

# Enterprise Architecture on Moral-based School Education Information Systems

Adi Sopian<sup>1)\*</sup>, Haura Karlina<sup>2)</sup>, Achmad Saefurridjal<sup>3)</sup>, Faiz Karim Fatkhullah<sup>4)</sup>

<sup>1)2)3)4)</sup> Universitas Islam Nusantara Prodi Ilmu Pendidikan, Bandung, Jawa Barat

<sup>1)</sup>[adisopian@gmail.com](mailto:adisopian@gmail.com), <sup>2)</sup>[haurakarlina@gmail.com](mailto:haurakarlina@gmail.com), <sup>3)</sup>[achmad.saefurridjal433@gmail.com](mailto:achmad.saefurridjal433@gmail.com),

<sup>4)</sup>[faizkarim@uninus.ac.id](mailto:faizkarim@uninus.ac.id)

**Abstract:** Indonesia has a diversity of cultures, hospitality, and people who have good ethics. Moral problems often occur and are commonplace, such as corruption, collusion, nepotism, promiscuity and drug abuse, sexual harassment, theft, and murder. The Indonesian nation experienced moral degradation. Moral education refers to the concept of Moral Behavior. Ethical behavior is grouped into three parts: Moral Attitudes, Moral Feelings, and Moral Thoughts. Moral education is very dependent on how to educate parents, association, and the community environment. Moral issues are not enough just to do an analysis of moral education, such as the perspective of religion, philosophy, psychology, and sociology. But also provide solutions so that moral improvement can occur. One of the solutions for improving morale is, of course, by providing education for moral improvement, such as establishing a school with the aim of improving morale. This is what drives the establishment of schools based on moral education, which use the perspectives of religion, philosophy, psychology and sociology. One of the proposals is moral-based education with the help of information technology. Information technology is capable of performing tasks such as controlling the behavior of students, teachers, and being able to control content that is not in line with the educational curriculum. The results of monitoring students can be reported online at any time. This research aims to provide moral improvement solutions by establishing a moral-based school, with the help of Enterprise Architecture as a Framework. This Enterprise Architecture output is an Information Technology Blueprint for system development in schools. The approach used is the Framework from The Open Group Architecture Framework.

**Keywords:** Enterprise Architecture; Education; Information Technology; IT Blueprint; Moral Attitudes;

## INTRODUCTION

A view where, the adjutant of a country depends on its morals, and the decline of the morals of a country depends on the spirit and practice of religion. This view is related to one of the noble duties of the Prophets and Apostles, namely to improve the morals of men. Moral education is an education that applies the principle of integrity with an approach to a moral or moral perspective. Efforts to realize moral education is to cultivate the ability to act, behave and make decisions with morals or morals. Moral education can be said to be also Value education. One of the values instilled in moral education is the ability to behave with caution and certainty.

The damage to the morale of this country can be seen from the many cases of corruption, collusion and nepotism in government agencies and people's representative institutions. Free association, drug use, riots, brawls, and other criminal acts are common in this nation's next generation. Existing moral problems do not conflict with the commitment of this nation, namely Indonesia as a Godless State (Daimah, 2018). Imam Machali (Machali, 2015) states that a country must anticipate indications that can destroy the nation. The indications include high crime rates among adolescents and community groups, bad behavior and speech such as promiscuity, drug and alcohol use, suicide, brawls/fights, lying, disregard for rules and norms such as no respect for parents and teachers, mutual prejudice between individuals and no sense of responsibility towards work and also as citizens. Today we can see and feel these indications.

The policy that underlies moral education is Law Number 20 of 2003 concerning the National Education System. The law states that the purpose of national education is capacity building, the formation of a civilized

\*name of corresponding author



and dignified character for the life of a nation that is rational and has good character. National education functions to develop capabilities and shape dignified national character and civilization in the context of educating the nation's life. The legal basis above shows that education has a responsibility to make students' personality and morals good. Students are expected to be able to demonstrate behaviors that show personal morals and noble character. Educational institutions are currently participating in providing moral or moral education values as an effort to anticipate moral decay in this country. These values have not been maximized. These moral values have not been optimally internalized by students. Moral Education basically refers to the concept of Moral Behavior. Moral behavior is grouped into three parts, namely: Moral Attitudes, Moral Feelings and Moral Thoughts. Moral attitude is a component framework of behavior patterns. Moral behavior is related to inner processes. Moral feeling is a form of feeling or affection that promotes empathy and tolerance towards others. Meanwhile, moral thinking is a way of thinking that puts forward moral values that apply, including customs, culture, and norms in society. All three form the moral quality of individuals in this case teaching participants to be able to interact well in society.

