

Impact of Convergence on Newsrooms of Pakistani Newspapers

Abstract: *This research study looks into newsroom convergence in Pakistan and looks at the newsrooms of four major newspapers: Dawn, Jang, The Nation, and Express. The study's goal is to discover how newsrooms are coping with digital innovations. Purposive sampling was used by the researcher to choose the four newsrooms and staff members, and observation and interviews were used as the research methods. The study found that editors in the newsrooms were concerned about the future of print media in the digital age and mulling ways to generate revenue for the print media for their survival, with some suggesting setting up paywalls on exclusive content on the newspapers' websites and using local modes of payment such as EasyPaisa, JazzCash, etc for the readers. Overall, it is believed that convergence has led to better journalism in terms of the ease in production and distribution of content in the media, while it has also led to reduction of costs for the newspaper owners.*

Contents

- [Introduction](#)
- [Literature Review](#)
- [Research Methodology](#)
- [Research Questions](#)
- [Theoretical Framework](#)
- [Findings and Discussion](#)
- [Conclusion](#)
- [References](#)

Key Words: Newsroom, Pakistan, Newspapers, Dawn, Jang, The Nation, Express

Introduction

The Internet has permeated our daily lives, and digital communication technologies are increasingly being used in newsrooms of media organizations. Journalists and media executives must understand the phenomenon of newsroom convergence and the usage of digital technology in order to work professionally in the modern day. However, many journalists in Pakistan are still unaware of the newsroom convergence, leaving them without the skills and awareness needed to function in today's digital age. This study looks at newsroom convergence in Pakistan's print media, or how digital technology

has altered the procedures of traditional newspaper newsrooms.

Convergence is the interconnectedness of communication technologies, computers, and media content. It incorporates three Cs: communication, computation, and content, and it is the result of the Internet's birth and the digitalization of mass media material.

In other terms, convergence refers to the availability of content from one media on another, such as print text or movies on the Internet. Journalism is no more a one-way transfer of information from mass media to the

* PhD Scholar, Department of Journalism & Mass Communication, University of Peshawar, Peshawar, KP, Pakistan. Email: shahid152001@yahoo.com (*Corresponding Author*)

† Lecturer, Department of Journalism & Mass Communication, University of Peshawar, Peshawar, KP, Pakistan.

publics in this age of digital communication technologies; online platforms have given the audience more say.

Newspapers are one of the earliest kinds of journalism when viewed historically. The term "newspaper" was first used in the United Kingdom in 1670. Before that, the newspapers were called "corantos". Similarly, the term "journalist" first appeared in English around 1830, referring to those who worked for newspapers at the time (Brock, [2013](#)).

According to DeFleur and Melvin (2016), the nineteenth century was a time when print media experienced tremendous expansion and development as a result of the industrial revolution. The introduction of the steam engine in the 1830s facilitated the publication and distribution of newspapers. The rise in literacy rates in the nineteenth century coincided with an increase in the number of newspapers. The 1870 Act of compulsory education for all children in England increased literacy and, as a result, demand for newspapers.

The twentieth century also witnessed the advent of radio and television as new competitors to newspapers, reducing circulations. However, the advent of the Internet has had a significant impact on newspapers and journalists working with print media in a variety of ways. People all across the world are increasingly using online media in the modern era. As a result, print media circulations have been declining globally.

The Internet, which arose in the late twentieth century, has altered the global news media landscape. The Internet is thought to be the offspring of a computer and a telephone network union. The Internet has influenced journalism in a variety of ways. The amount of information has increased dramatically. For example, in 2008, Google trawled 1 trillion online pages; five years later, it had surpassed 30 trillion (Brock, [2013](#)).

Given these facts, dealing with such a massive volume of information in the age of the Internet becomes a challenge for journalists. Since the emergence of online media in the United States, newspaper circulation have steadily declined. In 2018, weekday print circulations of newspapers declined by 12% and Sunday print circulations fell by 13% compared to

2017. The daily newspaper circulation figures in the United States were 34,657,199 in 2016 but declined to 30,948,419 in 2017 and 28,554,137 in 2018.

Newspaper circulation in the United States fell to its lowest level since 1940 in 2018. In the year 2020, the expected weekday and Sunday circulation of American daily newspapers (print and digital combined) was 24.3 million and 25.8 million, respectively, but both statistics fell by 6% in 2021. (PEW Research Center, [2021](#)).

