

# The Impacts of Communication in Transformational Leadership and ICT on Customer Satisfaction in the Educational Sector

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## Abstract

*This research aims to assess the impacts of implementing Transformational Leadership (TL) and Information Communication and Technology (ICT) in the education sector to increase Customer Satisfaction especially during uncertainties. Using the quantitative approach, this research argues the importance of customer satisfaction in education business influenced by the communication skills implemented in Transformational Leadership and ICT. Data from 286 respondents using stratified data sampling are gathered and analysed using PLS. The results showed that TL has a stronger influence than ICT in improving customer satisfaction with a value of 0.547 and 0.329, respectively. This study indicates the importance of Communication to build relationships with customers in Transformational Leadership to improve Customer Satisfaction in education. With transformational Leadership and the application of ICT, educational institutions as business units can provide better service and, as an implication, can improve company's profit.*

*Keywords: Customer Satisfaction; Business; Transformational Leadership; Communication; ICT;; Education*

## Abstrak

Penelitian ini menguji pengaruh Kepemimpinan Transformasional dan IT di dunia pendidikan untuk meningkatkan kepuasan konsumen terutama di masa ketidakpastian. Dengan menggunakan pendekatan kuantitatif, penelitian ini berargumen tentang pentingnya kepuasan pelanggan dalam bisnis pendidikan yang dipengaruhi oleh kemampuan komunikasi dari kepemimpinan transformasional dan IT. Data dari 286 responden dikumpulkan dan dianalisis dengan menggunakan PLS. Hasil menunjukkan bahwa Kepemimpinan Transformasional yang menitikberatkan pada kemampuan komunikasi memiliki pengaruh lebih kuat daripada IT dalam meningkatkan kepuasan pelanggan dengan nilai 0,547 dan 0,329. Penelitian ini mengindikasikan pentingnya komunikasi dalam membangun hubungan dengan pelanggan dalam Kepemimpinan Transformasional untuk meningkatkan kepuasan pelanggan. Dengan penerapan Kepemimpinan Transformasional dan IT, maka institusi pendidikan sebagai unit bisnis dapat memberikan layanan yang lebih baik dan sebagai implikasinya, dapat meningkatkan keuntungan usaha.

Kata Kunci : Kepuasan Pelanggan; Bisnis; Kepemimpinan Transformasional; Komunikasi; ICT; Pendidikan

## INTRODUCTION

### Research Background

During these few years, educational institutions experience many challenges due to limitations for students to attend school. This leads to limited interaction between teachers and students or between students and other students. Education obviously cannot go as it usually would. The low ability of schools to adapt to technology advancement and pandemic situations cause parents and learners to experience disappointment. This disappointment leads to parent's decision to move their children to other schools which are assumed by the parents better. Therefore, it is vital to meet the parent's expectations as in this research refer to as customer satisfaction.

In addition, educational psychology between primary education and other levels of education has very different concepts and characteristics. The difficulties faced by teachers and students, especially in the current pandemic period, are apparent. In contrast to other levels of education, elementary school students will be much more challenging to be expected to learn independently and experience development in emotional intelligence and intelligence with the implementation of distance learning. Currently, parents' participation is needed to support success in implementing online learning. In addition, the difficulty of building closeness and interaction between teachers and students needs to be a serious concern because elementary school students urgently need encouragement and interaction with both teachers and other learners.

So, in this study, we raised the importance of transformational Leadership that, according to theory, can overcome the weaknesses of traditional Leadership that is more transactional or instructional towards independence, creativity, and direction (Breevaart et al., 2013; Tepper, 1993). Transformational Leadership can adapt quickly according to changing environments. Transformational leadership gives followers the freedom to be creative and use different ways to achieve their desired goals (Andriani, Kesumawati, & Kristiawan, 2018; Lai, Tang, Lu, Lee, & Lin, 2020). In addition, as a novelty of this research, this research examines the influence of transformational leadership types and the application of ICT to increase customer satisfaction. Previous education research focuses on learning outcomes, learning processes, and students. Education research that assesses customer satisfaction, in this case, students and parents, are very limited. Therefore, the research questions are as formulated as follow: *Does Transformational leadership positively influence Customer Satisfaction in Primary Education? Does ICT positively influence Customer Satisfaction in Primary Education? Do Transformational Leadership and ICT simultaneously and significantly influence Customer Satisfaction in Primary Education?*

### **Student as Customer (SAC) Model**

When an experiential performance or outcome fulfills one's expectations, one is said to be satisfied. The proportional magnitude of expectations and perceived results determines satisfaction. Expectations themselves must be measured before students even enter the Institution of Education, suggesting that researchers must determine what students expect before enrolling (Palacio et al., 2002). With the current situation where students are also treated as customers, as they pay and deserve to be treated as expected, their opinions and thoughts have become a main concern for the school.