The inner process of moral behavior is the embodiment of a statement of inner feelings or opinions. Aspects that are closely related to the process of forming moral behavior, namely efforts to create a feeling situation, efforts to observe behavior or read morals from cognitive and/or affective components, efforts to filter the results of assessments about observing moral behavior, efforts to realize something that will be carried out, or carry out according to what is expected. to decide and implement what to do (Rest, 1982). In carrying out moral education, one solution is to carry out moral-based school development. All goals, vision and mission, noble ideals are moral improvement through education. Schools like this require governance and planning using one of the methods, namely Enterprise Architecture. TOGAF is the chosen framework, because this framework is an open source framework.

In TOGAF there are nine domains that are used to obtain the Information Technology Blueprint as a step in implementing Enterprise Architecture. The nine domains are Preliminary, Architecture Vision, Business Architecture, Information Systems Architecture, Technology Architecture, Opportunity and Solution, Migration Planning, Implementation Governance, Architecture Change Management. The aim of this research is to provide moral education solutions by establishing moral-based schools and using the TOGAF framework for business processes, application architectures, information architectures, technology architectures and opportunities and solutions. This research raises several research questions, namely how to use the TOGAF framework in moral-based school development? (RQ1). What are the opportunities and solutions for dealing with school development problems using Information Technology as a moral-based school development solution? (RQ 2).

### LITERATURE REVIEW

Literature review is a process in which researchers identify a number of journal articles, reference books, proceedings and various scientific works to find ideas, thoughts, elaborate conclusions and justify various phenomena on the basis of research and studies submitted in writing by other researchers. In this case research by analyzing books and also some research results of various figures from various disciplines.

This process is carried out by highlighting various important findings from the literature, then juxtaposing them with the needs of the discussion as explained in the background. Here, the process carried out is related to analyzing statements, sentences, opinions and arguments in various literature to be mapped into the theme of moral education, including religion, philosophy, psychology and sociology, as well as the discussion in terms of attitudes, feelings and thoughts. In addition, this analysis also elaborates findings related to problem findings and provides justification for the importance of moral education in overcoming moral problems.

The establishment of schools based on moral education results in the formation of students with good character. This research provides knowledge about Enterprise architecture in schools based on character with the TOGAF Framework methodology. Some research from previous research discussing Enterprise Architecture-based schools. This research reviews several studies as follows:

Table. 1 Research discussing Enterprise Architecture in schools

Reference	Title	Advantages	Weakness
(Deris Santika, 2016)	Designing School Information System Enterprise Architecture Using TOGAF ADM (Case Study: Sumedang Informatics Vocational School)	This research discusses Enterprise Architecture using the TOGAF Framework discussing Preliminary, Business Architecture, Application architecture, Technology Architecture.	This research has not yet discussed the domain of Implementation and Migration. Domain Change Management has not yet been discussed.
(Suhendri, 2015)	Architectural Design of	The discussion in this	Discussion of the domain