The use of technology particularly approaches for creating internet news, has had an impact on newsrooms. Newspaper companies are concerned about how to integrate technological convergence into newsroom routines and the news production process to balance traditional and online production. In the course of producing news, newsroom structures are shifting from a strict hierarchy to a narrower gap between the top and bottom. The "unified newsroom" that Pavlik refers to as a result of these events may be seen at CNN and The Tribune, for example. Hebert, 2000; Pavlik, [2001](#); Pavlik, [2000](#): 234)

Newspaper newsrooms are embracing technology, and the Internet is the most useful tool and information platform. Newsrooms are integrating the roles of journalists and technicians and undermining the hierarchical and traditional power structure in the organisations by providing new jobs and tasks for multi-skilled personnel.

Despite the foregoing literature and excellent efforts by scholars analyzing convergent newsrooms, particularly news flow between the online and print output of media organizations, literature focusing on Pakistan's setting is missing. The purpose of this research project is to bridge this gap by conducting an empirical examination in the newsrooms of four Pakistani traditional newspapers. The qualitative research examines the changes, implications, and consequences of technological convergence at four traditional media organisations in Pakistan.

Statement of the Problem

The purpose of this study is to investigate newsroom convergence in Pakistan and how it affects conventional print publications.

A critical component is determining the viability of print newspapers and how they are affected by digital media. The study also examines the management of news flow across print and online media, as well as newsroom organization. Certain studies have been undertaken in other nations, but no such study has been conducted on Pakistani media. As a result, this study aims to fill a gap in the literature and contribute to the body of knowledge and literature from the context of Pakistan. Also, the purpose of this research is to look at how the Internet and technological convergence are affecting Pakistan's print media newsrooms. The research focused on workflow, managing news development across traditional and digital media, changes in the news creation process, and the duties and interactions between online and print newsrooms.

Literature Review

In journalism, the use of technology in news collecting and transmission has always been at the forefront. In today's world, all types of media content, including as text, images, videos, and so on, have been combined on a single platform, implying that the three Cs - communication, content, and computation - have converged in the form of the internet, which is known as media convergence. Newsrooms in print media have likewise converged as a result of the use of communication technology. (El Badawy & Magdy, [2015](#)).

According to Alzahrani ([2016](#)), the forces of technological convergence are altering Saudi news organizations, with implications for the social, political, and economic sectors. In the digital age, Saudi newspapers have begun to rethink the viability of their business strategies. Because of the decline in print circulation and the proliferation of media platforms, newspaper executives have been obliged to adopt a new strategy of multimedia houses rather than the traditional press model. In the context of digital marketing, the multimedia organisation model will enable the provision of website hosting as well as services such as selling, web design, and maintenance. Because the press organisations law regulates the formation of Saudi press

organizations, it appears that this alternative will be impossible to implement.

As mentioned in the accompanying research, the major global media conglomerates, such as the BBC, Al Jazeera, and CNN, have usually recognized media convergence. Similarly, digital integration has altered the overall environment of Pakistani journalism. For example, the majority of a survey's respondents thought that the integration of digital and technology has altered news development, delivery, and public reception of media material (Ali, [2021a](#)).

Digital utopias have also spurred optimism about the benefits that convergence can provide, particularly in terms of economics and enabling news organizations to take advantage of technical capabilities and produce dependable, diversified, and appropriate information to serve an informed population. Convergence allows for the sharing of information and resources, as well as the coordination of content distribution across many media platforms, which encourages cost-effective creation in the business world. (Mico et al., [2013](#)).

Garca-Avilés and Carvajal ([2009](#)) performed a study on newsroom models and convergence at two Spanish multimedia enterprises, Novotécnica and La Verdad Multimedia. The study revealed two models for newsroom convergence: an integrated newsroom model and a cross-media model. The cross-media paradigm is related with platform and resource sharing, which is viewed as a tool rather than the final result of transformation. The integrated model's purpose is to create a convergent culture that can be spread across traditional media barriers. The poll also revealed different levels of newsroom organisation, journalist multi-skilling, media production system, and commercial strategy. Regardless of the difficulties in implementing either of these two convergence models, a successful transition is dependent on the managers at the media organisations and their conviction in the proposed model.

In comparison to earlier studies, the researcher conducted this study on newsroom convergence in Pakistan with the goal of discovering the issues and potential of newsroom convergence, as well as how many journalists operate in newsrooms. As a result, the study is an

attempt to bridge the gap in the literature by contributing to the body of knowledge from a Pakistani perspective, as no study of this kind has been undertaken in Pakistan focused on the country's four major media organizations. The researcher saw several newspaper newsrooms to determine the extent of convergence that has occurred in their separate premises and also questioned top journalists to determine how they were working to produce material for both print and digital consumption of readers.

While this study focuses on newsroom convergence, the notion of new media evolves over time. Digital technologies are also evolving, and further such studies can be undertaken in the future to determine whether newer types of tools and software are being used in newsrooms by journalists for news production and dissemination.

