traditional] media, before using social media... We ensure that every detail we pull out of the social media to broadcast on the screen is very heavily monitored and regulated. We are very, very careful that nothing negative or nothing which is not been verified is put on air... I get my own team to verify it before we can run it.

Citizen journalism is gradually increasing in Pakistan particularly with the expansion of smartphones. Generally citizens become journalists to report cases of injustice, and spreading information to hold politicians and/or other authorities, often their family members, accountable for their misconduct.

Representatives of NGOs also stressed the importance of PakVotes as having been instrumental in the increased accountability of the election process in the 2013 election. In the 2008 election, the only election monitoring and coverage had been on traditional media, but due to lack of reporters, it had not been possible to cover more than just over one third of the constituencies. The use of social media in 2013 by contrast allowed people in every part of the country to cover the elections, at every polling station. In addition, the PakVotes platform, with its use of SMS and social media, had proved very successful, and it is still being used for regional and local elections. People throughout Pakistan volunteered to go to polling stations and report on events, often doing so by taking pictures and posting them online.

The PakVotes experiment showed that

- Videos received more attention than TV channels;

CASE STUDY: PAKVOTES

Engaging citizens to help monitor elections through social media

During the 2013 general and by-elections a social media experiment was designed and run by Bytes for All, an Islamabad based human rights organisation and a research think tank with a focus on ICTs. The project, which was supported by the United States Institute of Peace (USIP), aimed to monitor violence and misconduct during elections through engaging citizens as reporters.

The project was the first citizen journalism initiative to monitor elections in Pakistan using social media. It was initiated in 10 districts that were relatively remote, conflict-prone and offline, and did not usually receive regular coverage by the traditional media. The coverage of the districts increased to include all of the 41 constituencies where by-elections were held in August 2013.

For the project, a network of citizen reporters, who were equipped with Android Phones, was trained in ethical journalism, social media ethics, information verification and safety under a code of conduct that defined how citizen reporters would collect, verify and share information on social media.

In order to ensure that the information sent by the citizens was accurate, Bytes for All, used a two-tier verification system and an Islamabad based team checked the information coming from its citizen reporters before publishing it online on Twitter, Facebook, a blogging website and an online map. Although only 5.5% of the citizen reporters' information was published during the general elections, the hashtag #PakVotes became a trending topic providing real-time information from remote areas in English and Urdu, in addition to stories, pictures, and videos. #PakVotes was used by major politicians and media persons, and also received international coverage in French media, and on Al-Jazeera TV. On the general election day, #PakVotes was used by 5,251 unique users who sent 13,324 tweets and was viewed by more than 12 million users (Gienger 2013). During our interviews PakVotes was often mentioned as a successful example of expanded reporting of elections, which easily surpassed the coverage by the traditional media.

- SMS was necessary to increase the reporting of citizens without smart phones;
- Having a board of advisors from well-known Twitteratis and online activists helped the popularity and credibility of the project.

The project was replicated in Afghanistan Presidential and Provincial council elections in 2014 as AfghansVote.[20]

Our research indicates that social media could have advantages for traditional journalists:

- Journalists are needed, not only as reporters or interpreters but also as sources of verification;
- Journalism is enhanced through multimedia sources such as videos, graphics etc., which can be the best means to tell certain stories as compared to text;
- Social media allow journalists to interact with their audiences, open up channels for collaboration and networking with other journalists, and also to understand better the issues people care about.

The evidence from this research does not seem to confirm the view of researchers and commentators who believe that social media has a negative impact on traditional media and journalism. It could be argued instead that in Pakistan, social media, blogs and UGC are not replacing journalism, but are creating an important extra layer of information and diverse opinion.

[20] Sources: for PakVotes


Makeathon2017
Tweet, Post and Snap away
PLAN 9
TAZA
Nahi
Tu

CHAPTER 05
TWITTER ANALYSIS

In Pakistan 90% of social media users are on Facebook (ranked at 1), and 30% on Twitter (ranked at 7)[21].

Table 1: Ranking of social media websites in Pakistan

Social media websites	Total
Facebook	90.00%
Google Plus	70.10%
Whatsapp	57.90%
Dailymotion	51.60%
Skype	46.80%
YouTube	43.90%
Twitter	30.40%
Vimeo	16.60%
Snapchat	11.50%
Linkedin	5.40%
Millat Facebook	5.30%
Instagram	5.30%
Orkut	3.90%
MySpace	3.70%
Pinterest	2.90%
Flixster	2.50%
Tumblr	2.30%
n=	982

These figures come from our quantitative analysis, but the interviews revealed a different picture. Our key informants suggested, in contrast, that Twitter was seen as much more important than its ranking suggests, to the extent that the phrase 'social media' was mostly associated only with these two media. This probably reflects the fact that the interviewees were not representative of the whole population, but were chosen for their involvement in social media. Except for the digital marketers and activists, our key informants rarely talked about other social media platforms unless they were prompted.

This study focuses on Twitter for methodological reasons – Twitter make their data available to researchers. There are some interesting studies on groups of Facebook users that have found, for example[22], that Facebook is the most popular Social Networking Site (SNS) among university students in Pakistan. The study also found that the intensity of using SNS, duration of using SNSs, and motives of using SNSs were found to be positively associated with the formation of bonding and bridging social capital. Bridging Social Capital is important in that it consists of social ties that link people together with others across a cleavage that typically divides society (like race, or class, or religion). More work needs to be done on Facebook.

Our Twitter analysis was of tweets from the 1% feed that were geo-tagged with coordinates inside a geographic box which included all of Pakistan and parts of surrounding countries. The geographical distribution of tweets remained stable across the sampled period, reflecting and confirming the provincial disparities in access to social media.

Tweets were collected for the period of six months for the time period 21st November 2014 to 31st May 2015. The collection was split into six monthly sub-collections.[23]

We looked at tweets in English, Urdu and Roman Urdu. We analysed tweets containing hashtags so that we could identify the topics under discussion. Predictably, the most popular topics of conversation on Twitter were around politics and sport.

[21] See table 1

[22] Ahmad, Saeed, Mustafa, Mudasir, & Ullah, Ahsan (2016). Association of demographics, motives and intensity of using Social Networking Sites with the formation of bonding and bridging social capital in Pakistan. Computers in Human Behavior, 57, 107-114. doi: http://dx.doi.org/10.1016/j.chb.2015.12.027.

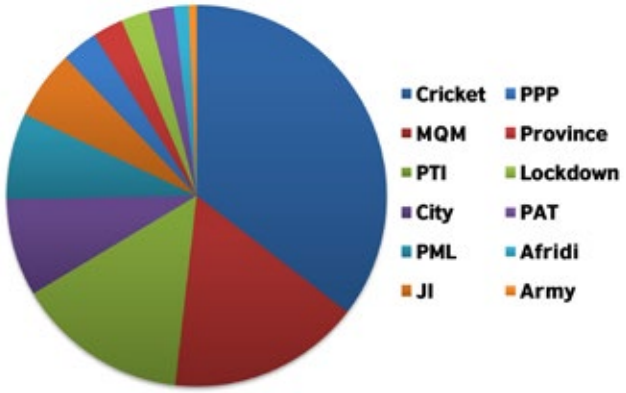
[23] The first sub-collection is slightly larger as it starts on 21st November 2014 and ends on 31st December 2014.

Top topics changed with time and events, however and reflected 3 key events related to terrorism, sport and politics.