\*name of corresponding author



	School Information Systems with The Open Group Architecture Framework (Togaf) (Case Study: Ar-Rahmat Islamic Boarding School)	research discusses Enterprise Architecture using TOGAF and discusses architectural business domains, architectural applications, architectural information and architectural technology.	of opportunity and solution, implementation, change management is not discussed in this research.
(Wiranti et al., 2019)	Enterprise Architecture Modeling Using the Togaf Method at the Madani College of Economics, Balikpapan	This research discusses information systems for high schools of economics using the TOGAF framework in information system planning. The discussion is still on the domain of business architecture, application architecture, data architecture, architectural technology, and opportunity & solutions.	The discussion is not discussed for the domain of change management, migration planning, implementation governance.
(Lathifah et al., 2021)	Enterprise Architecture Modeling Using Togaf at X University Palembang	Discussion on enterprise architecture in business processes at X Palembang University including business organization, data, applications, and technology used.	The discussion on the research "Enterprise Architecture Modeling Using Togaf at X University Palembang", does not discuss the domains of change management, migration planning, implementation governance.
(Sylfania et al., 2019)	Implementation of an Android-Based Academic Information System at SMA Negeri 1 Tempilang	Discussion on the research "Implementation of Android-Based Academic Information Systems at SMA Negeri 1 Tempilang", discussion on the domain of business architecture, architectural applications, architectural information.	This research has not yet discussed architectural technology, opportunities and solutions, migration planning.
(Fauzi et al., 2022)	Enterprise Architecture Planning (Eap) As a Strategic Plan for Information System Management To Improve the Service Quality for Multazam Vocational School in Gisting.	The discussion regarding this research is data architecture, application architecture, architecture and business process modeling.	Research "Enterprise Architecture Planning (Eap) As a Strategic Plan for Information System Management To Improve the Service Quality for Multazam Vocational School in Gisting" has not discussed the implementation plan.

From table 1, which discusses research on the application of Enterprise Architecture for schools, there are gaps in this research. Several studies have not discussed opportunities and solutions, have not discussed

\*name of corresponding author



implementation governance. This is what makes this research a complement to previous research that has discussed enterprise architecture. The **state-of-the-art** of this research is to discuss opportunities & solutions as well as the implementation governance domain.

**METHOD**

**The Open Group Architecture Framework (TOGAF)**

TOGAF framework is used to plan the creation of a school Enterprise Architecture by prioritizing moral education. There are five main layers in implementing TOGAF, namely the Business Layer, Application Layer, Technology Layer, Implementation & Migration, Strategy & Motivation Layer. So it can be seen in fig 1, which is part of the framework. Strategy & Motivation is represented by the Architecture Vision and Architecture Change Management domains. Vision and mission are discussed in the Architecture Vision domain. Where one of the visions is to create a moral-based school with a religious approach, cultural approach, philosophical approach and a psychological perspective. So that the vision of a moral-based school is to make schools by carrying out moral improvements for students so that they are able to produce the best graduates who not only master science and technology, but produce graduates who are dignified and have the best morals.

