Evaluating the Effectiveness of News Management Software’s: A Study of Pakistan News Channels

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Abstract

Technological innovations and its implementation in different organizations has been one of the prime interest of academicians as well as practitioners. The diffusion and implementation of information systems invited researchers to check effectiveness of the systems. The current study is using the Delone and Mclean as theoretical framework in context of media organizations. Sample data has been collected from top 15 news channels employees who are using news management software. A sample of 1000 was selected from these channels with the help of stratified sampling technique. Data were analysed by using the structural equation modelling. The results show that employees perceive that service quality, system quality and information quality are significant contributor to news flow and individual performance. Moreover, news flow is directly and indirectly affecting the individual performance. In addition to this, individual performance is significant predictor of process performance, satisfaction and organizational performance. The result strongly supports the integration of news flow and satisfaction in Delone and Mclean model. The results also support the mediating role of news flow, process performance and satisfaction. The paper offers a snapshot that how quality indicators and user satisfaction from news management system can increase the effectiveness of media organization. The research would be a great value to practitioners and media organizations.

Keywords: News information systems success; News management system; TV news channels; News flow; Delone and mclean.

1. Introduction

Technological developments occurred in last two decades have changed the television newsrooms completely. Media organizations are struggling with workplace conditions and newsrooms digitalization. To meet the ever-demanding needs of their audience and compete with their competitor, media organizations have introduced the Information system (IS) in their newsrooms to make the news gathering process effective and efficient. Weiss and Schwingel (2008), defined the Information system (IS) in media organizations as a content management system that facilitates newsroom workers, reporters, editors, and others to proceed with the content for reviews and finally help it to get to the consumer. Information system in a newsroom is not a new thing, different Information or content management systems had been implemented since the early time of computer systems but now a day IS is in sophisticated form, meeting the latest requirements of the media industry. Saltzis and Dickinson (2008), describe the information system as an important catalyst in producing speedy content for media houses. Boyd et al. (2008), describes an information system as a content management system that countenances news flow and facilitates journalists to air their content timely and saves from ambiguity and confusion. Holmberg (2002), described Information System as it helps quick sorting of news, efficient support of information flow among reporters and editors, improving content, time and resource management for meeting deadlines, refrain journalist to work in parallel and providing access to journalists with the information they might require to perform their job. Mauthe and Thomas (2004), label Information system for TV organization as having all functions required to manage news, that includes news filing, video import, and export within the system, editing of news and footages requires for the news, teleprompter management and control, access to archives and finally broadcasting of the news. Todorović (2006), describes each TV organization customizes information systems for their specific requirements.

There are ample studies that discuss Information systems success in media organizations. From print media i.e. newspapers, news websites, radio stations to TV medium, information systems have helped increase the productivity of organizations. Rodgers (2015), termed information systems as helpful and flexible in developing layouts for both news and advertising for print media. Zangana (2017), studied two TV news channels with one implemented Information system for their news operations while another news channel was still running at the non-automation
system. The findings of the study suggest that news channels with Information systems produced better results for the organization and had a positive impact on journalists than its counterpart. We found media organizations especially TV news channels with implemented information systems for their news production but there are very few studies that describe the implications at organization and journalists’ level (Brautović, 2009). Different models are available to study the success of information system. Manchanda and Mukherjee (2015), review and compare four information systems: TAM (Technology Acceptance Model), DeLone and McLean model, updated DeLone and McLean model and Model by Gabel and fellow researchers in their relevance to the information system field. The D & M model is the most prevalent among all previous models providing different parameters to gauge the system success while other mention models are good for some specific scenarios. The D & M have been studied in medicines (Ojo, 2017), for E-Government, (Rana et al., 2013), in RFI (Radio Frequency Identification) system (Dwivedi et al., 2013) similarly, many researchers like Larsen (2003), Seddon (1997) and Urbach et al. (2009) studied information systems in different organizations and discuss its effectiveness. The influential DeLone and McLean model (DeLone and McLean, 1992) having six interconnected variables to define Information System success: SQ (System Quality), IQ (Information Quality), Use, User Satisfaction, Individual Impact, and Organizational Impact. Further researches tested, recommend changes, and develop the concept of Information System success (Dwivedi et al., 2013). The very model is not tested in media and communication studies yet. The current study is testing the D&M model with slight modification for the information system success in the field TV channel in Pakistan.