Research Methodology

The observation approach was used to obtain data for this investigation. Observational research is a sort of investigation in which people and events are observed in their natural environments. This allows researchers to watch their participants' decisions and reactions to situations outside of controlled settings such as study rooms or focus groups. The term "observation" refers to a qualitative research method that involves ethnography and field research in addition to participant observation. The benefit of observation is that it allows researchers to observe humans in their natural environments in order to understand "things" from their point of view. With observation, the researcher can take on multiple roles and spend a significant amount of time in the field to gain a better understanding of the subjects. (Baker, 2006).

The observation qualitative research technique includes participant observation, ethnography, and fieldwork. Several study sites are included in the observational research strategy. Observational data can be used in auxiliary or confirmatory research (Jamshed, [2014](#)).

Research Questions

The main research question is presented first, followed by sub-questions.

1. How are Pakistani print media newsrooms responding to digital communication technologies?
 - a. What is the organizational structure of a newspaper's management and newsroom?
 - b. What is the current newsroom model in Pakistani newspapers, and is there any intention of restructuring?
 - c. What responsibilities do web desks/online newsrooms play in newspapers, in addition to print or traditional newsrooms?
 - d. What is the existing workflow and production procedure in the newsrooms between the web and print desks?
 - e. How do digital communication technologies affect the creation and dissemination of news in Pakistani newspapers?
 - f. What are the primary regulatory implications of digital technologies?
 - g. What steps is the print media taking to prepare for the ongoing digital age?

It is critical to investigate the processes involved in the generation and acceptance of creative ideas through observation, which is an empirical research method used in quantitative and qualitative naturalistic studies aiming at understanding behaviour and interactions as they occur in real time. (KatzBuonincontro and Anderson, 2020).

Observation is an empirical research method that can be used to develop narratives of first-hand, real-world naturalistic events in order to comprehend their defining characteristics, contextual, and time-sensitive properties (Berg, [2004](#)).

Observational data can be used to enhance or confirm the findings of other investigations (Gray, 2021). Because observation research can be a fairly intrusive sort of research, the ethical implications of observation research must be explored (Urquhart, 2015).

Managerial psychologists, as well as others such as staff officers and other employees in a

similar positions, are interested in participant observation, a research approach in which the researcher directly participates in the scenario of interest. (Vinten, 1994).

Mason (2002) defines observation as "methods of data collection that necessitate the researcher immersing oneself in a research context in order to feel and witness firsthand a range of elements in and of that setting." p.84.

The study makes use of nonparticipant observation, in which the researcher is present but not a participant in the situation (newsrooms in this example) (Tuchman, 1978).

The most ideal method for performing this type of micro-level study on newsrooms is observation. In this study, nonparticipant observation is used, in which the researcher observes but does not participate in the environment (in this case, newsrooms). This study used observation to identify news production, workflow, and managing journalistic production across traditional print and digital formats, as well as relationships between journalists inside newsrooms.

The following observation schedule was recorded in various newsrooms.

Table 1.

S.No	Newsroom	Days	Time	Authority	Observation items
1	Dawn	December 1 to 5, 2021	6pm to 11 pm	News editor, senior editors, sub-editors	Observed their response to technology (software being used), news flow, editing, and production process
2	The Nation	December 6 to 10, 2021	6pm to 11 pm	News editor, senior editors, sub-editors	Observed their response to the use of new technology, news flow, production process and editing.
3	Jang	December 11 to 15, 2021	6pm to 11 pm	News Editor, senior editors, sub-editors	Observed their response to the use of new technology, news flow, production process and editing.
4	Express	December 16 to 20, 2021	6pm to 11 pm	News Editor, senior editors, sub-editors	Observed their response to the use of new technology, news flow, production process and editing process

The researcher observed the environment, news flow, news production, and the technology (software) employed in newsrooms. The organisational and administrative or management structure were carefully scrutinized. The workflow and staff strengths were studied, as well as the newsroom structure, to determine the changes, problems, and possibilities in terms of newsroom convergence.

Sampling and Selection Procedure for Semi-structured Interviews

In general, there are two types of sampling strategies: probability sampling methods and non-probability sampling methods. The term "probability sampling" refers to the fact that every item in the population has an equal chance of being sampled. Non-probability sampling, on the

other hand, is commonly associated with case study research design and qualitative research (Taherdoost, 2016).

One of the most crucial elements in determining how reliable a study is is sampling. Simple random sampling, systematic random sampling, and stratified random sampling are examples of probability sampling techniques in addition to non-probability sampling techniques including quota sampling, self-selection sampling, convenience sampling, snowball sampling, and purposive sampling (Bhardwaj, 2019).