In this SAC model, schools consider the students as the main customers and the schools must pay attention to the student satisfaction, which in this research refer to customer satisfaction based on their expectations and perceived performance (Hasan, Ilias, Rahman, & Razak, 2008). To identify this, it is essential for schools to measure the customer satisfaction (Beerli Palacio et al., 2002). Though considered important, this SAC model has created debates among academics and practitioners as schools are originally non-profit organizations and should not be aiming for profit.

However, the senses of keeping the services at top level to attract the potential customers and keeping the existing customers have proven to be crucial in the school survival (O'Keeffe, 2013). Educational institutions need students to survive and thrive. Meanwhile, the students purchase educational services by paying school fees. Therefore, they should be treated the same way as the customers of any goods and services (Ijaz et al., 2011). After the services, the students provide feedback to the schools and expect for changes in the future services (Clayson & Haley, 2005).

### **Transformational Leadership**

Leadership is the ability or readiness possessed by someone to influence, encourage, invite, guide, move, direct, and force others or groups to accept that influence and do things that can help achieve

specific goals that have been set (Boddy, 2014; Burke, 2017; Fassinger, Shullman, & Buki, 2017). Transactional and transformational leadership are two conflicting styles of leadership that James MacGregor Burns discusses. (Awan, Kraslawski, & Huiskonen, 2018; Breevaart et al., 2013; Tepper, 1993). The most basic transactional The promise of rewards for labor is leadership. The goal of transformational leaders is to fully engage their followers and inspire them to achieve at a higher level. They approach their work from a more altruistic perspective (Bass & Riggio, 2006; Egri & Herman, 2000; Lin & Hsiao, 2014).

In order to alter and transform people such that they are willing to change and better themselves, transformational leadership involves motivations, meeting needs, and showing respect for subordinates (Nonaka & Takeuchi, 2011; Zhang, Waldman, Han, & Li, 2015).

Burns (1978) stated that both transformational and transactional leadership are contradictory. The transactional leaders work within the existing cultures of the organization meanwhile the transformational leaders can change the existing cultures.

Furthermore, Bass, Bernard (1985) explains that three conditions must be managed in implementing a transformational leadership model, namely dissatisfaction with the status quo, the need for future visions and models, and the need for a well-managed change process. This study will use transformational leadership as the operational variable: First, the ideal influence (charisma). Second is the ability to provide inspirational motivation, which can work through words and examples. Third, individual considerations, namely genuine attention to the needs and feelings of followers, how far a leader pays attention to followers. Fourth, the capacity of leaders to push their subordinates to be inventive and creative stimulates their minds.

Mccraven (2015) also states that Leadership in uncertain times, transformational Leadership covers various aspects, including a focus on intrinsic motives and positive development of followers. Moreover, according to Lau Chin (2011), transformational Leadership is a model consistent with today's higher education goals. They enable and encourage faculty, students, administrators, and other staff to transform institutions and enhance student learning, generate new knowledge, and empower students to become agents of positive social change in the larger society. Individual consideration is defined as giving an individual team member genuine attention to each other's state of mind, needs, and emotional concerns. Leaders that excel at demonstrating empathy and compassion are attuned to their workforce. Regardless of a team member's position, duration, or job description, leaders that engage in individualized consideration recognize the need of developing personal bonds with each member of their organization. Therefore, it is hypothesized that

*H1: Transformational Leadership has a positive significant influence on Customer Satisfaction.*

### ***Information, Communication dan Technology (ICT)***

ICT has mostly been utilized in the business sector to assist employees and management in accessing and processing massive volumes of information in order to boost productivity. However, little to no information is utilized in the field of education to increase student happiness, maybe because education managers are mostly uninitiated in the use of information management systems. As a result, despite increased access to ICT in schools, the application of new technology to increase student happiness is still somewhat limited. Additionally, a lack of training presents challenges since many instructors are uncomfortable using new technologies in the classroom and lack the specific training required to do so. ICT has had a significant influence on teaching and administration in the educational sector (Carnoy, 2005).