The assessment, validation, and success of Information system success have been one of the favourite areas of research for both academicians and practitioners. Measuring Information system success is not an easy task, as “success” varies from industry to industry. The clash of interests between the management and employees also contributes toward the complexity of Information system success as management might take success in terms of an increase in profits while employees see the very concept as ease in day to day tasks in an organization. Urbach et al. (2009). Different theories and models are developed to measure the success of information systems in different organizations but DeLone and McLean (1992), later updated DeLone and McLean (2003) received immense popularity among Information systems researchers. The Updated D&M model contains six variables to gauge the success of the Information system (Delone and McLean, 2003), while some mediating variables are also being introduced while taking this model in the context of TV. The study also employed a D&M model with slight modification and going to test it for TV organizations. A significant number of studies examined and found a positive relationship between system quality and individual performance. Petter and McLean (2009) and Bharati and Berg (2003) found a positive relationship between system quality on individual (employee) performance. Petter et al. (2008) in a review-based study found the variable system quality affecting positively to individual performance in the context of different organizations. Undurraga (2017) studied technological innovation in news industry, the results of the study suggest that new system increase the news flow as it enables journalists to file news at multiple platform simultaneously. Based on available literature following hypothesis is anticipated.

**H1:** System quality positively affect news flow.

**H2:** System quality positively affect individual performance.

Information quality is one of the very important variables especially in the context of media organizations. Seddon (1997), noticed a supported relationship between information quality and users or individuals at the organization level. The studies by Yoon (2009) and Sørum et al. (2012) supported information quality with a performance at the employee level i.e. individual performance. Petter et al. (2008), conducted meta-analysis on Information system success supported a significant relationship between information quality and individuals. Rai et al. (2002), also found a positive relation of information quality and perceived usefulness. Roldán and Leal (2003) and livari (2005) found significant relationship information quality and user, termed as individual in the current study. In the context of media and communication with particularly in TV channels, Weiss and Schwingel (2008) noticed the positive effect of information quality at individuals i.e. journalists. They found that TV channel having information system has fewer information issues and their news was aired on time with comparisons to those journalists who did not have an information system. Zhang et al. (2016), noted that better information quality result into gratification and gratification contributes to more information writing. The more information writing contributed to more news flow. The second hypothesis is based on the studies mentioned above as:

**H3:** Information quality positively affect news flow.

**H4:** Information quality positively affect individual performance.

Service quality was one of the missing variables in the initial D&M model (DeLone and McLean, 1992). This important variable was included in the updated model of the D&M study (Delone and McLean, 2003). Lin (2007), in the study of online system success found that service quality has a significant tie with the individuals. Wang and Liao (2008), in accessing eGovernment system success experienced a positive relationship between service quality and individuals. Tam and Oliveira (2017), in their study for information systems in mobile banking found that service quality is one of the key factors at the individual level. Al-Debei et al. (2013) studied information systems in the context of web portal success, found service quality is positively affecting the users. Chang et al. (2012) studied information system success in the field of medical services. They found that service quality and user (individual) factors are vital parts of their information system. Weiss and Schwingel (2008), discussed that the better content management system is linked with better content and production of the news. In other words, information system enabled journalists to produce more content effectively. So, based on these studies and many more third hypothesis of the study is proposed as

**H5:** Service quality positively affect news flow.
H6: Service quality positively affect individual performance.

Lodhi (2016), studied Enterprise Resource Planning (ERP) success, the study found a positive relation in individual performance and process performance. Lin et al. (2006), noticed that individual performance enhances business gain which ultimately improves organizational performance. They did an extensive study on more than 250 organizations having an information system in Taiwan and their results showed that individual performance has a positive association with process performance. The fourth hypothesis supported by mentioned studies is as:

H7: Individual performance positively affect process performance.