The researcher chose a non-probability sample technique for gathering data, using a judgmental or purposive sampling strategy with the intention of observing the chosen newsrooms to gauge the degree of convergence before using

the same technique to gather data through interviews. When certain settings, individuals, or events are purposefully picked to expose important information that cannot be reliably acquired in another way, this method is known as "judgmental sampling" (Maxwell, 2012).

Choosing sample units at random from the population segment that contains the most information on the trait of interest is known as "purposive sampling." (Guarte, & Barrios, 2006).

In order to use a sample technique, the observer must carefully examine the facets of behaviour and social interactions that are significant to the study population and the research aims. The majority of studies will not have enough empirical knowledge of the connections between important variables. In these situations, the observer should make every effort to minimize any inherent biases, especially those that have a direct bearing on the variables under study. (Altmann, 1974).

The Audit Bureau of Circulation (ABC), which also verifies the newspapers' circulation data, has validated a certain set of Pakistani newspapers that the researcher has specifically chosen. Because the study is predicated on how digital technologies are affecting traditional newsrooms, the newspapers chosen all have both printed and online editions. The researcher has also chosen publications from the Dawn Group, Jang Group, Nawa-e-Waqt Group, and Express Group, four of the biggest media conglomerates in the nation. On the basis of the aforementioned criteria, the researcher chose the following newspapers:

1. Urdu daily Jang (Jang Media Group)
2. English daily Dawn (Dawn Media Group)
3. English daily The Nation (Nawaiwaqt Group)
4. Urdu daily Express (Century Publications Pvt Limited)

All of the chosen newspapers are mainstream publications that are a member of Pakistan's four main media conglomerates. Each of the four organizations controls the market in terms of readers and money at the national level and owns English- and Urdu-language publications and TV networks. Only the Nawai Waqt Group has, however, discontinued Waqt TV due to specific

problems, though they may do so at any point in the future. The researcher went to the newsrooms of the chosen newspapers and spoke with the editors and senior sub-editors there. The number of employees in a newsroom typically varies from one firm to another. In the newsroom of the daily Dawn, there were three female editors and six male editors; in the newsroom of the Express, there were three female editors and five male editors; and in the newsroom of the daily Jang, there were four female editors and ten senior sub-editors. They were subjected to in-depth interviews by the researcher. There were about 40 responders in all, including seven female and 33 male journalists, who were all thoroughly interviewed for the purpose of gathering data.

Research Ethics, Procedures, and Practices

One of the most important components of any research study is adhering to ethical norms. The researcher is accountable for ensuring the security of all participants and respondents in the study (Fontana & Frey, 2008: p.142). In this regard, the researcher obtained permission from the administrators of the chosen newspapers to perform a newsroom observation.

Theoretical Framework

A theory is a set of assumptions that aims to rationally or logically explain the connections between a number of observed occurrences. In this area of mass communication, theories are viewed in a variety of ways. One way to look at mass communication theory is as a lens through which one might view the world as can other researchers. (McQuail, 1983).

This research study is based on Henry Jenkins' presentation of the Media Convergence Theory in his 2006 book, *Convergence Culture: Where New and Old Media Collide*. According to Jenkins (2006), media convergence consists of three primary components: the ability of media content to span platforms; the collaboration of many media businesses; and the migratory mindset of audience members.

According to Jenkins (2006), there are three main components of media convergence: the ability of media content to cross platforms; collaboration among various media industries;

and the migratory behaviour of audience members as they search through various media platforms for the information they require.

Definitions

Convergence is a term that combines the three Cs of communication, content, and computing. As a result, it is a process connected to the creation of new media technologies and the digitization of media material. Wendland (2001) asserts that media convergence is a type of advancement and development in digital imaging because it combines the Internet with conventional print and broadcast media to give audiences more recent news on a wider range of subjects.

Quinn claimed that convergence is the result of global mass communication, yet different countries are changing at different rates, therefore it is possible to see convergence.

Convergence has several definitions, and as Quinn (2005) points out, these variants demonstrate how convergence can vary depending on cultural differences between distinct countries.

Quinn claimed that convergence is the result of global mass communication, yet different countries are changing at different rates, therefore it is possible to see convergence. Convergence has several definitions, and as Quinn (2005) points out, these variants demonstrate how convergence can vary depending on cultural differences between distinct countries.

The phrase "media convergence" refers to the blending of various forms of mass media, such as digital media platforms, conventional media, print media, broadcast media, new media, the internet, and mobile and highly interactive technology. The process of national homogeneity has several facets and has an impact on culture, politics, and the economy. "A detailed and thorough analysis of convergence definitions might go on for several volumes," asserts Lawson-Borders (2005). (p. 4).