What people talk about: Twitter analysis

Top 500 hashtags (Dec 2014 to May 2015) – NB categorised hashtags make up only about 42% of the top 500 hashtags

Hashtag	Tweets
Cricket	109,359
MQM	50,500
PTI	45,127
City	25,514
PML	22,616
JI	18,077
PPP	9,421
Province	8,018
Lockdown	7,392
PAT	6,555
Afridi	3,906
Army	2,065



- December 2014 to May 2015: Dominated by cricket and politics, varying by month as to the significance of each category
- Topics discussed were variable and in politics, sometimes the tweets were anti-the party mentioned in the tweet: more analysis needed to see how far these tweets reflect 'hate-speech'

Top topics changed with time and events, however and reflected 3 key events related to terrorism, sport and politics.

This pattern usefully confirmed what the other research told us about the uses people in Pakistan make of social media – which are typical of how people elsewhere use them. The content shared on social media is mostly personal, popular culture and spectacular events that attract mass media audiences. While patterns of social media use are always context specific, there are characteristics of the media themselves that appear to be universal.

What people talk about: Twitter analysis – key words timeline

December 2014: Peshawar attack

February 2015: Cricket World Cup

April 2015: By-election for national assembly seat 246, in Karachi

CHAPTER 06
OPPORTUNITIES AND THREATS

In general, the relationship between social and digital communications media use and its potential for change is not straightforward. Previous research by the Centre for Cultural Relations for the British Council[24] found that:

- It cannot be assumed that the use of social media will necessarily bring about positive change. Social media can work both for and against people. On the positive side, they can help share news, fill the gap when traditional media are censored and feed content into traditional media. They can also help to involve new people in organised activities and they can play several roles: support activism; provide information; help with mobilisation and act as a platform for debates.
- They exist, however, in specific contexts and reflect factors specific to their society. These can be social; historic; economic; religious or cultural. Social media can also be used to advance sectarian interests.
- Social media use is often non-political. They are often used simply as tools for commerce, social life or self-distraction, rather than for being used as a political, cultural or educational force. In this, they are the same as traditional media. It is often this social activity which citizens find most useful;
- Social media create spaces where people can increase shared awareness. By propagating messages through social networks, people can develop a public sphere where opinion relies on both media and conversation. They do this by spreading messages, sharing knowledge, learning and skills, both within their own countries and across borders. In this way, social media can promote self-governance, and contribute to economic growth; and
- Social media connect people to the outside world. People can target external audiences in order to inform them as to events; express criticism of their opponents; enhance their own legitimacy or advertise their ideas to global audiences. They can also learn about strategies from external sources.

Many of these positive opportunities were found to be present in Pakistan. There were clearly opportunities for economic growth, business start-ups, online learning, civil society, information sharing, and providing opportunities for young people. There was a perceived weakening in the two main barriers to effective digital citizenship as cost and language barriers are reduced.

The earlier research found that, globally, the main threat to use of social media came from governments who act to limit the use of social media, or use social media to manipulate public opinion.

In Pakistan, the new Cyber Bill is seen overall as a positive move, but there were concerns that its primary purposes were to enhance controlling and moral policing. By the vagueness of its provisions, ran the risk of criminalising a wide range of comment including satire.

In addition, fears exist that social media promote the status quo, including ideological, ethnic and sectarian polarisations, and increase social inequality. Social media use could also be pre-empted in an increasingly conservative society to impose restrictions on women and minorities through threats to their personal safety, and to encourage violence, hate speech and terrorism.

[24] https://www.britishcouncil.org/organisation/policy-insight-research/insight/soft-power-twitter

CHAPTER 07

HOW PAKISTAN COMPARES TO OTHER COUNTRIES

Pakistan currently is among the countries with lower percentage of Internet users in South Asia, but it also has the greatest rate of increase in numbers since 2014. In terms of active users of social media, Pakistan has the same proportion as India and is ahead of Bangladesh, but is behind Sri Lanka and Nepal. Again, the rate of increase is impressive – the second highest in the region.[25]

The rate of mobile connectivity is ahead of India and Bangladesh, and is increasing faster than in these countries, but lags behind Sri Lanka and Nepal both in terms of numbers and rate of increase.

According to GSMA Intelligence, as of December 2015, the percentage of mobile connections with broadband in Pakistan (19%) is now more than India (15%), Nepal (17%) and Bangladesh (13%), but significantly lower than Sri Lanka (38%). This is a critical issue, given the importance of mobile broadband for the development of digital citizenship. Not surprisingly, given this, the share of web traffic over mobile devices is also on the lower side. Speeds of connection are also low but are improving. Levels of mobile social media use are increasing faster than elsewhere except Bangladesh.
The South Asian region as a whole has low levels of user penetration with India on 15.1%. In terms of Internet freedom, the Internet Society ranks Pakistan at 20th equal with Sri Lanka, but behind India and Bangladesh.

According to the Internet Society,[26] Pakistan ranks 149th among 180 countries in terms of Internet penetration, although in terms of numbers of Internet users it ranks 27th.[27]

25. Source: Digital Social and Mobile in APAC, March 2015

26. Source: https://www.Internetsociety.org/map/global-Internet-report/

27. Source: https://www.cia.gov/library/publications/the-world-factbook/rankorder/2153rank.html#pk

APPENDIX A:
DEFINITIONS

The study took the definition of Digital Citizenship to be:

People who use the Internet regularly and effectively on a daily basis, ie those who have regular access to the Internet, the literacy and digital skills to use it, and can use it freely and ethically to participate in society, political and civic life.

This report has in its scope all relevant technologies for digital citizenship, including access via PCs and mobile Internet technologies. It also has a focus on social media – those online media, which share characteristics of participation, openness, conversation, community and connectedness. There are six main types of social media: a) social networks (such as Facebook, MySpace); b) blogs; c) wikis; d) podcasts (like iTunes); e) content communities (Flickr, YouTube); and f) micro-blogging (Twitter). These different types of social media pose different challenges for researchers. While some (eg Twitter) make their data available, others do not, and information has to be gathered through traditional surveys and qualitative interviews. This report uses automated social media analytics where possible (ie in relation to Twitter) and traditional methods elsewhere.

[25] https://www.britishcouncil.org/organisation/policy-insight-research/insight/soft-power-twitter

APPENDIX B
METHODOLOGY

The research for this report combined four approaches:

- A desk-based detailed review of the literature;
- A quantitative study of access to and use of Internet, social media and smart phones, and the attitudes and behaviour of young people with regard to use of different forms of media in Pakistan;

The target respondents for this survey were young people aged 15-30. The sample size was 2,415 young people including 1,815 random sample and 500 booster sample (of Internet users from urban areas). Information on access to and knowledge of using PC/Laptop/Tablet, Internet and smart phones was also collected from young people with regard to their household members who were aged 15 and above. This enabled us to reach basic information on access/usage for 9,954 individuals from 2,415 households.

- Qualitative data were obtained through interviews with key informants about their use and views about the existing challenges and opportunities with regard to Internet and social media in Pakistan.
- Social media analysis: Twitter data were investigated to identify the content of discussions and the linguistic patterns of use.

In addition to a number of international and national databases that provide county level statistics on Internet penetration rates and social media, a small number of surveys also present more detailed insights about the demographic/ socio-economic characteristics of Internet, social media and mobile phone users and their patterns of use in Pakistan. These surveys,[28] however, are outdated considering the recent developments in the telecommunications sector: 3G/4G mobile Internet services are rapidly spreading across the country, more affordable smart phones are becoming available, and the costs of mobile social media are becoming cheaper, if not yet free. In addition, most of these surveys[29] only present partial information as they are not nationally representative and focus mainly on urban populations. In order to address the need for a comprehensive survey on Internet, social media and smart phone usage, a nationally representative quantitative survey was designed to collect information to:

1. Create a profile of social groups that have access to, and the skills to make use of, social media in Pakistan,
2. Create a profile of those who are still excluded from digital citizenship, and
3. Investigate the behaviour and attitudes of young men and women with regard to use of media (new social media as well as other forms).

