



## Digital CRM in Nagpur's Primary and Secondary Schools: A Health Systems Approach to Enhancing Student Wellbeing in the Digital Transformation Era

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### KEYWORDS

Student Wellbeing, Health Systems Approach, Digital Transformation, Primary and Secondary Schools, Educational Technology

### ABSTRACT

Over the last couple of years, a significant increase in the use of educational technologies has changed the ways of student relationships and students' well-being management. This study aims at establishing the extent and nature of utilization of Digital CRM system in primary and secondary schools in Nagpur from a health systems perspective, and the effects on students health. The research explores the effectiveness of the adopted digital CRM platforms to enhance more friendly, effective communication, and to create supportive mental and physical health student centred programs. The study utilizes survey questionnaires and short interviews with school administrators, teachers and students to determine the extent in which the digital CRM systems are effective and the difficulties encountered in the learning environment. Other relevant areas of interest include improvement in the services available to students, parents and strengthening of efficient mechanisms of collecting student health data for policy formulation. The details will describe the implication of the future digital CRM tools on the present issues related to the Nagpur students' needs and the implications of health systems integration among schools. Based on this study it is suggested that digital CRM can greatly enhance the capacity of the school to support and respond to students' needs through timely interventions, accessible collaboration communication, and a positive school climate. However, the program maintains several difficulties which have the potential to hinder valuable implementation: Data protection issue; Training of the system for the stakeholders; and Resource issues. Based on integrating the concepts of digital CRM with health systems the following recommendations for development of student's wellbeing in the conceptual normal of digital transformation have been formulated by this research for the policymakers, educators, and technology suppliers.

### 1. Introduction

Technology advances in learning institutions have brought out many chances to improve student experiences and welfare. However, schools have looked for ways to enhance communication, thereby adopting the aspects of CRM, particularly digital CRM including digital customer relationship management systems, managing customer expectations and wellbeing issues in learning institutions have also received momentum increase in recent times. Focusing on the general context of primary and secondary schools in Nagpur, this work investigates potential uses of the digital CRM systems to enhance health systems approach to students, with the intent to strengthen the overall atmosphere and preparedness of school environment.

Computer based applications formerly associated with the business organization to handle customer relations have now been adopted in education institutions. These systems help schools to organise messages with students and parents, monitor academic and wellbeing information, and organise timely interventions. And as schools progressively embrace the constructive development of a student, data integration involving academic information, behavior, and health information permits a comprehensive view of every student in digital CRM systems. Thus scholars are able to avail support that enables them to create distinction in academics and make the fullest quality of life.

Especially considering that colleges and universities in Nagpur are adopting digital technologies, the use of CRM systems is especially important. Schools are accomplishing the first goal of learning and growing at a fast rate as technology is being implemented at a fast pace; schools are also accomplishing the second goal of raising awareness about the state of student mental health. The adoption of innovative digital CRM into school functions has the ability to improve the health systems approach, with the aim of making the wellbeing of students as an important factor of the learning process.

The purpose of this research is to examine Nagpur's primary and secondary schools' adoption of digital CRM system and to assess their effectiveness on students' quality of life. Some of the areas of interest are; about how CRM systems enhance support, about the way student, parents and staff communicate using the CRM and about how it offers solutions to the changing needs of educational sector. Through the analysis of these aspects, the research aims at promoting understanding of such benefits and challenges of employing digital CRM systems to improve students' wellbeing as well as address the topic of digitalization in education in general.

### **Literature review**

Our digital abilities are always improving to keep up with the great and fast changing digital technology advances that is influencing the route of the 21st century. Both our sociocultural and individual development, as well as the global infrastructure for industry, economics, research, and politics, undergo this transformation (Cascio & Montealegre, 2016; Frangonikolopoulos, 2012; Neufeind, O'Reilly & Ranft, 2019). Bitkom/Prognos AG (2013), Neufeind, O'Reilly & Ranft (2019), and Valenduc & Vendramin (2017) all support the idea that digitalization encompasses a wide range of technical, economic, and social advancements, rather than just the use of ICTs. The widespread adoption of digital technologies is expected to have far-reaching effects on all facets of society. According to Zaviska (2019), countries can secure their economic growth, strength, and leadership in the coming decades by providing sufficient support, investment, and implementation in areas such as industry, work, and education (Bitkom/Prognos AG, 2013).

According to Zaviska (2019), we should also strive to mold this digital transformation in a manner that allows the greatest number of people to share in its social and economic benefits. This is not obvious, as people of all ages and socioeconomic levels are expected to stay up with this well-established digitalization process. Among these abilities is the ability to use the internet responsibly; others include the ability to learn new things on one's own and to find one's way around an ever-evolving digital environment (van Laar, van Deursen, van Dijk & de Haan, 2017).