Roger's theory in Orr (2003), the diffusion of innovation, attitudes have a significant impact on how people interact within groups and organizations. According to the notion, people who choose to use and absorb advancements like technology have a favorable attitude toward them. Let's say ICT is viewed

as a workplace innovation. The diffusion of innovation concept appears to be applicable in this situation to explain the mechanisms that lead instructors to embrace and use ICT in their classrooms in order to support their classroom instruction (Chang & Tung, 2008; Hermans, Tondeur, van Braak, & Valcke, 2008).

According to Rodriguez Casal (2007), when ICT is completely incorporated into other sectoral development projects, such as those in education or health, its potential advantages are at their greatest. Moreover, the most effective ICT program combines traditional media with new forms of ICT. At the same time, the internet is a powerful tool for connecting networks and exchanging large amounts of information over long distances. This is, of course, very influential, especially during the current pandemic. Although ICT can deepen the digital divide, it clearly should not be eliminated. The international community strongly recognizes the value of ICT. Diffusion of technological innovation can be described as successive adoptions of policy innovation, in this study referred to as acceptance of innovation. The big question lies in the operating mechanisms used during adoption decisions.

ICT literacy as part of the skills of the 21st century is required by society to survive in this century (Cevere & Gailums, 2017; De Marez & Verleye, 2004; Fuchs, 2008). Along with that, the characteristics of our students who are already familiar with technology and reviewed from the ability of schools to purchase technological equipment direct teachers and schools to integrate ICT in learning immediately.

The study argues that customer satisfaction can be improved by applying technology to educational organizations, namely schools. Based on previous research by (Makarem, Mudambi, & Podoshen, 2009), it is explained that technology-based interaction management between customers and companies is crucial. Interactions between organizations and customers do not happen only in face-to-face service meetings but also in the form of voice-to-voice interactions that use technology. As a result, new and more potent ideas are needed to comprehend how information technology (IT) resources contribute to value in management education. This study makes the case that educational technology enables teachers to include students and enhance learning outcomes, which raises student happiness. Therefore, the second hypothesis can be formulated as follow:

*H2: ICT has a positive significant influence on Customer Satisfaction.*

### **Customer Satisfaction**

Elliott & Shin (2002) defined student satisfaction as the alignment of students' subjective evaluations of various outcomes and experiences related to education. The repeated experiences during the learning journey shape student satisfaction. The concept of quality and customer satisfaction has grown in the education sector and received considerable attention (Teeroovengadam, Kamalanabhan, & Seebaluck, 2016). This trend has also been seen in developing countries such as Indonesia.

Customer satisfaction and quality of service have been important topics of discussion among academics and researchers over the past few decades (Barnes, 2007; Avdjieva & Wilson, 2002). Service quality can be measured by how customer expectations and perceptions are achieved and lead to customer satisfaction (Cronin & Taylor, 1994; Ekinici, Dawes, & Massey, 2008; Petruzzellis, D'Uggento, & Romanazzi, 2006). Students are important clients for educational institutions, and if they are satisfied, they will be loyal, stay in school, and spread good word about the institution (Arambewela & Hall, 2009; Helgesen & Nettet, 2007; Mavondo, Tsarenko, & Gabbott, 2004). Furthermore, Banwet & Datta (2003) believe that customer satisfaction creates loyalty, whereas satisfied students are interested in taking other courses/services that are available in that institution.

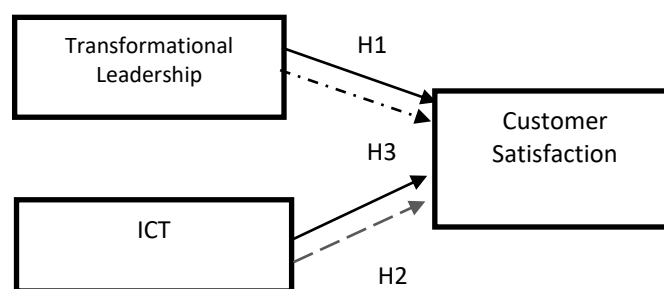
The Social Learning theory proposes that expectations predict behavior (McLeod & Wainwright, 2008), which was why this theory has been used in studies which investigated student satisfaction

measured from the expectations and perceptions. Hence, student satisfaction is still a complex phenomenon and has different dimensions (Marzo, Iglesias, & Rivera, 2005; Richardson, 2005).