H8: Individual performance positively affect satisfaction.

Various studies supported the idea that process performance positively influences organizational performance. Dehning and Richardson (2002), theory proposed a strong relationship between process and organizational performances. Lodhi (2016), also proposed a positive relationship between the two variables in the context of ERP systems. Chung et al. (2007), also notices that process performance is positively related to organizational performance. Harr et al. (2019), notices that information system had produced better results regarding competence, partnership, and acquiescence for employees, these factors resulted into employee satisfaction that contributed to overall for organizational performance. Based on mentioned and many more studies the fifth hypothesis of the study as:

H9: Process performance positively affect organizational performance.

H10: Satisfaction positively affect organizational performance.

Weiss and Schwingel (2008), studied that journalists of TV channels having information systems, produced better results for their organizations in comparison to TV channels working manually. Timely news reporting and efficient resource management enabled journalists to contribute to their organization positively. Lodhi (2016), also noticed that there is a significant relationship between individual performance and organizational performance. Based on the studies the sixth hypothesis of the study is as:

H11: Individual performance positively affect organizational performance.

Brautović (2009), discussed the information system (newsroom computer system) increased overall productivity of the organization. One of the main causes of the better performance was improved flow of information (news) due to newsroom computer systems, which became the cause of improved individuals’ performance. Implementation of digitization improved news flow lead to improved work speed of journalists which ultimately resulted into processing of more news and avoided the possibility of working in parallel. Gomez-Mensah (2016), in the study about technology effect in news process (newsgathering, production, and delivery) of Ghana TV discussed that information systems had positives effects on news production and improved individual performance as well. These and many more studies suggested that news flow will mediate between the main component of any Information system that is system, service and information quality and individual performance so the proposed hypothesis is as:

H12: News flow is mediating among the relationship of Service Quality, information quality, and system quality with individual performance.

Spyridou et al. (2013), noticed improvement in news process and satisfaction of individuals due to information system, these factors ultimately contributed towards better organizational performance. Lin et al. (2006), also argued that due to improved individual performance, process performance and satisfaction level were also noticed to have positive effects which lead to improving overall organizational performance. These studies and others like these leads to propose the following hypothesis.

H13: Satisfaction and process performance are mediating between the relationship between individual performance and organizational performance.

2. Method

The present study used survey method for data collection from the journalists who are using news information system for news gathering and production process. The sample of the study is top 15 TV news channels who implemented the news management for news gathering and production process. The selection of the top 15 channels is based on criteria of TRPs (TV Ratings of Programs), viewership and Nationwide Reach. The stratified sampling technique was employed to collect data from the defined population of the study. In survey, stratified sampling is useful to find out key evidence from diverse groups to enable the investigator to develop basic understanding and to know their opinion or attitude towards specific issue (Ary et al., 2002). A sample of 1000 journalists which include reporters, assignment editors, copy editors or desk editors, producers and other staff who is involved in the news gathering and production process through software have been taken for the study. Data was collected from the journalist between the month of January and February of 2020. The detail of 1000 sample size and stratified sampling is provided in the below table.
Table 1. Selection of sample through Stratified Sampling Technique