[28] For example, P@sha Internet Study, which is the largest survey conducted in terms of the areas covered both geographically (four provinces, both rural and urban areas) and themes included in the survey, was conducted in 2013.

[29] For example, Pakistan Internet Use Survey, which was conducted in 2013, provides detailed information about 1,100 Internet users, their methods of access, patterns of Internet use, and experiences on Internet and use of social networks. The results of this online survey, however, are not nationally representative as the majority of respondents (94%) were from three major cities (Islamabad, Karachi and Lahore) and were males (70%). Despite having a better geographical coverage, the representation of the sample is also limited in Pakistan Digital Consumer Study, which focuses on attitudes towards online consumption and consumption patterns among Internet users.

LITERATURE REVIEW

Digital citizenship can be broadly defined as 'the ability to participate in society online', and digital citizens are 'those who use the Internet regularly and effectively' on a daily basis to participate in the society, political and civic life (Mossberger, Tolbert, & McNeal, 2008: 1). Based on this definition, digital citizenship goes beyond just the access to the Internet, and embraces regular use, digital literacy and skills, digital rights (such as freedom of speech, privacy) and responsibilities (such as ethical use). Therefore, we define digital citizens as those who have regular access to Internet, have literacy and digital skills to use it, and can use it freely and ethically to participate in the society, political and civic life.

Access to Internet is the first prerequisite for digital citizenship. However, in majority of developing countries, including Pakistan, low Internet penetration rates continue to be the foremost challenge. According to ITU (International Telecommunications Union), in 2015 there were 794 million fixed broadband and 3.46 billion mobile broadband users in the World. There, however, was a significant divide between the developed and developing countries: while in developed countries out of every 100 people 87 had access to mobile-broadband, access to mobile broadband was only 39% in developing countries. The fixed broad-band access, although was low (29%) in developed countries, it was still four times higher than the fixed broadband access rates in developing countries (7.1%). Given these figures, it is evident that more than 4 billion people are still not online, and a great majority of them live in the developing countries, also including 160 million people from Pakistan.

The digital divide, according to Norris (2001) can be seen at three levels a) global divide - connoting the inequalities in Internet access between countries; b) social divide - indicating the inequalities within social groups within a country; and c) democratic divide - suggesting the differences between those who use Internet for political reasons and the others. It is often explained by the physical access to ICTs and Internet (Chinn & Fairlie, 2004), and in the most basic form defined as 'the gap between those who do and those who do not have access to new forms of information technology'(van Dijk, 2006: 221-222) such as computers, Internet and mobile phones. Although earlier studies equalised digital divide with access to technology, the research moved beyond access in early 2000s to include digital competencies and skills as well as access (Mossberger et al., 2008; van Dijk, 2006; Warschauer, 2003). For example, Paul DiMaggio et al (2001: 310), define the digital divide more broadly as 'inequalities in access to the Internet, extent of use, knowledge of search strategies, quality of technical connections and social support, ability to evaluate the quality of information, and diversity of uses'. Van Dijk (2006), argues against the binary approach of defining digital divide by "haves" and "have nots", and expands the definition of access to cover not only the physical access to Internet but to include differences in motivational access (willingness to use Internet), skills access (operational, information and strategic skills) and usage access (usage time, type of use such as creative, active etc). More recent studies, particularly from developed countries where physical access to computers and Internet are high, suggest a paradigm shift from digital divide to digital inclusion, which can be defined as a process of democratisation of access to ICTs to enable the inclusion of marginalised in society (Hache & Cullen, 2009), and is not related with the 'the technology that will promote inclusion but how the technology will meet the social needs of local communities' (Nemer, 2015).

(With the emergence and growing use of smart phones- dual digital divide- one between users and non-users of smartphones, and other within smart phone users who have skills to use advance features and those who cannot (Park and Lee 2015)). Global Internet Report of 2015, which focuses on the mobile Internet, presents data that shows it is not always the access, but rather costs and lack of useful content that support the digital divide between and within countries.)

The impact of digital divide can be seen "across a broad range of individual-level and macro-level domains, including life course, gender, race, and class, as well as health care, politics, economic activity, and social capital" (Robinson et al

2015: 569).[30] It leads to "unequal access to the opportunities, experiences, skills, and knowledge that will prepare youth for full participation in the world of tomorrow" (Jenkins, 2009: 3). Therefore it might strengthen or even exacerbate the prevailing social inequalities through creating further differences in human capital (DiMaggio & Garip 2012)[31].

Social media is a group of new kinds of online media, which share the characteristics including participation, openness, conversation, community and connectedness (Mayfield, 2008: 5). Mayfield (2008) divides social media into six: a) social networks (such as Facebook, Myspace); b) blogs; c) wikis; d) podcasts (like Itunes); e) content communities (Flickr, Youtube); and f) microblogging (Twitter).

In Pakistan, although the recent developments in telecom sector increased the geographical and rural spread of the Internet to some extent, the Internet penetration is still very low and there exist differences in Internet, social media and smart phone use by gender, age, provinces, rural/ urban areas, income, and educational attainment levels. A recent study also suggests differences in ICT diffusion based on caste among rural farmers in Punjab, Pakistan[32] (Abdullah, 2015).

[30] Laura Robinson , Shelia R. Cotten , Hiroshi Ono , Anabel Quan-Haase , Gustavo Mesch , Wenhong Chen , Jeremy Schulz , Timothy M. Hale , Michael J. Stern. 2015. Digital inequalities and why they matter. Information, Communication & Society, 18(5): 569-582.

[31] DiMaggio, P., & Garip, F. 2012. Network effects and social inequality. Annual Review of Sociology, 38: 93-118.

[32] Research - 2750 farmers in rural Punjab, 12 castes

APPENDIX C
TABLES

INTRODUCTION

CATEGORY:	EXAMPLES	REGISTERED USERS
Social Networks	Facebook Google+ LinkedIn	1,280,000,000 1,600,000,000 200,000,000
Blogs: There are many different types of blogs, differing not only in the type of content, but also in the way that content is delivered or written. Much blogging is focused on lifestyle: gossip; food; fashion; health.	**NEWS:** • Huffington Post **POLITICAL BLOGS:** • Global Politics **SCIENCE:** • City Lab • NASA	No information
Micro blogging sites	Tumblr Twitter Weibo	226,950,000 645,750,000 222,000,000
Wikis	Baike Wikipedia	3,920,000 18,000,000
Podcasts: content from websites intended for downloading. Often originated by media or educational organisations.	The list of podcasters is enormous Examples include: BBC TED Talks Radio Pakistan	The medium is growing its audience due to the rapid growth in use of smartphones and mobile devices.
Content communities	Flickr Instagram	32,000,000 300,000,000

CHAPTER 1: ACCESS TO DIGITAL CITIZENSHIP IN PAKISTAN

PHYSICAL ACCESS

FIG.1 INTERNET ACCESS BY PROVINCE:

PROVINCE	POPULATION	% OF PEOPLE WITH INTERNET ACCESS
Azad Jamon Kashmir	2,972,501	10.3%
Baluchistan	13,162,222	1.1%
Fata	3,930,419	2.7%
Gilgit Baltistan	1,441,523	0%
Islamabad Capital Territory	1,151,868	23.1%
Khyber Pakhtun Khwa	26,896,829	5.8%
Punjab	91,379,615	13.2%
Sindh	55,245,497	12.6%
Total		11.3%