Moreover, Achrol & Kotler (2012) stress that When someone compares the performance (results) to what was anticipated, they will either feel satisfied or disappointed. Customer dissatisfaction results from performance that falls short of expectations. The consumer is happy if the performance lives up to their expectations. The consumer is extremely delighted or satisfied when performance meets or surpasses expectations. The customer's reaction to the assessment of perceived disconfirmation between prior expectations and the product's actual performance felt after its use is known as customer satisfaction or discontent.

Similarly, Weerasinghe, Lalitha, & Fernando (2017) define student satisfaction as a short-term attitude that evaluates students' experiences, services, and educational facilities. Previously measured by a shared satisfaction framework, this student satisfaction model was re-developed. Student satisfaction is found widely in the educational research literature and has influenced student persistence, retention, motivation, and success. Caskurlu, Maeda, Richardson, & Lv (2020) found a strong positive relationship between Teaching Presence and perceived student satisfaction and learning. Nowadays, the attention to customer satisfaction and dissatisfaction has been greater because the goal of a company is to create satisfaction for customers. The higher the level of customer satisfaction, the greater the profit for the company because the customer will repurchase the company's products. However, if the level of satisfaction felt by the customer is trim, then there is a possibility that the customer will move to a competitor's product. Therefore, this research argues that the interaction of transformational leadership and ICT positively influences Customer Satisfaction. Hence, the third hypothesis can be written as:

*H3: The interaction between Transformational Leadership and ICT has a positive significant influence on Customer Satisfaction*



*Figure 1. Research Framework*

### **Research Methodology**

The study used a quantitative approach using closed questionnaire methods. The sample was 286 parents out of 547 parents. The data sampling technique used is Simple Random sampling. The instruments used in the study were questionnaires and interviews consisting of 32 indicators. The use of 5 Likert scales ranging from 1 for Strongly Disagree to 5 for Strongly Agree.

Table 1. Validity and Reliability Test Result

Variable	Items	Outer Loading	C.R.	AVE
<b>Transformational Leadership</b> <i>The behavior of a leader who keeps good relationships with the students and parents inspires and motivates them to achieve shared goals.</i>	The principal has good communication with the parents.	0.905	0.98	0.82
	The principal has a good relationship with the parents and students.	0.922		
	The principal is open to opinions and suggestions.	0.936		
	The principal can control emotions and egos.	0.926		
	The principal can control himself	0.938		
	The principal can encourage the students.	0.935		
	The principal can motivate the students	0.939		
	The principal is proactive when facing problems.	0.913		
	The principal can inspire the students.	0.908		
	The principal can set a realistic and achievable vision.	0.914		
	The principal can communicate the visions, missions, and goals effectively.	0.890		
	The principal can adapt to changes.	0.893		
	The principal can share for mutual goals.	0.881		
	The principal can make a good decision.	0.915		
	The principal stimulates and encourages students' creativity.	0.882		
	The principal takes care of and develops the people who think independently.	0.910		
The principal dares to take risks and listen to parents' and students' opinions.	0.866			
The principal gives opportunities to parents and students to speak up their minds and opinions.	0.916			
<b>Information Communication and Technology</b> <i>The use of ICT in learning and school</i>	Students do not have difficulties in using online applications.	0.773	0.95	0.70
	The school uses online applications	0.866		
	The school has accessible websites.	0.883		
	The school has accessible applications.	0.892		
	The school uses electronic forms and online chats to simplify communication.	0.816		
	The school transaction is done online (paperless).	0.883		



Variable	Items	Outer Loading	C.R.	AVE
<i>service</i>	Students can use the technology well.	0.827		
<b>Customer Satisfaction</b>  <i>The satisfaction degree of students and parents on the education service at school.</i>	I feel satisfied with the learning process at school.	0.857	0.96	0.77
	I am happy to let my children study at school.	0.914		
	I will continue my children's studies at school.	0.896		
	I will register for next year's study.	0.822		
	I recommend the school to my relatives	0.907		
	I suggest the school to my relatives	0.911		
	I send my feedback to the school well.	0.857		
	I received responses to my complaints.	0.914		

From the Table above, all the constructs incorporated in the study are reliable and valid to continue this research. Quantitative research in this study used questionnaires distributed to the parent and student group. The questionnaire uses the 5 Likert scale.