| Channel    | Islamabad | Karachi | Lahore | Total  | %    | % Strata |
|------------|-----------|---------|--------|--------|------|----------|
| PTV News   | 1000      | 40      | 30     | 1070.00| 0.14 | 143      |
| GEO        | 30        | 800     | 25     | 855.00 | 0.11 | 114      |
| ARY        | 32        | 900     | 20     | 952.00 | 0.13 | 127      |
| Dunya      | 28        | 15      | 100    | 143.00 | 0.02 | 19       |
| Samaa      | 30        | 800     | 18     | 848.00 | 0.11 | 113      |
| 92 News    | 25        | 28      | 80     | 133.00 | 0.02 | 18       |
| Express    | 28        | 25      | 90     | 143.00 | 0.02 | 19       |
| Aaj News   | 25        | 700     | 15     | 740.00 | 0.10 | 99       |
| Dawn News  | 23        | 500     | 20     | 543.00 | 0.07 | 72       |
| Bol News   | 22        | 425     | 18     | 465.00 | 0.06 | 62       |
| News one   | 20        | 400     | 15     | 435.00 | 0.06 | 58       |
| GNN        | 32        | 28      | 150    | 210.00 | 0.03 | 28       |
| Hum News   | 480       | 25      | 22     | 527.00 | 0.07 | 70       |
| 24 News    | 22        | 25      | 250    | 297.00 | 0.04 | 40       |
| NEO News   | 13        | 17      | 115    | 145.00 | 0.02 | 19       |
| **Total**  | **7506**  |         |        |        |      |          |

Preliminary analysis was performed through SPSS. Demographic results showed that majority of the respondents were males (80%) while females were only 200 (20%). In addition to this, the age range of males’ respondents were between 20 to 70 years while for females age range were between 20 to 50 years. The monthly income of the males’ respondents was between 30,000 to 150,000 while for females it was between 20,000 to 100,000. Half of the respondents have minimum qualification of master’s (50%), 45% holds Bachelor or BS degree while 5% respondents have MPhil degree. More than 80% of respondents belongs to cities while remaining 20% belongs to rural areas.

2.1. Measures

Main variables of the study are measured with the help of established scales. The scales are modified to meet the requirements of TV news channels and reliability and validity of the scale is evaluated. The system quality scale is adapted from Gable et al. (2008). The scale for Service Quality is adapted from the study by Parasuraman et al. (1988). The scale to measure Information quality is adapted from Pitt et al. (1995). Individual Performance scale is adopted from the study of Chand et al. (2005) and Axelsson and Sonesson (2004). Organizational Performance is measured from the scale developed by Gable et al. (2008). User Satisfaction scale was adapted from the Lin (2007) and Wang et al. (2007), study. A scale for news flow has been developed with help of existing literature and experts from the academia and professional field. The reliability and validity of the scale has been tested through Cronbach alpha, composite reliability, factor loading, and AVE (Average variance extracted).

2.2. Data Collection Procedure

Before the data collection, a permission was taken regarding questionnaire from ethical review committee of Faculty of Media and Communication Studies. The researchers took the permission from relevant news channels offices and visited their channels on their allocated date and time. Respondents were informed about the purpose of research and a formal consent was taken before the data collection from the employees. The respondents were informed that their identity will not be disclosed, and information will be used only to understand the success of software in news channel. Those employees who were not willing to participate in the study, were excluded.

2.3. Analysis

The researchers used the SPSS version 25 for data entry and initial data screening. All the hypotheses were tested with the help of Smart PLS version 3.2.9.

3. Results

Partial least square (PLS) approach of SEM (Structural equation modelling) was used to test the measurement and structural part of the study. This approach is useful while conducting the exploratory and confirmatory studies (Chin, 1998; Falk, 1992; Jöreskog and Sörbom, 1993; Schaper and Pervan, 2007). Smart PLS 3.2.9 software was used to perform the PLS based SEM analysis. This software was used for this study because it can work on wide range of data set, non-normality, and can handle complex model easily (Hair et al., 2017; Pan et al., 2015). Preliminary assumptions of missing data, data distribution, and outliers were checked as per the recommendations of Hair et al. (2013).
3.1. Measurement Model