FIG. EVOLUTION OF INTERNET TECHNOLOGIES IN PAKISTAN	
1992-93	First dial-up service introduced in Lahore by ImranNet
1993	Dialup email services became available in Karachi, Lahore and Islamabad.
1995	Paknet (PTCL) started offering dialup text based Internet services in Karachi, Lahore and Islamabad via local call network
1996	Paknet (PTCL) started offering dialup graphics based Internet, speed 14.4 to 28.8 kbps in Karachi, Lahore and Islamabad.
1996	First ISP by COMSATS launched in Karachi, Lahore and Islamabad
1997	Dialup Speed moved to 33.6 kbps
1998	Dialup Speed moved to 56.0 kbps
2001	First broadband, DSL launched by Micronet Broadband
2006	First FTTH launched in Islamabad by Nayatel (Pvt) Ltd
2007	First WiMax services launched by Wateen Telecom followed by WiTribe, Mobilink Infinity and Qbee
2008	First EvDO services launched by WorldCall in Karachi, Lahore, Gujaranwala and Sialkot, followed PTCL providing EvDO services in major cities.
2011-12	VDSL2 technology introduced by PTCL with a speed up to 100 Mbps.
2014	Mobile broadband (3G/4G) technology introduced by CMPAK, Mobilink, Telenor and Ufone
2015	Mobile broadband (LTE) technology introduced by Warid
Source: ISPAK and PTA annual reports	

FIG. X INTERNET ACCESS BY URBAN/RURAL AREAS		
Has Internet in household	Urban	Rural
	20.8%	4.8%
Random sample of X households, weighted, 0.0% missing **There is a statistically significant difference.**		

FIG. INTERNET ACCESS BY ACCESS TO ELECTRICITY			
	Has electricity in household	Has no electricity in household	Total
Has Internet in household	11.9%	2.0%	11.4%
Random sample of 1916 households, weighted, 0.0% missing			

FIG. X SHARE OF INTERNET CONNECTIONS BY TECHNOLOGY, 2005-2015							
	DSL	**HFC**	**WiMax**	**FTTH**	**EvDO**	**Others**	**Mobile BB**
2005-06	26,611						
2006-07	44,669			484,000			
2007-08	102,910	42,760	19,612	2,800			
2008-09	262,661	36,201	88,477	3,967	22,503		
2009-10	476,722	49,110	257,616	5,002	111,194	1,004	
2010-11	695,245	34,274	428,523	6,346	325,140	1,963	
2011-12	880,071	35,520	589,887	8,444	584,459	2,934	
2012-13	1,064,003	33,184	575,939	11,152	1,033,513	3,868	
2013-14	1,346,817	37,011	530,889	14,848	1,861,118	5,240	
2014-15	1,480,672	43,220	488,990	19,180	1,349,843	6,069	13,498,677
SOURCE: PTA							

THE SOCIAL DEMOGRAPHICS OF ACCESS

FIG. INTERNET ACCESS BY INCOME (ONLY FOR WAGED WORKERS, SELF-EMPLOYED AND RETIRED PEOPLE)

	Annual income in Rupees							
	<5,000	5,001 to 10,000	10,001 to 25,000	25,001 to 50,000	50,001 to 100,000	Don't know	Refused to answer	Total
% of sample with Internet in household	2.5	3.5	10.3	24.2	33.3	10.3	9.3	8.4

RANDOM SAMPLE OF 619, WEIGHTED, 67.8% MISSING

FIG. INTERNET ACCESS BY ECONOMIC ACTIVITY STATUS

	% of sample with Internet in household
Waged employee	8.9
Self-employed	7.1
Student	23.3
Homemaker	7.1
Doesn't work and looking for work	7.8
Unemployed (but looking for work)	14.9
Unpaid Family worker	0.0
Retired	66.7
Unable to work	16.7

Random sample, weighted, 0.2% missing
Grey results are not based on large enough samples.

FIG. INTERNET ACCESS BY GENDER

	Female	Male
% of sample with Internet in household	10.1	12.6

Random sample of 1915 people, weighted, 0.0% missing
The 95% confidence intervals do not show a statistically significant difference.

FIG. INTERNET ACCESS BY AGE

	15-18	19-22	23-26	27-30	Total
% of sample with Internet in household	12.2	13.4	12.5	8.2	11.4

Random sample of 1916 people, weighted, 0.0% missing

FIG. INTERNET ACCESS: URBAN/RURAL AND AGE

		% of sample with Internet in household
Urban	15-18	20.6
	19-22	23.7
	23-26	21.8
	27-30	17.4
	Total	20.7
Rural	15-18	5.1
	19-22	6.3
	23-26	5.9
	27-30	2.1
	Total	4.6

Random sample of 1,124 people, weighted, 0.2% missing

FIG. INTERNET ACCESS: URBAN/RURAL AND GENDER

		% of sample with Internet in household
Urban	Female	17.2
	Male	23.9
	Total	20.7
Rural	Female	5.0
	Male	4.6
	Total	4.8

Random sample of X people, weighted, 0.1% missing

FIG. INTERNET ACCESS BY EDUCATION

	Never been to school	Completed Schooling	Currently receiving schooling	Total
% of sample with Internet in household	1.5	12.6	21.7	11.3

Random sample of 1914, weighted, 0.1% missing

FIG. INTERNET ACCESS BY LITERACY (ABILITY TO READ AND WRITE IN ANY LANGUAGE)

	Can read & write	Cannot read & write	Total
% of sample with Internet in household	14.9	1.4	11.4

Random sample of 1913, weighted, 0.2% missing

FIG. NO ACCESS TO INTERNET BY AGE

	15-18	19-22	23-26	27-30	Total
I do not have access to the Internet	39.0%	40.1%	35.3%	34.3%	37.1%

FIG. NO ACCESS TO INTERNET BY AGE

	15-18	19-22	23-26	27-30	Total
I do not have access to the Internet	39.0%	40.1%	35.3%	34.3%	37.1%

FIG. LANGUAGES USED ONLINE

		LANGUAGE USED ONLINE						
		English	Urdu	Urdu in Roman script	Provincial language	Provincial language in Roman script	English and Urdu in Roman script	English and provincial language
Language spoken	Urdu	393	176	234	8	4	60	3
		99.0%	97.8%	100.0%	88.9%	80.0%	100.0%	100.0%
	English	350	92	187	0	1	50	1
		88.2%	51.1%	79.9%	0.0%	20.0%	83.3%	33.3%
	Punjabi	82	67	86	0	0	13	0
		20.7%	37.2%	36.8%	0.0%	0.0%	21.7%	0.0%
	Sindhi	55	5	22	1	1	9	3
		13.9%	2.8%	9.4%	11.1%	20.0%	15.0%	100.0%
	Pushto	42	23	26	1	1	5	0
		10.6%	12.8%	11.1%	11.1%	20.0%	8.3%	0.0%
	Others	3	0	1	0	0	5	0
		.8%	0.0%	.4%	0.0%	0.0%	8.3%	0.0%

BARRIERS TO INTERNET ACCESS

FIG. NO ACCESS TO INTERNET BY GENDER			
	Female	Male	Total
I do not have access to the Internet	35.9%	38.5%	37.1%

FIG. NO ACCESS TO INTERNET BY URBAN/RURAL			
	Urban	Rural	Total
I do not have access to the Internet	36.2%	37.6%	37.1%

FIG. NO ACCESS TO INTERNET BY EDUCATION							
	Illiterate	Less than Primary	Primary to Class 9	Matric	Inter-me-diate	Graduate	Total
I do not have access to the Internet	33.6%	40.2%	44.9%	32.4%	40.8%	28.3%	37.0%

FIG. NO ACCESS TO INTERNET BY PROVINCE*					
	Punjab	Sindh	Khyber Pa-khton Khwa	Baluchistan	Total
I do not have access to the Internet	46.1%	30.3%	21.0%	28.6%	37.0%

*Random sample, weighted, only people who don't use Internet, provinces with n<50 not separately listed in table but included in total count.