## RESULT AND DISCUSSION

*Table 2. Descriptive Statistical Results*

	Mean	Std. Deviation	N
Customer Satisfaction	33.5559	6.10223	286
Transformational Leadership	76.9580	14.08763	286
IT	29.8182	5.10196	286

From the descriptive results in Table 2, it is known that Customer Satisfaction has an average value of 33.5559 with a standard deviation value of 6.10. At the same time, transformational Leadership has an average value of 76.9580 with a standard deviation value of 14.08. Furthermore, the ICT variable has an average value of 29.8182 with a standard deviation value of 5.10.

*Table 3. Inner VIF Values Test Result*

	Customer Satisfaction
Customer Satisfaction	
IT	2.569
Transformational Leadership	2.569

From the correlation test written in table 8, it is known that the three variables used in this study have an inner VIF Value greater than 1. Still, far below 10, it can be concluded from the correlation test results that the three variables proved to be interconnected and correlated but did not occur high multicollinearity.

*Table 4. R-Square Test Result*

	R Square	R Square Adjusted
Customer Satisfaction	0.689	0.686

Table 4 shows an Adjusted R Square value of 0.686 which means that both independent variables, namely Transformational Leadership and Information and Communication Technology (ICT), represent customer satisfaction variables of 68.6%, which is excellent.

*Table 5. Bootstrapping Test Results*

	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	P Values
ICT -> Customer Satisfaction	0.329	0.331	0.058	5.628	0.000
Transformational Leadership -> Customer Satisfaction	0.547	0.546	0.059	9.292	0.000

Based on the results of the bootstrapping test in table 5, Transformational Leadership has a significance value of  $0.00 < 0.05$  at a 95% degree of confidence. It can be said that transformational Leadership has proven to affect customer satisfaction significantly. With this result, hypothesis zero is rejected, and hypothesis 1 is accepted. In addition, the ICT variable is seen to have a significant value of  $0.00 < 0.05$  at a 95% degree of confidence. Then it can be concluded that ICT variables are proven to affect Customer Satisfaction significantly.

In addition, from the results of the bootstrapping test above, it can be seen that the T-Statistics value from ICT relationship to Customer Satisfaction is 5.628 and from Transformational Leadership to Customer Satisfaction of 9,292. From the value of T-Statistics, it is known that Transformational Leadership has a greater influence than ICT. These results reflect the importance of Transformational Leadership to be more focused on improving customer satisfaction. In addition, ICT influences Customer Satisfaction by 0.329, and Transformational Leadership influences Customer Satisfaction by 0.547. Thus, it is proven that in addition to both variables having a significant positive influence on



Customer Satisfaction, both have a solid and significant contribution to Customer Satisfaction. However, Transformational Leadership has a more substantial influence than ICT. In its implementation, schools as educational institutions need to prioritize the proper application of Leadership in pandemic conditions like today, namely transformational Leadership by applying the principles and characteristics of a transformational leader while also ensuring that ICT implementation remains a concern.