But according to Gentry (1999), media convergence is a significant development that will require media businesses to employ experts with strong critical thinking abilities in order to communicate in a future era of convergent media.

Gentry backs Jenkins' (2001) idea of media convergence, in which journalists simultaneously work for print, Internet, and broadcast media in a newsroom that combines the functions of print, broadcast, and online newsrooms into a single news production setup. According to him, in the age of convergence, both public relations specialists and advertising communicators are changing how they approach creating messages for audiences.

Despite the fact that Jenkins discussed the Media Convergence Theory, he also makes reference to political scientist Ithiel de Sola Pool, who published a book in 1983 called "Technologies of Freedom." Jenkins claims that Pool was in fact talking about convergence because he had previously discussed technologies and how they affected society.

According to Pool, print media organizations used to be completely independent from other types of media because each had its own operations and markets and was subject to different rules. However, Pool observed that emerging technologies were encouraging greater variety and engagement in the media sectors; as a result, he asserted that the boundaries between diverse forms of media were becoming increasingly hazy as a result of the convergence of mass communications and modes. The pool is regarded as one of those academics who originally asserted that convergence allowed media content to stream across several platforms at once and brought disparate mediums together.

The Theory's Relevance to this Study

Jenkins, as was mentioned at the beginning of this chapter, roughly categorizes convergence into three parts: how material moves across various media platforms; how various platforms interact with one another; and how audiences navigate various media platforms to find the information they require. Because the third section is concerned with audiences, which are not a part of this study, this thesis is pertinent to the first two parts.

The researcher examined the operations of the workers in the newsrooms of four newspapers as well as the flow of content across various platforms, including print and online desks. The

senior journalists in the newsrooms were also questioned by the researcher about their perspectives on the future of print media in light of the current advancements in digital technologies. The Media Convergence Theory, a generic theory that applies to all types of media, including print, broadcast, and online, connects all of these academic fields. The print media, however, is the unique topic of this study.

Findings and Discussion

This study's major objective is to ascertain how traditional print media newsrooms are integrating digital technology. The researcher would like to introduce the newspaper organisations chosen for this study before moving into the specifics of the findings. The details of the chosen newspapers are as follows:

The Nation

The Nation is a well-known English-language publication that is a part of the Nawa-i-Waqt media organisation, which also publishes the Urdu daily Nawa-i-Waqt. Its first headquarters were in Lahore, but more recently, the federal capital of Islamabad has served as the new location for the main office.

Jang

Daily Jang is a popular Urdu daily published in Pakistan. Given that it was founded in 1939, before Pakistan was created, it is regarded as the nation's oldest newspaper. Geo television and the English-language newspaper The News International are also sister companies of this one.

Dawn

Dawn is regarded as an elite publication and Pakistan's newspaper of record because it is frequently cited in scholarly studies. On October 26, 1941, the founding father of the nation Mohammad Ali Jinnah launched Dawn in Delhi, India, during a time when it was the voice for the Muslim League party (Long, 2017).

Express

In June 2002, Daily Express, another widely read

newspaper published in Urdu in Pakistan, began publication from 11 locations around the nation. Its founder and organization's chief executive officer, Sultan Ali Lakhani, launched it. The company also introduced the Express News TV channel in January 2008. The Express media organisation also debuted the English-language Express Tribune in April 2002. (Nasim Haider, personal communication, 2022).

During this research study, the researcher found the following answers to the research questions:

Organizational and Managerial Structure of the Newsrooms

According to the findings, there are two main hierarchies in each of the four newspaper organisations: one for editorial, which is led by an editor, and one for human resources (HR), which is led by a general manager. Despite the fact that practically all four of the organisations have this structure, there may still be a few minor variations, such as the number of staff members and employees in each organisation. Additionally, all newspapers follow the same business model and rely on advertising, print copy subscriptions, and circulation sales as their primary sources of income. Additionally, newspapers do not now use paywalls, but some experts predict that they may in the future as part of a strategy to manage money. Additionally, there is a belief among newspaper journalists that readers may pay for access to exclusive content of a newspaper online in the future using local payment methods available in Pakistan, such as easy paisa and jazz cash, while some believe that even debit cards from different banks may be used for the purpose. However, there are currently no paywalls on the websites of newspapers, making their content freely accessible to internet users.