FIG. LOCATION OF INTERNET USE	
Home	77.0%
Office	9.6%
School	7.2%
Internet Café	2.4%
Library	1.9%
Mobile phone, through WiFi	17.7%
Mobile phone, through GSM operator	43.1%
Other	0.7%

ECONOMIC BARRIERS

FIG. AGE					
	15-18	19-22	23-26	27-30	Total
Internet is expensive	9.9%	15.0%	11.5%	12.0%	12.1%

FIG. GENDER			
	Female	Male	Total
Internet is expensive	10.5%	14.0%	12.1%

FIG. URBAN/RURAL			
	Urban	Rural	Total
Internet is expensive	14.7%	10.7%	12.1%

FIG. EDUCATION							
	Illiterate	Less than Primary	Primary to Class 9	Matric	Interme-diate	Graduate	Total
Internet is expensive	9.3%	11.1%	17.1%	12.5%	10.7%	15.2%	12.1%

FIG. PROVINCE*					
	Punjab	Sindh	Khyber Pakh-ton Khwa	Baluchistan	Total
Internet is expensive	9.4%	25.5%	0.5%	8.3%	12.1%

LACK OF SKILLS

FIG. AGE	15-18	19-22	23-26	27-30	Total
I cannot use the Internet	65.7%	72.6%	71.3%	76.2%	71.6%

FIG. GENDER	Female	Male	Total
I cannot use the Internet	72.7%	70.4%	71.7%

FIG. URBAN/RURAL	Urban	Rural	Total
I cannot use the Internet	61.1%	77.2%	71.6%

FIG. EDUCATION	Illiterate	Less than Primary	Primary to Class 9	Matric	Interme-diate	Gradu-ate	Post Gradu-ate	Total
I cannot use the Internet	85.1%	84.4%	66.8%	57.2%	51.2%	43.5%	50.0%	71.6%

FIG. PROVINCE*	Punjab	Sindh	Khyber Pakh-ton Khwa	Baluchistan	Total
I cannot use the Internet	75.8%	67.2%	71.0%	66.7%	71.7%

Random sample, weighted, only people who don't use Internet, provinces with n<50 not separately listed in table but included in total count.

CHOICE

FIG. AGE					
	15-18	19-22	23-26	27-30	Total
It is a waste of time	7.9%	9.7%	13.6%	13.8%	11.3%

FIG. GENDER			
	Female	Male	Total
It is a waste of time	11.5%	11.1%	11.3%

FIG. URBAN/RURAL			
	Urban	Rural	Total
It is a waste of time	19.8%	6.8%	11.3%

FIG. EDUCATION								
	Illiterate	Less than Primary	Primary to Class 9	Matric	Interme-diate	Graduate	Post Graduate	Total
It is a waste of time	3.6%	7.5%	13.3%	18.5%	16.5%	37.0%	50.0%	11.3%

FIG. PROVINCE*					
	Punjab	Sindh	Khyber Pakh-ton Khwa	Baluchistan	Total
It is a waste of time	11.8%	16.2%	3.2%	9.5%	11.3%

Random sample, weighted, only people who don't use Internet, provinces with n<50 not separately listed in table but included in total count.

NOT ALLOWED BY FAMILY

FIG. AGE	15-18	19-22	23-26	27-30	Total
I am not allowed to use the Internet by my family	25.9%	20.6%	8.7%	9.6%	16.3%

FIG. GENDER	Female	Male	Total
I am not allowed to use the Internet by my family	19.4%	12.4%	16.3%

FIG. URBAN/RURAL	Urban	Rural	Total
I am not allowed to use the Internet by my family	19.2%	14.7%	16.3%

FIG. EDUCATION	Illiterate	Less than Primary	Primary to Class 9	Matric	Intermediate	Graduate	Post Graduate	Total
I am not allowed to use the Internet by my family	10.9%	14.1%	19.3%	21.0%	22.3%	21.7%	0.0%	16.3%

FIG. PROVINCE*	Punjab	Sindh	Khyber Pakhton Khwa	Baluchistan	Total
I am not allowed to use the Internet by my family	12.5%	12.3%	24.9%	20.5%	16.2%

Random sample, weighted, only people who don't use Internet, provinces with n<50 not separately listed in table but included in total count.

INTERNET USE

FIG. OVERALL LEVELS OF USE

% of men and women using the Internet by PC and mobile

	Female	Male
PC	8	16
Mobile	12	30

FIG. FREQUENCY OF USE OF SOCIAL MEDIA BY GENDER

	Female	Male	Total
I did not use it at all	91.0%	73.5%	81.9%
1-2 days a week	1.5%	6.2%	4.0%
3-4 days a week	1.2%	3.9%	2.6%
5-6 days a week	1.9%	3.5%	2.7%
Every day	4.4%	12.9%	8.8%

Random sample, weighted, 1.3% missing.

FIG. FREQUENCY OF USE BY URBAN/RURAL

	Urban	Rural	Total
I did not use it at all	73.1%	87.9%	81.9%
1-2 days a week	4.8%	3.5%	4.0%
3-4 days a week	4.1%	1.5%	2.6%
5-6 days a week	4.5%	1.4%	2.7%
Every day	13.5%	5.6%	8.8%

Random sample, weighted, 1.2% missing.

FIG. ACCESS TO INTERNET IN URBAN/RURAL AREAS BY DEVICE

% of Internet access by device in urban and rural areas

	Urban	Rural
PC	27	16
Mobile	31	15

Random sample, weighted.

USE OF THE INTERNET ON PC BY YOUNG PEOPLE AND DEVICE

FIG. USE OF PC FOR INTERNET ACCESS

Young people: % use on PC by age group

	15-18	19-22	23-26	27-30	Overall
Entertainment	78	78	79	65	75
News	31	48	61	46	46
Sports	24	29	30	37	30
Hobbies	19	31	18	14	22
Education	36	33	28	25	31
Politics	16	15	13	17	15
Social media	12	11	11	12	12
Business	1	9	7	12	7
Shopping	1	6	5	5	4
n=	83	99	61	65	308

FIG. USE OF MOBILE DEVICES FOR INTERNET ACCESS

Young people: use on mobile by age

	15-18	19-22	23-26	27-30	Overall
Entertainment	75	89	82	81	82
News	43	36	49	41	42
Sports	32	31	32	25	30
Hobbies	34	35	27	25	30
Education	35	28	27	15	26
Politics	14	10	23	13	14
Social media	17	15	9	9	13
Business	4	4	8	5	5
Shopping	3	10	1	1	4
n=	107	124	79	101	411

Random sample, weighted.