The measurement model contains the detail about the factor loadings of the items, Cronbach alpha, composite reliability, average variance explained, and details related to discriminant validity. Table 2 shows the factor loadings of the construct and some construct have low loadings on some items, but their average variance explained is above 0.50 value. Factor loading tells about the loading of each item on construct and threshold value for this is 0.70. Smart PLS provide the two measures of internal consistency, one is Cronbach alpha and second is composite reliability. Cronbach alpha value is old test of reliability and internal consistency. The value of Cronbach alpha for each construct is above the threshold of 0.70 (Hair et al., 2011). Moreover, composite reliability is considered a good measure of internal consistency and unidimensionality of construct. The cut off value for composite reliability is 0.70. Each construct holds a value above 0.70 which is sign of unidimensionality and internal consistency. Convergent validity is measured through average variance extracted (AVE). AVE provides the details related to average variance explained by each construct and it’s cut off value is 0.50 (Hair et al., 2011). Each construct of this study is showing an AVE value above the threshold, so there is no issue of convergent validity in all the constructs.

Table 2. Psychometric Properties of System Quality, Information Quality, Service Quality, News Flow, Individual Performance, Process Performance, Satisfaction, and Organizational Performance

| Variables                   | K  | λ. Range | α   | CR   | AVE  |
|-----------------------------|----|----------|-----|------|------|
| System Quality              | 11 | 0.52-0.82| 0.92| 0.93 | 0.53 |
| Information Quality         | 7  | 0.47-0.83| 0.81| 0.86 | 0.52 |
| Service Quality             | 5  | 0.63-0.84| 0.82| 0.87 | 0.58 |
| News Flow                   | 5  | 0.71-0.83| 0.83| 0.88 | 0.59 |
| Individual Performance      | 7  | 0.67-0.78| 0.87| 0.88 | 0.51 |
| Process performance         | 6  | 0.66-0.83| 0.85| 0.89 | 0.57 |
| Satisfaction                | 3  | 0.78-0.81| 0.71| 0.84 | 0.63 |
| Organizational Performance  | 8  | 0.63-0.81| 0.88| 0.90 | 0.53 |

Note: k = number of items, CR = composite reliability, AVE = Average variance extracted, λ (lambda) = standardized factor loading α = Cronbach’s alpha

There are two ways to ensure the discriminant validity issue. One is Fornell-Lerker Criteria and second one is Heterotrait-Monotrait analysis (Fornell and Larcker, 1981; Henseler et al., 2015). The researchers applied the both techniques to assess the discriminant validity. The table 3 shows the correlation among factors and it is clear from the values that square root of AVE for each construct is greater than its squared correlated with all other construct and matrix diagonal values are greater than the off diagonal value (Fornell and Larcker, 1981; Hair et al., 2017). The is no discriminant validity issue as per the table of the correlation among the factors.

Table 3. Mean, Standard Deviation and Correlation among Factors

| Variables           | M  | SD   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|---------------------|----|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. System Quality   | 3.85| 1.29 | 0.714| 0.084| 0.078| 0.054| 0.14 | 0.049| 0.105| 0.064|
| 2. Information Quality | 3.83| 1.22 | 0.721| 0.52 | 0.365| 0.382| 0.269| 0.546| 0.201|
| 3. Service Quality  | 4.03| 1.22 | 0.768| 0.368| 0.392| 0.334| 0.272| 0.138|
| 4. News Flow        | 3.52| 1.32 | 0.727| 0.518| 0.559| 0.349| 0.243|
| 5. Individual Performance | 4.08| 1.06 | 0.757| 0.383| 0.563| 0.276|
| 6. Process performance | 3.67| 1.35 | 0.795| 0.22 | 0.028|
| 7. Satisfaction      | 3.64| 1.29 | 0.764| 0.277|
| 8. Organizational Performance | 3.62| 1.23 | 0.73 |

Note: M = mean, SD = standard deviation

The threshold for Heterotrait-Monotrait (HTMT) is 0.85 or 0.90 (Henseler et al., 2015; Voorhees et al., 2016) and it provides the details about the discriminant validity issues. The table 4 shows that all these values are less than the cut off value so there is no issue of discriminant validity in the variables.