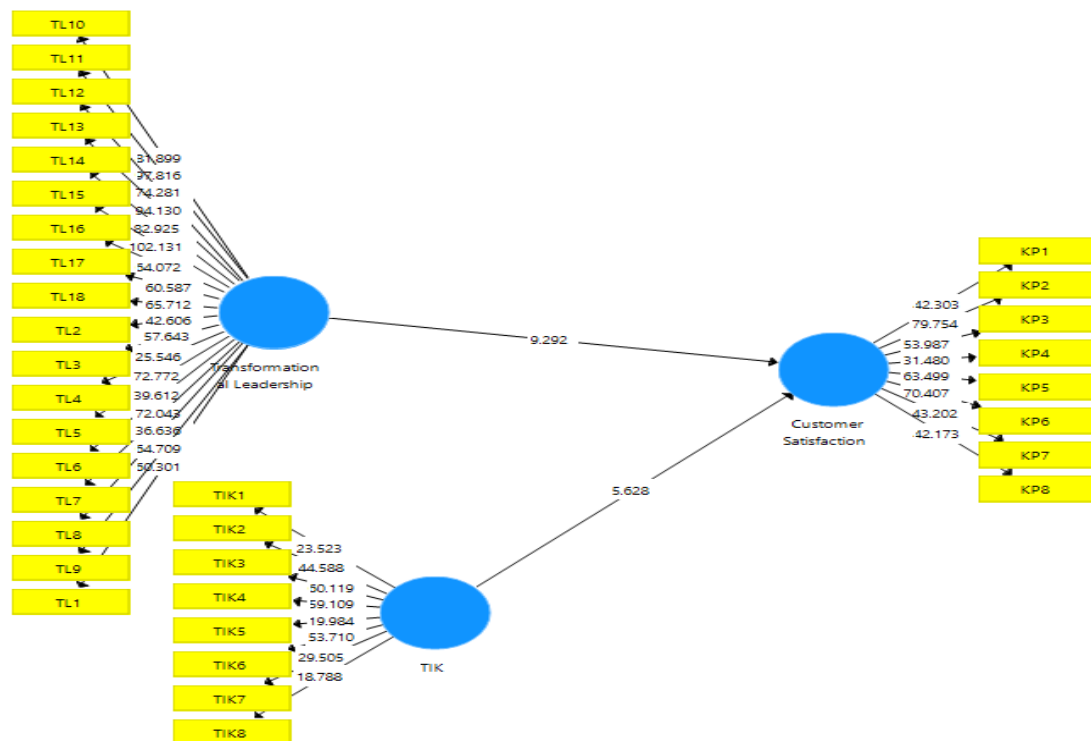


Figure 2. Bootstrapping Result Test Results

The ANOVA test, which tested the relationship between Transformational Leadership variables and ICT working together against customer satisfaction variables, had a significance value of  $0.000 < 0.05$ , which means that both transformational leadership and ICT variables directly affect customer satisfaction. Thus, the null hypothesis was rejected, and hypothesis 3 was accepted.

Table 6. ANOVA Test Result

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7268.908	2	3634.454	307.609	.000 <sup>b</sup>
Residual	3343.697	283	11.815		
Total	10612.605	285			

- a. Dependent Variable: Customer Satisfaction
- b. Predictors: (Constant), ICT, Transformational Leadership

## Discussion

The bootstrapping test shows a P-value of  $0.00 < 0.05$  at a 95% degree of confidence. The result shows that the relationship between Transformational Leadership and Customer Satisfaction is significant. The result reinforces previous studies that confirm that transformational Leadership significantly impacts employee and organizational performance (Buil, Martínez, & Matute, 2019; Hemsworth, Muterera, & Baregheh, 2013). With improved employee and organizational performance through individualized consideration approaches, intellectual stimulation, inspirational motivation, and ideal influence, customer satisfaction is expected to be achieved through the service process (Vargas-Sanchez & Perano, 2021).

The results of this study confirm research by Cross, Edmonson, & Murphy (2019), which found that leadership development helps encourage connections and maintain relationships, in this case, of course, from the principal to all his subordinates, namely teachers, as well as with parents and students. It can then be concluded that following previous research by Breevaart et al. (2013), transformational Leadership is an important predictor of satisfaction with leaders. The researchers' argument proved that transformational Leadership is a major predictor of customer satisfaction from these conclusions. This research also has managerial implications that schools or educational institutions need to improve customer satisfaction. Authoritarian and conventional headteacher leadership is no longer relevant in the present, especially during the new normal, where the learning process runs virtually, and physical supervision is difficult. There needs to be intellectual stimulation, individualized consideration, inspirational motivation, and ideal influence as transformational leadership characteristics to have maximum influence on teachers, parents, and students and ultimately affect customer satisfaction.

*Hypothesis 1: Transformational Leadership has a positive significant influence on customer satisfaction.*

Bootstrapping test results showed the ICT Variable had a significance value of  $0.00 < 0.05$  at a 95% degree of confidence in Customer Satisfaction. This value shows that statistically, ICT variables significantly influence customer satisfaction variables. In previous research by Makarem et al. (2009), technology in schools has improved customer satisfaction, and interaction between technology customers in organizations is critical to business success. Strengthened by (Rueda, Benitez, & Braojos, 2017), which found that the use of technology-based social media applications can strengthen relationships and interactions between customers and organizations, ultimately improving customer satisfaction.