FIG. SOCIAL MEDIA USED BY EDUCATION AND URBAN/RURAL						
	Never been to school	**Completed Schooling**	**Currently receiving schooling**	**Urban**	**Rural**	**Total**
Facebook	88.90%	89.10%	91.60%	92.30%	84.40%	90.00%
Google Plus	52.80%	67.00%	76.90%	73.90%	60.60%	70.10%
Whatsapp	50.00%	56.40%	61.30%	63.40%	44.30%	57.90%
Dailymotion	33.30%	50.60%	55.20%	54.90%	43.60%	51.60%
Skype	33.30%	49.10%	44.60%	51.40%	35.50%	46.80%
YouTube	38.90%	43.10%	45.70%	48.10%	33.30%	43.90%
Twitter	25.00%	30.50%	30.90%	32.70%	24.80%	30.40%
Vimeo	11.10%	16.40%	17.50%	17.70%	13.80%	16.60%
Snapchat	5.60%	10.20%	14.20%	12.60%	8.90%	11.50%
Linkedin	0.00%	5.10%	6.40%	6.00%	3.90%	5.40%
Millat Facebook	11.10%	4.80%	5.60%	6.90%	1.40%	5.30%
Instagram	2.80%	4.40%	7.00%	6.60%	2.10%	5.30%
Orkut	2.80%	3.10%	5.30%	5.00%	1.10%	3.90%
MySpace	2.80%	3.20%	4.50%	4.10%	2.50%	3.70%
Pinterest	0.00%	2.70%	3.30%	3.70%	0.70%	2.90%
Flixster	8.30%	1.90%	3.10%	3.60%	0.00%	2.50%
Tumblr	2.80%	2.40%	2.20%	3.30%	0.00%	2.30%
n=	36	587	359	700	282	982
Random & booster sample, unweighted, only people who answered the question						

FIG. SOCIAL MEDIA USED BY GENDER AND AGE GROUP							
	15-18	**19-22**	**23-26**	**27-30**	**Female**	**Male**	**Total**
Facebook	92.40%	87.10%	92.30%	88.50%	81.00%	95.40%	90.00%
Google Plus	66.20%	72.70%	73.00%	68.60%	72.30%	68.70%	70.10%
Whatsapp	52.50%	60.50%	64.40%	54.90%	57.60%	58.10%	57.90%
Dailymotion	49.80%	52.80%	57.70%	46.50%	42.70%	57.00%	51.60%
Skype	39.90%	45.80%	53.20%	50.00%	48.90%	45.60%	46.80%
YouTube	37.60%	46.50%	51.40%	40.70%	38.00%	47.40%	43.90%
Twitter	26.20%	28.80%	37.40%	30.50%	31.30%	30.00%	30.40%
Vimeo	12.20%	17.30%	18.90%	18.60%	14.90%	17.60%	16.60%
Snapchat	9.10%	14.00%	10.80%	11.90%	12.80%	10.70%	11.50%
Linkedin	6.10%	4.40%	5.90%	5.30%	4.60%	5.90%	5.40%
Millat Facebook	4.60%	5.90%	4.10%	6.60%	7.30%	4.10%	5.30%
Instagram	5.70%	6.30%	5.00%	4.00%	5.70%	5.00%	5.30%
Orkut	4.90%	2.60%	4.50%	3.50%	4.30%	3.60%	3.90%
MySpace	3.40%	4.10%	3.60%	3.50%	3.50%	3.70%	3.70%
Pinterest	2.70%	3.30%	2.70%	2.70%	3.30%	2.60%	2.90%
Flixster	1.90%	3.70%	3.60%	0.90%	4.10%	1.60%	2.50%
Tumblr	2.30%	2.60%	2.70%	1.80%	3.00%	2.00%	2.30%
n=	263	271	222	226	368	614	982
Random & booster sample, unweighted, only people who answered the question							

PURPOSES OF INTERNET USE

FIG. USE OF SOCIAL MEDIA BY GENDER

	Female	Male	Total
Entertainment	77	87	84
News	36	43	41
Politics	14	43	41
Education	29	17	20
Hobbies	34	19	22
Sports	5	26	21
Shopping	5	3	3
Business	2	3	3
n=	86	270	356

FIG. OVERALL PURPOSES OF USE BY GENDER AND PURPOSE

% of men and women using the Internet on PC by purpose

FEMALE		MALE	
Entertainment	34	Entertainment	31
Education	24	News	21
Hobbies	16	Sports	14
News	10	Education	11
Politics	8	Hobbies	8
Sports	4	Politics	6
Shopping	2	Social media	5
Social media	2	Business	4
Business	0	Shopping	2

FIG. PATTERNS OF USE ON PC AND MOBILE BY GENDER:

% of men and women using the Internet on mobile devices by purpose

FEMALE		MALE	
Entertainment	40	Entertainment	31
Hobbies	19	News	19
Education	14	Sports	14
News	11	Hobbies	10
Sports	7	Education	10
Politics	4	Politics	6
Shopping	2	Social media	6
Social media	2	Business	2
Business	1	Shopping	1

FIG. USE OF SOCIAL MEDIA BY EDUCATION

	Never been to school	Completed Schooling	Currently receiving schooling	Total
Entertainment	86	84	85	85
News	5	91	50	43
Politics	29	15	12	14
Education	14	16	28	20
Hobbies	14	22	24	23
Sports	14	18	26	21
Shopping	0	4	2	3
Business	0	4	1	3
n=	7	224	123	354

Random sample, weighted

FIG. USE OF SOCIAL MEDIA BY AGE					
	15-18	**19-22**	**23-26**	**27-30**	**Total**
Entertainment	85	86	81	87	85
News	44	39	41	43	41
Politics	13	11	9	24	14
Education	22	26	16	12	20
Hobbies	23	29	21	16	23
Sports	24	20	22	17	21
Shopping	2	4	4	1	3
Business	0	3	6	5	3
n=	87	118	68	82	355

USES OF SOCIAL MEDIA FOR ECONOMIC PURPOSES

USE OF INTERNET OR SMART PHONE TO BUY/SELL GOODS?

FIG. BY EDUCATION

	Never been to school	Completed Schooling	Currently receiving schooling	Total
Bought/Sold goods	27.8%	21.3%	21.7%	21.7%
Random & booster sample, unweighted				

FIG. BY GENDER

	Female	Male	Total
Bought/Sold goods	25.0%	19.7%	21.7%
Random & booster sample, unweighted			

FIG. BY URBAN/RURAL

	Urban	Rural	Total
Bought/Sold goods	23.9%	16.3%	21.7%
Random & booster sample, unweighted			

FIG. BY AGE GROUP

	15-18	19-22	23-26	27-30	Total
Bought/Sold goods	16.7%	23.2%	24.3%	23.0%	21.7%
Random & booster sample, unweighted					

TRANSFER OF FUNDS OVER THE INTERNET FROM MOBILE DEVICES (SMS)

	Never been to school	Completed Schooling	Currently receiving schooling	Total
Yes	25.0%	22.7%	25.7%	23.8%

FIG. USE OF SOCIAL MEDIA BY POLITICAL PARTIES

Official pages of parties	Facebook		Twitter	
	Local Fans	Total Fans	Followers	Joined since

FIG. USE OF SOCIAL MEDIA BY POLITICAL PARTIES

Official pages of parties	Facebook		Twitter	
	Local Fans	Total Fans	Followers	Joined since
Pakistan Tehreek-e-Insaf (PTI)	2 294 563	2 967 429	1 333 605	March 2010
Jamaat-e-Islami (JI)	1 179 295	1 961 148	37 725	June 2010
Pakistan Muslim League (N) (PMLN)	904 843	1 127 464	127 000	February 2012
Pakistan Awami Tehreek (PAT)	262 872	341 979	37 412	June 2013
Muttahida Quami Movement (MQM)	133 203	143 928	49 900	April 2012
Pakistan Peoples Party (PPP)	97 643	111 836	15 700	April 2012
Jamaat-e-Ulema-e-Islam (JUI-F)	-	42 739	-	-
Awami National Party (ANP)	23 711	30 951	12 507	May 2010