Newsroom models of the four Newspapers

Different organisations have different newsrooms. The crew at Daily Express manages news content for the newspaper, website, and TV station in a convergent newsroom. The Nation, however, has a distinct newsroom from its sister publication, the daily Nawa-e-Waqt. Only English-language stories are produced by the

newsroom staff of The Nation for print and online publication. The Nation, on the other hand, has plans for a convergent newsroom in the future where they might combine both the Nawai Waqt and The Nation newsrooms, much like the Express newsroom. The Nation management, however, feels that given the current state of the media's financial situation, they would prefer not to impose additional responsibilities to the journalists, as they have done with those working for the Express. (Salman Masoon, personal communication). All the four newsrooms studied in this research showed that their management were planning for merging their sister organizations' newsrooms in the future. Daily Jang has a semi-convergent newsroom in the sense that they also share news material with sister organisations The News through Al-Rehman system (a screenshot of which has been included in daily Jang section above in this chapter).

As of right now, there are four main structural types of newsroom models. According to The Nation, the initial model contains separate rooms for the desk in-charge, various sub-editors, and page-makers.

Observed in daily Jang is a second model that consists of a major editing lounge with divided desks for the production of various pages and a separate area for the desk in-charge that opens into the main lounge. The Express daily is an example of an integrated newsroom with a sizable open area equipped with numerous communication technology. A fourth style, seen in Dawn, includes a single, sizable room where everyone works on news production, including the desk in-charge and several sub-editors.

The role of online Newsrooms in Newspapers

The main responsibility of the web desks, which are located in each of the four newsrooms, is to maintain the websites of the relevant newspapers as well as provide text, images, and e-papers to their online platforms. One IT engineer is also employed for this reason, thus the web desks' other responsibility is to take care of the technical problems affecting the websites in question as well as their security against potential hacking. Facebook, Twitter, and other social media profiles are likewise managed by the web desks. The

creation of news is another another function of new media wings. Newspapers, however, produce news in different ways through their web bureaus. The newspaper has just begun overhauling its website to make it more user-friendly and to enhance its online desk, so the new media desk at The Nation, for instance, currently makes little of a contribution to news output. Additionally, print is prioritised more at Jang and Express than web desk. Dawn, however, outperforms all four newsrooms in terms of web desk performance since www.dawn.com employs exclusive (online-only) reporters who don't cover the newspaper's print or TV sides but only the website. Additionally, Dawn receives frequent updates and has a sizable viewership.

The Relationship between web and print Desks in the Newsrooms

The interaction between web and print desks varies among the four newsrooms that were the subject of this study. Both the web desk and the print desk contribute nearly equally to the news creation at Dawn.com. The web desks contributed significantly less to news creation in the other three newsrooms at Jang, Express, and The Nation than their print desk counterparts. One component, nevertheless, is shared by all four newsrooms: according to the staff, they attempt to initially file news for the websites in a concise manner before filing and finalising the complete piece on the print desk. However, the newsrooms are increasingly sharing files through their content management systems. Because newspapers primarily make money from print circulations, even while web desks are increasingly employing digital technologies and content management systems, these desks are still reliant on the print side. The new media departments of other newspapers primarily handle the technical aspects of websites, with the exception of the daily Dawn, which has a full-fledged online desk. However, even in this scenario, the new media desk's job is crucial because it calls for their abilities to update websites, create and upload e-paper, and convert print content into digital form.

Overall, there is collaboration between the print and digital departments. Convergent newsrooms would result from a total integration

of the print and digital sides, but even conventional newsrooms would need to train their staff in order for this to happen.

Effects of Digital Communication Technologies on the Creation and Dissemination of News

In the modern era, all newsrooms employ digital technology, which are essential to the creation and transmission of news. Unlike earlier times when newspapers had limited area for photographs and stories, the Internet has enormous space for news stories. In addition, unlike print texts that take a long time to publish, news items can be transmitted globally in a matter of seconds or minutes. Due to a workforce reduction in the newsroom's layout department, digital technology has also cut the cost of newspapers' production and distribution. Another way to save costs is that several publications that previously shipped copies overseas no longer do so because their news content is now accessible from anywhere in the world online.

Synchronous printing is another feature of digital technology that has lowered expenses, labour needs, and production times while also ensuring that daily newspaper content is more competitive in the modern media industry. As a result, newspapers' magazines can be created in soft form in one place and printed in another, where they are then sold at stands.

The distribution of news by print media has increased, which is yet another effect of convergence. Every newspaper has a website with both text-only pieces with images and e-papers. However, newspapers haven't yet started offering news via tablet apps and SMS services. Additionally, to make up for the decline in print circulation, newspapers are now concentrating on expanding their online audiences. The internet presence ensures that the newspapers can draw in new readers and keep those print readers who might otherwise switch their reading habits to online platforms.