This second hypothesis test reinforces previous research by Kumar (2008) that educational institutions have a mission to make the teaching and learning process effective and exciting. The use of ICT in Education provides more excellent opportunities than traditional teaching. Using ICT, universities and educational institutions can improve the admission process by placing and receiving complete forms online. It also helps in the faster services. With increased customer satisfaction, the students will still attend the school or even recommend acquaintances to attend school there. Therefore, customer satisfaction becomes an essential novelty in this study as agreed by other previous studies in the world of marketing and others (Cunningham, Young, & Gerlach, 2009; Giebelhausen, Robinson, Sirianni, & Brady, 2014; Jayawardhena, 2010; Jörling, Böhm, & Paluch, 2019), but still very limited in the world of education. Therefore, from the explanation above, it is concluded that

*Hypothesis 2: ICT has a positive significant influence on customer satisfaction.*

The analysis results showed that the interaction of Transformational Leadership and ICT to Customer Satisfaction has a significance value of  $0,000 < 0.05$ , which means that the interaction between Transformational Leadership variables and ICT is proven to affect Customer Satisfaction significantly.

Morriss & Frei (2012) mentions that it also takes leaders who have dedication and an excellent culture to improve customer satisfaction in carrying out transformations and technology. In addition, Jayawardhena (2010) also revealed that the total quality of service consists of three components, namely: technical quality (quality of service output received by customers) and functional quality (quality of delivery of a service). In this case, technology primarily determines technical quality, and functional quality is determined by transformational leadership qualities that can improve customer satisfaction.

From the results of the 3rd hypothesis test, then the argument of this study is proven. Transformational Leadership and technology working together can improve customer satisfaction. The results reflect how vital educational institutions are to develop transformational Leadership of principals and increase ICT use in learning and school service processes to improve customer satisfaction. Furthermore, the results of quantitative research given to teachers reinforce the results of previous quantitative research by confirming the findings and arguments that the principal of SDS Westin is a transformational leader.

*Hypothesis 3: The interaction of Transformational Leadership and ICT significantly influences customer satisfaction.*

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on the findings and results, the research comes up with some conclusions. First, transformational Leadership was shown to directly influence customer satisfaction with a P-Value of  $0.00 < 0.05$  and a T-Statistics value of 9,292. This proves that Transformational Leadership is an essential factor in organizational performance and for the betterment of schools. With transformational Leadership, the principal as a leader has the characteristics of an open attitude, willingness to listen to opinions, having a good relationship with parents, providing motivation, and being an inspiration to those around him. This study confirms and reinforces previous research that transformational Leadership is instrumental and has a significant positive influence on customer satisfaction, especially in education.

Second, with the change of teaching systems and services that were previously traditional to digital, especially in this pandemic period, information and communication technology became a significant contributing factor in providing services both in terms of administration and learning to all stakeholders (stakeholders) involved. However, schools' investment that needs to be spent on improving the quality of service and high learning is inevitable and needs special attention. In this service-centered study in the world of Education, SDS Westin focuses on applying ICT in the entire learning process and service delivery in schools to increase efficiency and effectiveness to improve customer satisfaction ultimately. These results reinforce previous research on the role and function of ICT in improving the effectiveness and efficiency of services to improve customer satisfaction.

Third, behind so many factors that affect customer satisfaction levels, this study takes two main factors that are considered vital in improving customer satisfaction, especially at Westin School. The results of this study prove that the initial arguments made at the beginning of the study are proven and that transformational Leadership and ICT are decisive factors in improving customer satisfaction. Data analysis shows that transformational Leadership has a greater influence than ICT, so educational institutions should focus more on transforming leadership before applying technology. Nevertheless, with the value of technology that is also significant and considerable influence, technology must be one of the critical factors that need to be considered to increase customer satisfaction, especially in education.

This research also has some implications. Theoretically, particularly in transformational leadership theory, this theory has significantly influenced customer satisfaction in educational institutions. It can corroborate the arguments of research – previous research that transformational leadership theory can

improve company performance, motivate followers, become a source of inspiration and others. In addition, this study also indicates the importance of the correct type of Leadership to improve customer satisfaction in education. With transformational Leadership and the application of technology, educational institutions can provide better service and, as an implication, can improve customer satisfaction.

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