FIG. USE OF SOCIAL NETWORKING SITES LIKE FACEBOOK/TWITTER TO SHARE VIEWS BY EDUCATION

	Never been to school	Completed Schooling	Currently receiving schooling	Total
Movies	52.80%	55.40%	65.70%	59.10%
Sports	52.80%	48.00%	63.20%	53.80%
Religion	44.40%	45.30%	47.60%	46.10%
Current Affairs	38.90%	43.30%	46.80%	44.40%
Human Rights	41.70%	28.80%	30.40%	29.80%
Political views	30.60%	23.30%	25.30%	24.30%
Minority rights	16.70%	15.00%	18.90%	16.50%
Random & booster sample, unweighted				

FIG. USE OF SOCIAL NETWORKING SITES LIKE FACEBOOK/TWITTER TO SHARE VIEWS BY EDUCATION			
	Female	**Male**	**Total**
Movies	40.20%	70.40%	59.10%
Sports	28.30%	69.10%	53.80%
Religion	45.90%	46.30%	46.10%
Current Affairs	31.00%	52.40%	44.40%
Human Rights	26.10%	32.10%	29.80%
Political views	12.80%	31.30%	24.30%
Minority rights	10.30%	20.20%	16.50%
Random & booster sample, unweighted			

FIG. PREFERRED TOPICS OF ENGAGEMENT RANKED BY GENDER			
Topic	**Female**	**Topic**	**Male**
Religion	45.90%	Movies	70.40%
Movies	40.20%	Sports	69.10%
Current Affairs	31.00%	Current Affairs	52.40%
Sports	28.30%	Religion	46.30%
Human Rights	26.10%	Human Rights	32.10%
Political views	12.80%	Political views	31.30%
Minority rights	10.30%	Minority rights	20.20%
Random & booster sample, unweighted			

FIG. BY URBAN/RURAL			
	Urban	**Rural**	**Total**
Religion	47.1%	43.6%	46.1%
Current Affairs	48.7%	33.7%	44.4%
Human Rights	34.0%	19.5%	29.8%
Movies	59.7%	57.4%	59.1%
Political views	26.7%	18.4%	24.3%
Sports	57.9%	43.6%	53.8%
Minority rights	19.6%	8.9%	16.5%
Random & booster sample, unweighted			

FIG. BY AGE GROUP					
	15-18	19-22	23-26	27-30	Total
Religion	43.0%	44.6%	46.8%	50.9%	46.1%
Current Affairs	40.7%	45.4%	43.2%	48.7%	44.4%
Human Rights	24.7%	30.6%	31.1%	33.6%	29.8%
Movies	60.1%	61.6%	59.5%	54.4%	59.1%
Political views	19.0%	23.6%	27.9%	27.9%	24.3%
Sports	57.8%	54.2%	55.4%	46.9%	53.8%
Minority rights	12.2%	17.0%	18.5%	19.0%	16.5%
Random & booster sample, unweighted					

TRADITIONAL MEDIA

FIG. USES OF SOCIAL MEDIA COMPARED TO TRADITIONAL MEDIA			
	Social Media	**Newspapers**	**Radio**
I did not use it at all	81.90%	82.80%	92.10%
1-2 days a week	4.00%	6.70%	3.60%
3-4 days a week	2.60%	3.20%	1.50%
5-6 days a week	2.70%	3.20%	0.60%
Every day	8.80%	4.10%	2.20%

FIG. DAILY MEDIA USAGE BY AGE GROUP

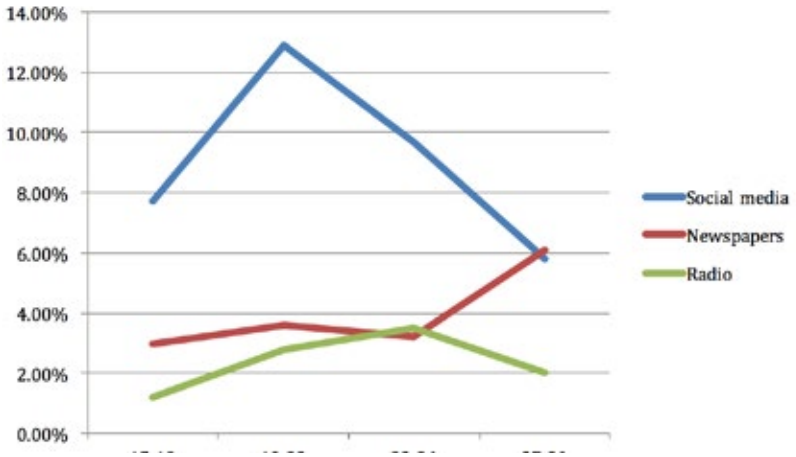


FIG. FREQUENCY OF USE OF NEWSPAPERS BY AGE GROUP					
	15-18	**19-22**	**23-26**	**27-30**	**Total**
I did not use it at all	84.1%	83.2%	81.2%	82.3%	82.8%
1-2 days a week	6.9%	7.9%	6.5%	5.8%	6.7%
3-4 days a week	2.2%	2.8%	5.9%	2.5%	3.2%
5-6 days a week	3.7%	2.5%	3.2%	3.3%	3.2%
Every day	3.0%	3.6%	3.2%	6.1%	4.1%
n=	492	471	372	553	1,888
Random sample, weighted, 1.4% missing.					

FIG. FREQUENCY OF USE OF NEWSPAPER BY GENDER			
	Female	**Male**	**Total**
I did not use it at all	93.1%	73.3%	82.8%
1-2 days a week	3.2%	10.0%	6.7%
3-4 days a week	1.4%	4.8%	3.2%
5-6 days a week	1.3%	4.9%	3.2%
Every day	1.0%	7.0%	4.1%
n=	907	981	1888
Random sample, weighted, 1.4% missing.			

FIG. FREQUENCY OF USE OF NEWSPAPER BY URBAN/RURAL			
	Urban	**Rural**	**Total**
I did not use it at all	76.2%	87.5%	82.8%
1-2 days a week	8.4%	5.6%	6.7%
3-4 days a week	4.0%	2.5%	3.1%
5-6 days a week	5.3%	1.7%	3.2%
Every day	6.1%	2.8%	4.1%
n=	772	1116	1,888
Random sample, weighted, 1.4% missing.			

RADIO

FIG. FREQUENCY OF USE OF RADIO BY AGE GROUP					
	15-18	**19-22**	**23-26**	**27-30**	**Total**
I did not use it at all	93.5%	90.1%	92.0%	92.2%	92.0%
1-2 days a week	2.6%	5.4%	2.9%	3.4%	3.6%
3-4 days a week	1.8%	1.5%	1.1%	1.6%	1.5%
5-6 days a week	0.8%	0.2%	0.5%	0.7%	0.6%
Every day	1.2%	2.8%	3.5%	2.0%	2.3%
n=	492	467	374	554	1,887
Random sample, weighted, 1.5% missing					

FIG. FREQUENCY OF USE OF RADIO BY GENDER					
	15-18	**19-22**	**23-26**	**27-30**	**Total**
I did not use it at all	93.5%	90.1%	92.0%	92.2%	92.0%
1-2 days a week	2.6%	5.4%	2.9%	3.4%	3.6%
3-4 days a week	1.8%	1.5%	1.1%	1.6%	1.5%
5-6 days a week	0.8%	0.2%	0.5%	0.7%	0.6%
Every day	1.2%	2.8%	3.5%	2.0%	2.3%
n=	492	467	374	554	1,887
Random sample, weighted, 1.6% missing.					