Impacts of Digital Technologies on the Economic and Regulatory Matters

The results demonstrate that there are no legal restrictions on alterations to the organisational

structures of newsrooms in Pakistani newspapers. The owner or management of a newspaper can arrange the newsroom as they like, both physically (in a model) and hierarchically. In terms of the business side, newspapers continue to make the majority of their money from print editions due to the publication of advertisements there. Despite the fact that most readers now access news online, the majority of businesses continue to run print newspaper adverts. This demonstrates that Pakistan's internet newspapers are still not all that profitable. Pakistan has yet to implement the online payment method for reading newspaper content, hence print editions are prioritised. However, the management of the newspapers is considering implementing paywalls and/or allowing them on their websites in the future. Some people think that credit cards might be used for this.

Additionally, prior to the development of the internet, newspapers competed primarily with one another (print media), as opposed to radio stations and television networks. The introduction of the internet, however, has proven to be the print media's main rival, and print publications are struggling to thrive in the current digital era.

Measures the Print Media is taking to Adapt to the Ongoing Digital Age

While Pakistani newspapers compete for readers as well as the creation and delivery of material for broadcast media, all four newsrooms examined in this study demonstrated that the Internet is currently the most significant actor in the world. The print media in Pakistan are aware of this, which is why they are now concentrating more on web desks in newsrooms while some are still working to improve their websites. The Internet has a lot of potential for news production and dissemination, and while print copies are published once every 24 hours, online stories can be updated minute by minute. Paywalls have not yet been implemented on newspaper websites in Pakistan. However, they are considering such a concept in order to make money online as the internet has negatively impacted newspaper print circulations. Debit cards and EasyPaisa, as well as other locally developed methods of payment

made through mobile phone companies, can be used to pay for paywalls.

The management of newspapers is currently considering solutions and tactics to deal with the decline in their print circulations, as well as ways to increase online readership and revenue. The first strategy being employed by newspaper newsrooms is that they want to advertise their print publications because print is the one that provides them with revenue. The majority of the adverts are printed in print publications. For this reason, in contrast to the content that is available online, they attempt to provide specific exclusive information in the articles of their print versions. It is important to note that Dawn, Express, and Jang all employ a TV-first strategy because they first submit their reports to networks with a "breaking news" mentality. They then submit the reports for the organization's print publications and online. The Nation, on the other hand, employs a brief news story filing method for the website before writing and editing a detailed version for the print edition of the newspaper. The local community is prioritised in news coverage as another production tactic, despite the internet's worldwide audience. Compared to peripheral or remote places, local incidents occurring in the area where the newspaper is published receive more publicity. Regarding their social media presence, Dawn, The Nation, Jang, and The Express Tribune all frequently update their Twitter and Facebook pages and share links to stories on those sites.

Conclusion

In addition to additional sources, information, or related news, online news articles may also contain text, audio, video, photographs, and hyperlinks. The way news is traditionally gathered and digested has been impacted by modern technology, and journalists are now using the Internet to study stories and find fresh concepts, images, and other content.

Another advancement in journalism practises is how journalists use images and video to change stories for different platforms. Digital and communication technologies have an impact on journalism in a variety of ways, including news gathering, editing and processing, presentation, storage, and accessibility. The

consequences of digital media technologies are already being felt by traditional media organisations in terms of work culture, management, structure, and operational operations. The reorganisation of newsrooms is one example of how newspapers are adjusting to technological convergence. The results of this shift include virtual newsrooms and integrated newsrooms.

A new work environment culture is necessary for the convergent newsroom to properly evolve. The newsrooms are affected by the integrated technologies of the new media era. Today's convergence is being influenced by a wide range of elements, including the influence of networks, computers, digitalization, increasing space and capacity, and deregulation in several industries. Procedure changes in the newsroom have started to be influenced by digital technologies. As a result, new developments in communication technology transform journalistic processes both inside and outside of newsrooms.

The way media organisations connect with their audiences and how journalism practises change are both significantly impacted by the Internet. The importance of the Internet in today's news production, editing, and dissemination has been emphasised. The newsrooms of traditional newspapers are equipped with large television screens as well as other digital equipment like PCs to enhance the linked settings for better media practises.

To address the expectations of internet consumers looking for free information sources, newspaper organisations have also developed into a number of producers that have expanded their online operations. Other digital services are also getting better for users of tablets and smartphones. These are not just confined to distributing news; they can also provide other services that go beyond their core duties of data collection, editing, and distribution. All of these modifications boost readership and raise revenue for the publications. As a result of these changes, the fundamental economic model that newspapers are attempting to establish is also being questioned.

Online news distribution also has the drawback of being less financially successful than

print editions, which have more advertisements and bring in money for management. It indicates that if an effective digital production model cannot be created, the entire transition of some conventional newspapers to convergent

journalism may be postponed or avoided. In reality, when print advertising starts to diminish, this will increase worries about Pakistani newspapers' print editions and their ability to survive in the digital age.