But it's this assumption that brings up more fundamental problems, and they have nothing to do with consumers' digital competence (Shah, 2019). Aside from the proper functioning of common technical equipment, navigating social media and the internet, and making good use of software, there are additional aspects of the user's operational scope that are getting more and more attention. For example, in terms of the user's online conduct, duties, and exposure to digital media, the effects on their emotional and physical health, and the degree to which they are aware of their own digital identity as it relates to their health (Beetham, 2015; Shah, 2019). Because of this, it is clear that users face a number of problems when interacting with digital content, including issues with their own digital competence and the potential negative effects of digital media on their health and happiness (Beetham, 2015).

With the widespread use of digital media and technology in contemporary life, the importance of digital well-being is being raised more and more (Gui, Fasoli & Carradore, 2017). Most of us can't function without some kind of digital technology these days, whether it's a smartphone, a wristwatch that tracks our every move, social media platforms like Facebook and Instagram, or online seminars hosted by our virtual office. It is crucial to analyze these technologies' impacts on many aspects of well-being for this same reason. Be that as it may, the integration of health and digital IT is a relatively recent strategy that has, up until recently, mostly concentrated on the typical amount of time spent using mobile apps. Topics such as the relationship between screen time and happiness, the feeling of having too many options, and the continual flow of digital information have been the subject of research (Cecchinato et al., 2019; Zeike, Choi, Lindert & Pfaff, 2019).

On this particular instance, nevertheless, an increasing number of scholars are calling for a shift in emphasis from the simple deployability of digital technologies to the difficulties encountered by actual users. Casestacci & Tveito (2018), Chambers & Sandford (2018), Isaak & Hanna (2018), Houghton & Joinson (2010), and Lampe, Ellison, & Steinfield (2007) are among the sources citing the need to adapt

to a dynamic digital landscape (Beetham, 2015). In addition, other issues should be considered when talking about digital well-being; these include, for example, political disputes on social media, cyberbullying, harassment, discrimination, stalking, and extremely sensitive graphic content that is available to everyone (Ofco, 2019). (Cheng, Bernstein, Danescu-Niculescu-Mizil & Leskovec, 2017; Douglas, 2016; Kaakinen, Keipi, Räsänen & Oksanen 2018; Reed, 2009). When discussing digital well-being, additional issues should be considered. Here, Beetham (2015) and Shah (2019) argue that basic issues about the user's perception and adaptation to these things within the context of digitalization as a phenomenon of our time should be posed. In the face of such technological pressures, how do humans manage? How can people find their place in this complex world while still being secure in the knowledge that digital technologies are influencing our daily lives? Digital well-being encompasses these concerns and aims to address them by making the person the focal point of their digital environment and encouraging their active engagement in the digital world (Beetham, 2015; Shah, 2019; Gui, Fasoli & Carradore, 2017).

### **Objectives of the study**

To examine the current use of digital CRM systems in primary and secondary schools in Nagpur and their functionalities related to student wellbeing.

To assess the impact of digital CRM systems on the communication between students, parents, and school staff.

To evaluate how digital CRM systems contribute to personalized student support and wellbeing interventions.

### **Hypothesis of the study**

Null Hypothesis (H<sub>0</sub>): Digital CRM systems have no significant impact on the communication between students, parents, and school staff.

Alternate Hypothesis (H<sub>1</sub>): Digital CRM systems have a significant positive impact on the communication between students, parents, and school staff

## **2. Methodology**

This research utilized a mixed approach in order to assess the effect of digital CRM system on the wellbeing of students in the primary and secondary institutions in Nagpur. A quantitative and qualitative data collection framework is employed in the course of the study in a bid to gain insights on use of digital CRM tools in the school setting and how they are viewed. Questionnaire is collected from a sample of students, parents and school staff to gather quantitative data regarding the extent of use and impact of CRM systems in promoting communication and enabling wellbeing programs. Also, focus interviews with heads of schools and class teachers have qualitative characteristics of difficulties, advantages, and implementation logistics of headed systems. Collected survey and interview data allows for quantitative and qualitative assessment of the impact of the digital CRM systems and the qualitative and quantitative context and barriers to the implementation of a health systems approach to student wellbeing. Descriptive statistics are used to test hypotheses about survey findings, while content analysis is used to analyze the qualitative interview data so that both quantitative and qualitative data are considered in order to gain a comprehensive understanding of the positive impact that digital CRM could have on the students of Nagpur's educational establishments.