Table 4. Heterotrait-Monotrait Ratio HTMT Matrix

| Variables           | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. System Quality   | 0.07| 0.07| 0.14| 0.08| 0.10| 0.07| 0.07|
| 2. Information Quality | 0.61| 0.42| 0.48| 0.35| 0.72| 0.21|
| 3. Service Quality  | 0.42| 0.47| 0.43| 0.31| 0.11|
| 4. News Flow        | 0.53| 0.66| 0.38| 0.24|
| 5. Individual Performance | 0.46| 0.66| 0.28|
| 6. Process performance | 0.27| 0.06|
| 7. Satisfaction      | 0.27| 0.29|
| 8. Organizational Performance | 0.29 |
3.2. Evaluation of Structural (inner) Model

In the two-stage approach of partial least square, the second part deals with the structural part of the model. In structural part of model, we evaluate the direct and indirect effects (mediation) in the model. The results of Table 5 indicate that H1, H2, H3, H4, H5, H6 and H7 are accepted. These results suggest that three indicator of news flow namely system quality (H1), information quality (H2), service quality (H3), significantly predict the news flow. Overall, 27.1% variance of news flow can be explained by the three characteristics of quality. Moreover, four indicators of individual performance namely system quality (H4), information quality (H5), service quality (H6), and news flow (H7) significantly predict the individual performance. Moreover, 23.1% variance of individual performance can be explained by the three characteristics of quality and news flow. In addition to this, H8 is supported (β = .34, p < .01) as individual performance is positively related with process performance. Overall, 15.7% of variance of process performance can be explained by individual performance (Figure 1). The results show that individual performance is positively related with satisfaction (β = .45, p < .01), this supporting H9 and explained a variance of 18.2% in satisfaction. The results also indicate that H10 is supported since individual performance is positively related with organization performance. In terms of organization performance, the results show that process performance (β = .36, p < .01) and satisfaction (β = .42, p < .01) is positively related with organizational performance. Overall, 42.1% of variance of organizational performance can be explained by the individual performance, process performance and satisfaction.

Table 5. Direct Effects of quality indicators on different dependent variables

| Antecedent          | News Flow | Individual Performance | Process Performance | Satisfaction | Organizational Performance |
|---------------------|-----------|------------------------|---------------------|--------------|---------------------------|
|                     | Coeff.    | f^2                    | Coeff.              | f^2          | Coeff.                    | f^2          |
| Service Quality     | .32***    | .28                    | .38*                | .26          |                           |             |
| Information Quality | .53**     | .27                    | .25**               | .21          |                           |             |
| System Quality      | .39**     | .22                    | .33**               | .21          |                           |             |
| News Flow           |           |                        |                     |              |                           |             |
| Individual Performance | .34**   | .26                    | .45**               | .32          | .42*                      | .30          |
| Process Performance |           |                        |                     |              | .34**                     | .24          |
| Satisfaction        |           |                        |                     | .42**        | .26                       |             |
| R^2                 | .27       | .23                    | .16                 | .18          | .42                       |             |

Note: Coeff. = standardized regression coefficient.

3.3. Mediation Analysis

To test the mediating hypotheses, two separate mediation analysis were performed with a bootstrap of 5000 values. In the first analysis, new flow was a mediator between the three quality indicators and individual performance. In the second analysis, process performance and satisfaction were a mediator between the relationship of individual and organizational performance. The results indicate that relationship of system quality (β = 0.18, p < 0.05), information quality (β = 0.26, p < 0.01), service quality (β = 0.19, p < 0.01) and individual performance was mediated by news flow which means that three quality indicator (independent variables) had indirect effects on individual performance via news flow. Therefore, Hypothesis H12 was supported. Moreover, second mediation analysis shows that individual performance had indirect effect on organizational performance through process performance (β = 0.20, p < 0.05) and satisfaction (β = 0.17, p < 0.05). The results indicate that process performance and satisfaction were mediator for the relationship of independent variable (individual performance) and dependent variable (organizational performance). Thus, Hypotheses 13 was also supported.
4. Discussion