References

- Altmann, J. (1974). Observational Study of Behavior: Sampling Methods. *Behaviour*, 49(3), 227–266. <https://doi.org/10.1163/156853974x00534>.
- Alzahrani, A. A. (2016). *Newsroom Convergence in Saudi Press organisations: A qualitative study into four newsrooms of traditional newspapers*. Doctoral dissertation, University of Sheffield.
- Berg, B. (2004). *Qualitative research methods for the social sciences (5th edn)*. Boston: Pearson.
- Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, 5(3), 157. Researchgate. https://doi.org/10.4103/jpcs.jpcs_62_19.
- Brock, G. (2013). *Out of Print: Newspapers, journalism and the business of news in the digital age*. London: Kogan Press.
- El Badawy, T. A., & Magdy, M. M. (2015). The Impact of Media Convergence on Egyptian HR Practices: A Zoom on the Newsroom Post January 2011 Revolution. *International Business Research*, 8(4), 10–18. <https://doi.org/10.5539/ibr.v8n4p10>.
- García Avilés, J. A., Meier, K., Kaltenbrunner, A., Carvajal, M., & Kraus, D. (2009). Newsroom Integration in Austria, Spain and Germany. *Journalism Practice*, 3(3), 285–303. <https://doi.org/10.1080/17512780902798638>.
- Gentry, J. (1999). “The Orlando Sentinel. Newspaper of the future: Integrating print, television and the Web,” in Making Change a report for the American Society of Newspaper Editors.
- Guarte, J. M., & Barrios, E. B. (2006). Estimation Under Purposive Sampling. *Communications in Statistics - Simulation and Computation*, 35(2), 277–284. <https://doi.org/10.1080/03610910600591610>.
- Jamshed, S. (2019). Qualitative research method-interviewing and observation. *Journal of Basic and Clinical Pharmacy*, 5(4), 87–88. NCBI. <https://doi.org/10.4103/0976-0105.141942>.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York and London: New York University Press.
- Joseph, B. (1998). The Influence of Newsroom Layout on News. *ResearchGate*. https://www.researchgate.net/publication/37616181_The_Influence_of_Newsroom_Layout_on_News.
- Klinenberg, E. (2005). Convergence: News Production in a Digital Age. *The ANNALS of the American Academy of Political and Social Science*, 597(1), 48–64. <https://doi.org/10.1177/0002716204270346>.
- Li, F., Ghaznavi, Q. Z., & Khan, S. (2021). Impact of Technology on Traditional Journalism in Pakistan. *Global Social Sciences Review*, V(II), 112–120. [https://doi.org/10.31703/gssr.2021\(VI-II\).12](https://doi.org/10.31703/gssr.2021(VI-II).12).
- McQuail, D. (1983). *Mass Communication Theory: An Introduction, First Edition*. London: Sage Publications.
- Micó, J. L., Masip, P., & Domingo, D. (2013). To Wish Impossible Things: Convergence as a Process of Diffusion of Innovations in an Actor-Network. *International Communication Gazette*, 75(1), 118–137. <https://doi.org/10.1177/1748048512461765>.
- Pavlik, J. (2000). The Impact of Technology on Journalism. *Journalism Studies*, 1(2), 229–237. <https://doi.org/10.1080/14616700050028226>.
- Pavlik, J. (2001). *Journalism and New Media*. New York: Columbia University Press.
- Pavlik, J. (2008). *Media in The Digital Age*. New York: Columbia University Press.
- Pavlik, J. V. (2004). A Sea-Change in Journalism: Convergence, Journalists, their Audiences and Sources. *Convergence: The International Journal of Research into New Media Technologies*, 10(4), 21–29. <https://doi.org/10.1177/135485650401000404>.
- Pew Research Center. (2021, June 29). *Trends and Facts on Newspapers / State of the News Media*. Pew Research Center’s Journalism Project. <https://www.pewresearch.org/journalism/fact-sheet/newspapers/>

- Quinn, S. (2005). Convergence's fundamental question. *Journalism Studies*, 6(1), 29–38. <https://doi.org/10.1080/1461670052000328186>.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal*, 5(2), 18–27. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3205035.
- Tuchman, G. (1978). *Making News: A Study in the Construction of Reality*. London: Free Press.
- Vinten, G. (1994). Participant Observation: A Model for Organizational Investigation? *Journal of Managerial Psychology*, 9(2), 30–38. <https://doi.org/10.1108/02683949410059299>.
- Wendland, M. (2001). Newspapers, TV stations and websites converge to create a new media entity. http://www.freep.com/money/tech/mwend21_20010221.html