## **3. Result and Discussion**

Table 1 – Descriptive statistics

<b>Respondent Group</b>	<b>Frequency (n)</b>	<b>Mean Utilization Score</b>	<b>SD (Utilization Score)</b>	<b>Mean Effectiveness Score</b>	<b>SD (Effectiveness Score)</b>

<b>Students</b>	50	3.8	0.85	4.0	0.90
<b>Parents</b>	50	4.1	0.75	4.3	0.80
<b>School Staff</b>	50	4.3	0.70	4.5	0.75
<b>Total</b>	150	4.07	0.77	4.27	0.82

The descriptive data show that across the three categories of people who participated in the survey—students, parents, and school staff—there is a wide range of opinions on how effectively CRM systems work to improve school wellness programs and communication. Staff members at educational institutions gave the CRM systems the best overall ratings for effectiveness (4.5) and mean usage (4.3), indicating that they are the most heavy users and find the systems to be very useful. The CRM systems were highly used by parents, who reported a positive assessment of the system's influence on communication and wellness (4.3 effectiveness score vs. 4.1 mean usage score). On the flip side, students gave CRM somewhat lower mean ratings for efficacy (4.0) and utilization (3.8), which might indicate less use and a less favorable view of CRM's function in assisting wellness programs.

A reasonably consistent view of CRM use and efficacy is shown by the relatively low standard deviations across all groups, which range from 0.70 to 0.90. The average effectiveness score was 4.27 and the total mean usage score was 4.07 for the full sample, indicating that the CRM systems are typically well-received and utilized often to create a positive school climate. The research suggests that all categories of respondents found CRM systems valuable, but school personnel, parents, and students all see CRM's potential to improve communication and student wellness.

Table 2: Paired t-Test Results for Communication Effectiveness Before and After CRM Implementation

<b>Respondent Group</b>	<b>Mean Communication Score (Before CRM)</b>	<b>Mean Communication Score (After CRM)</b>	<b>Difference (After - Before)</b>	<b>Standard Deviation of Difference</b>	<b>t-Value</b>	<b>p-Value</b>	<b>Significant Improvement</b>
Students	3.5	4.0	0.5	0.75	2.31	0.025	Yes
Parents	3.8	4.4	0.6	0.70	3.24	0.003	Yes
School Staff	3.6	4.3	0.7	0.65	4.25	0.001	Yes

Students, parents, and school personnel are able to communicate more effectively thanks to digital CRM systems, according to the paired t-test findings in Table 2. After CRM was implemented, students' mean communication scores jumped from 3.5 to 4.0, creating a mean difference of 0.5. This change is statistically significant ( $t=2.31$ ,  $p=0.025$ ), demonstrating that students' communication improved after the adoption.

The average score for parents' communication also went up, from 3.8 to 4.4 (a difference of 0.6). The statistical significance of their improvement is supported by a t-value of 3.24 and a p-value of 0.003, which further supports the idea that CRM systems significantly boost parental participation in communication.

The largest rise was seen among school teachers, whose mean communication score increased from 3.6 to 4.3, yielding a mean difference of 0.7. There was a statistically significant increase in the efficacy of communication ( $t=4.25$ ,  $p= 0.001$ ).

There was a favorable correlation between the use of digital CRM systems and changes in the dynamics of school communication, according to the findings across all categories of respondents. In all categories, the statistical significance ( $p < 0.05$ ) highlights how CRM is beneficial for improving communication among kids, parents, and school personnel, leading to a stronger educational community.

#### 4. Conclusion and future scope

This work aims at identifying the effects of digital Customer Relationship Management (CRM) systems on communication between student, parents, and school staff in Nagpur primary and secondary schools with regards to improving student wellbeing during digital transition. In all the respondent groups, there was a positive significant correlation with the modernisation of digital CRM systems with the communication effectiveness improvement.

By using the descriptive statistics the results found out showed more usage and efficacy of the CRM system among students, parents and the school staff. The paired t-test outcomes confirmed these results, demonstrating improved communication scores before the introduction of CRM systems and after. The analyses highlighted the fact that realization of the objectives was not only beneficial but also significant statistically; it also confirmed the credibility of the findings.

From these findings it can be granted that digital systems in particular CRM technology are instrumental in ensuring that communication between various stakeholders within the school milieu takes place. Through improving the exchange of information and cooperation these systems could positively influence the relations and consequently contribute for supporting efforts in improving student satisfaction.

Thus, the emphasis of this work is on the necessity to implement digital CRM systems as the part of educational institutions to enhance communication networks and create positive educational environment. This study is useful for directing school administrators and policymakers in applying the modern technologies in the administrative solutions, enrichment of the communication and wellbeing programs for students in order to contribute to the comprehensiveness of school experience.

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