This study has found the impact of service quality, information quality, system quality, news flow, individual performance, process performance, and satisfaction on organizational performance and relationships of these variables. First, our study found that news flow is directly determined by the three quality indicators (service quality, information quality, system quality). When these three quality indicators work efficiently, they make the better news flow in the software. Second, individual performance depends on the three quality indicators and news flow. According to result, four variables directly affect the individual performance and can increase the journalist individual performance. Third, individual performance is a significant predictor of process performance, satisfaction from software and organizational performance. Fourth, process performance and satisfaction from software is also a significant predictor of organizational performance. In mediation result, the research identified that news flow, process performance and satisfaction from software is mediating the relationship between independent and dependent variable. These results indicated that better individual performance will leads to better organizational performance.

4.1. Theoretical Implications

This research contributes in the existing literature in two ways. First, we identified the news flow as important indicator of individual performance for new organization. News organization works differently than the other organization. In other organization like in universities, hospital and libraries, Delone and Mclean model has already been applied but these organization check the success of their system in terms of emails, websites and customer or patient’s data. In news organization main commodity is news for which this whole system was used. So, the whole purpose of different news management software’s is to effectively and smoothly helps the news reporter to send their news work to editor. Therefore, quality indicators help in the smooth functioning and transmission of news from reporter to editor. Researchers has previously identified that news is the main product that a news organization sells to its audience (Jackson, 2009; McManus, 1992). Channels struggle for breaking news and try to broadcast the news before another channel (Chadwick, 2011; Hamilton, 2004).

Second, satisfaction from software is an important theoretical contribution. Previous research has found that satisfaction from website or software is important element to predict the organizational performance (Kang and Lee, 2010). Previous model of DeLone and McLean (1992) mentioned the user satisfaction but latest model of Dehning and Richardson (2002) excluded it, but we found that satisfaction is important contributor in organizational performance. Satisfaction has direct and significant effect on organizational performance. Moreover, previous research deals with the satisfaction from the usage experience of software (Cheung and Lee, 2009; Sangwan, 2005) but our research defines the satisfaction as the gratification a user receive from the characteristics or features of software. Moreover, our study has extended the D&M IS success model to media organization.
4.2. Practical Implications

The results of this study have three major implications for practitioners and media organizations. First, the study provides insight that how quality indicators contribute to success of individual in an organization. Based on the findings, quality parameters help a reporter, editor or producer to maintain the news management and broadcasting in a better way. The problem in the quality indicator can slow down the process and individual performance. Therefore, channels should focus on the quality parts of software to increase the news flow and individual performance. The more easy, reliable and helpful employees find the software, the more effectively and efficiently, they can perform their duties. Those organizations who have weak system, service or information quality, they can hardly perform like a top organization.

Second, user satisfaction from the features of software is another factor that can help the media organization. Organizations pay less attention to user satisfaction from the implemented system (Khosravi et al., 2013). Our study results indicate that satisfaction from website leads an employee towards better organization performance. So, organizations should keep in mind the interface and design of the software and journalist can consider it more user friendly. For example, if the journalist recommends that different options in the software are hard to access on mobile, then organization should work on it.

Third, our model offers a solution to organization that they can check their success of their software’s and they can evaluate the organization performance. With the help of these findings, they can locate the problem and can prioritise their investment.

4.3. Limitations and Future Implications

One of the research limitations is that we have collected the data from only top 15 organization, so these results are not applicable to those organization who are not using any software in their organization. Moreover, this model has been tested in the media organizations of a developing country. A comparison with other Asian countries media organization or with the advanced countries media organization can provide more generalised results. Future research should explore more dimensions of quality which can contribute in performance of an individual while keeping in mind the media organization. In addition to this, future research should also compare the performance of those organization who have access to news management system in their organization with those who do not have access to these news management systems.

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