FIG. FREQUENCY OF USE OF RADIO BY URBAN/RURAL					
	Urban	**Rural**	**Total**	**27-30**	**Total**
I did not use it at all	94.6%	90.3%	92.0%	92.2%	92.0%
1-2 days a week	2.7%	4.1%	3.6%	3.4%	3.6%
3-4 days a week	0.9%	1.9%	1.5%	1.6%	1.5%
5-6 days a week	0.9%	0.4%	0.6%	0.7%	0.6%
Every day	0.9%	3.2%	2.3%	2.0%	2.3%
n=	771	1115	1,886	554	1,887
Random sample, weighted, 1.5% missing.					

HOW PAKISTAN COMPARES INTERNATIONALLY

TABLE: A COMPARISON OF SOUTH ASIA

	Pakistan	Bangla-desh	India	Sri Lanka	Nepal
Population (in millions)	189	158	1,268	20	28
Internet users (% of population)	15%	26%	19%	24%	31%
% increase since Jan 2014	47%	12%	14%	22%	20%
Active social media users (% of population)	10%	8%	10%	14%	17%
% increase since Jan 2014	72%	128%	38%	40%	50%
Mobile connections (% of population)	79%	77%	75%	165%	90%
% increase since Jan 2014	15%	10%	6%	35%	39%
Mobile broadband use (% of mobile connections that have broadband)	4%	6%	8%	34%	9%
Share of Web traffic by mobile phone	46%	70%	68%	57%	47%
Average mobile net speed (in Mbps.)	1.5	1.7		2.6	
Mobile social media use	9%	7%	9%	11%	16%
% increase since Jan 2014	113%	132%	50%	53%	57%

Source: Digital Social and Mobile in APAC, March 2015[34]

34. http://wearesocial.net/blog/2015/03/digital-social-mobile-apac-2015/

APPENDIX D
BIBLIOGRAPHY

Abdullah, A. (2015). Digital Divide and Caste in Rural Pakistan. The Information Society, 31(4), 346-356. doi: 10.1080/01972243.2015.1040936

Ahmad, A. (2014). The Role of Social Networks in the Recruitment of Youth in an Islamist Organization in Pakistan. Sociological Spectrum: Mid-South Sociological Association, 34(6), 469-488. doi: 10.1080/02732173.2014.947450

Ahmad, K., & Sheikh, K. S. (2013). Social Media and Youth Participatory Politics: A Study of University Students. South Asian Studies, 28(2), 353-360.

Ahmed, I. (2010, July 8, 2010). Newest friends on Facebook? Pakistan militants, The Christian Science Monitor. Retrieved from http://ezproxy.lib.ed.ac.uk/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsggo&AN=edsgcl.231000073&site=eds-live

Ahmed, S., & Skoric, M. M. (2014, 6-9 Jan. 2014). My Name Is Khan: The Use of Twitter in the Campaign for 2013 Pakistan General Election. Paper presented at the System Sciences (HICSS), 2014 47th Hawaii International Conference on.

Chinn, M. D., & Fairlie, R. W. (2004). The Determinants of the Global Digital Divide: A Cross-Country Analysis of Computer and Internet Penetration. UC Santa Cruz Department of Economics, UCSC.

Eijaz, A. (2013). Impact of New Media on Dynamics of Pakistan Politics. Journal of Political Studies, 20(1), 113-130.

Farooqi, H., Patel, H., Aslam, H. M., Ansari, I. Q., Khan, M., Iqbal, N., . . . Asad, N. (2013). Effect of Facebook on the life of medical university students. International Archives of Medicine, 6.

Gold, S. (2011). Terrorism and Bluetooth. Network Security, 2011(7), 5. doi: 10.1016/s1353-4858(11)70073-3

Hache, A., & Cullen, J. (2009). ICT and Youth at Risk: How ICT-driven initiatives can contribute to their socio-economic inclusion and how to measure it. JRC Scientific and Technical Reports. .

Haq, A. u., & Chand, S. (2012). Pattern of Facebook usage and its Impact on Academic Performance of University Students: A Gender Based Comparison. Bulletin of Education and Research, 34(2), 19-28.

Hassan, K. (2014). The Role of Private Electronic Media in Radicalising Pakistan. Round Table, 103(1), 65-81.

Howard, P. N., Duffy, A., Freelon, D., Hussain, M., Mari, W., & Mazaid, M. (2011). Opening Closed Regimes: What Was the Role of Social Media during the Arab Spring Project on Information Technology and Political Islam. . Seattle: Department of Communication, University of Washington.

Javed, M. W., & Bhatti, R. (2015). Usage of Social Media by Medical and Dental Students at Nishtar Medical College, Multan, Pakistan. Journal of Hospital Librarianship, 15(1), 53-64.

Kamal, T. (2015). An Investigation into the Negative Impacts of Social Media on Academic Performance of Youth. New Media and Mass Communication, 34, 50-56.

Kugelman, M. (2012). Social media in Pakistan: catalyst for communication, not change: NOREF: Norwegian Peacebuilding Resource Centre.

Mahmood, Q. K., Ullah, R., & Akbar, M. S. (2013). Manifestation of Mobile Phone Assisted Personal Agency among University Students: Evidence from Lahore. South Asian Studies, 28(1), 139-149.

Malik, Q.-u.-a., & Khan, M. A. (2011). Shift in Media Power: An Empirical Analysis of Emerging Patterns of Media Use. Journal of Social Sciences & Humanities (1994-7046), 19(1), 65-84.

Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2008). Digital citizenship : the Internet, society, and participation. Cambridge, Mass: MIT Press.

Nemer, D. (2015). From Digital Divide to Digital Inclusion and Beyond. . The Journal of Community Informatics, North America. Available at: http://ci-journal.net/index.php/ciej/article/view/1030/1131. Date accessed: 27 July 2015.

Norris, P. (2001). Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide. . Cambridge: Cambridge University Press.

Phillips, W. (2015). This is why we can't have nice things: Mapping the relationship between online trolling and mainstream culture. Cambridge, Mass.: MIT Press.

Schoemaker, E. (2015). 'Digital purdah': How gender segregation persists over social media, Dawn, 31st July 2015.

Shackle, S. (2013). The Twitter jihadis. New Statesman, 142(5169), 17-17.

Tariq, W., Mehboob, M., Khan, M. A., & Ullah, F. (2012). The Impact of Social Media and Social Networks on Education and Students of Pakistan. International Journal of Computer Science Issues (IJCSI), 9(4), 407-411.

Valenzuela, S., Park, N., & Kee, K. F. (2009). Is There Social Capital in a Social Network Site?: Facebook Use and College Students' Life Satisfaction, Trust, and Participation. Journal of Computer-Mediated Communication, 14(4), 875-901. doi: 10.1111/j.1083-6101.2009.01474.x

van Dijk, J. A. G. M. (2006). Digital divide research, achievements and shortcomings. Poetics, 34(4-5), 221-235. doi: http://dx.doi.org/10.1016/j.poetic.2006.05.004

Waller, L. G. (2013). Enhancing Political Participation in Jamaica. SAGE Open, 3(2), 1-9. doi: 10.1177/2158244013486656

Warschauer, M. (2003). Technology and Social Inclusion: Rethinking the Digital Divide Cambridge, MA: MIT Press.

www.britishcouncil.pk
www.facebook.com/BritishCouncilPakistan
www.twitter.com/pkBritish