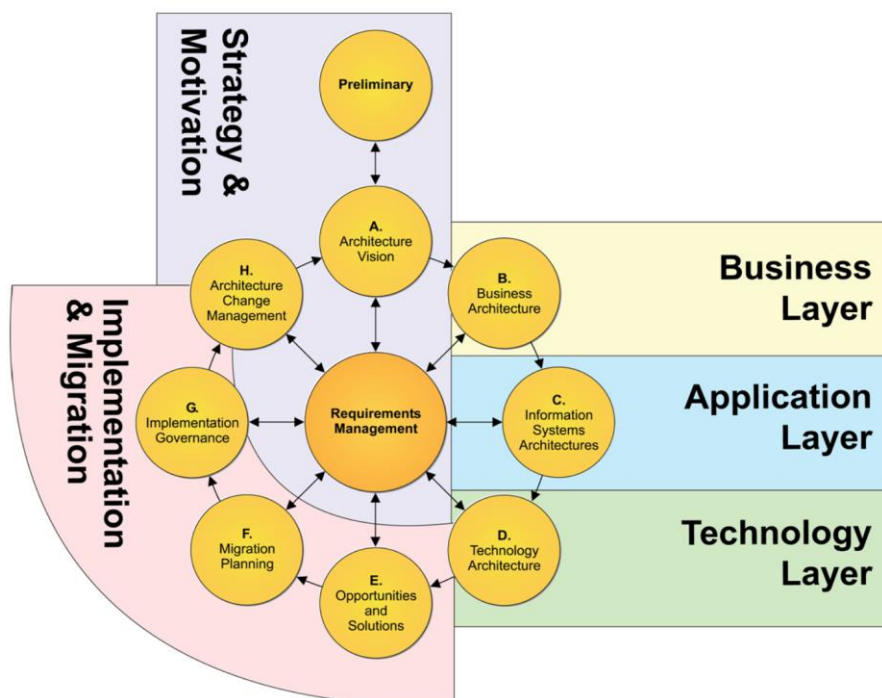


Fig. 1 Layers on the TOGAF Framework  
Source: Google Image

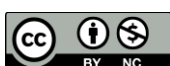
The business layer is represented by Business Architecture which provides a view of the establishment of a moral-based school. Where the business architecture is related to the school's business processes. The implementation of the school's vision is implemented in business architecture so that later the vision is appropriate and applicable. Information system architecture consists of application systems and data information systems. Business architecture, which is the elaboration of the vision, will later be translated in the form of an information system as a tool for daily operations for schools.

Architectural technology will discuss the devices that will be used in the success of daily operational management. The use of information technology should be in accordance with the budget provided and adjusted to the needs of the application system. Therefore the application system that will be built is adjusted to the needs of the school. Financial control is expected to reduce the budget for purchasing technological devices that are too over budget.

**Stakeholder**

Stakeholders from schools such as the principal as the person in charge of school education. The teacher as executor in carrying out teaching and learning activities. Students act as recipients of moral material and carry out learning activities according to the school curriculum. School staff play a role in school administration so that it runs smoothly according to the curriculum. Parents play a role in educating students outside of school,

\*name of corresponding author



because without the help of parents, teachers and schools are less than optimal in educating students. The surrounding community acts as a control for school students.

### Religious Perspective on Moral Education

There are two main factors for the occurrence of children's moral problems. These factors are parents and the surrounding community. The formation of a good child's character starts from the formation of his morals or morals. The family environment, society, especially good schools support good morals and children's morals as well. In accordance with the values of religious norms, it is the duty of educators to form generations of good, noble, and virtuous human beings. Aspects that must be instilled are polite, virtuous, disciplined, broad-minded, kind, loyal, strong-willed, humble, responsible, tolerant, studious, cooperative, mutual respect, loyalty, chivalrous, sincere, principled, courage, integrity, firmness, perseverance, honesty, openness, and tenacity.

In educating children's morals, it means that the child has good customs and norms. Children who understand customs and traditions and norms will behave well everyday. Religious teachings explain that moral education is an ordinance for how to treat all living things, both living and dead. Moral education aims to protect individuals from misbehaving or deviating from the norms of education, society and the state. Moral education in modern times seems to have become a social phenomenon that can be said to be comprehensive and acknowledged by all parties. Currently moral education has integrity and as a part of the education system. However, this does not mean that there is no known moral education outside of modern society. This educational practice is actually known in all types of society, even in the lower middle class society in the form of moral socialization. Declining morality is a worldwide problem. Problems of morality sparked uproar and disturbed the peace. The level of one's education should influence the quality of good ethics and morals. In fact, there are people with higher education who still behave in ways that deviate from religious norms and regulations. Moral education will be very beneficial for self-development of students and getting along with society. Morality is a state of self-development. The cultivation of morality is a form of individual responsibility to oneself, society and also God Almighty.

### Philosophical Perspective on Moral Education

In modern philosophical schools, one of them is the flow of progressivism aimed at achieving extreme renewal of educational competence. Existing competencies are obtained through classroom activities, self-management and activities that shape other creativity (Fatwa Anbiya et al., 2020). Progressivism philosophy further understands the view of progress and change to be better than before (Ibrahim, 2018). Progressivism philosophy arises because of limitations in teaching ancient methods, especially in the field of education. Progressivism argues that students have a natural self-regeneration ability to deal with life's problems

Progressivism believes that education is not just transferring knowledge to students, but hopes that through education, students can understand and predict future lives. The philosophy of progressivism contributes to the world of education by laying the foundation for students to be independent and environmentally friendly. Progressive philosophy does not require authoritarian learning and indoctrination.

### Sociological Perspective on Moral Education

Moral issues are topics that have their own charm to be discussed and analyzed (Mahardiani & Pradhanawati, 2013). This is because moral issues involve good and bad behavior or whether or not an individual action is right or wrong. Moral issues themselves are closely related to the social and cultural environment of society. Moral issues concern aspects of the norms and rules that apply in society in everyday life. Moral can also be said as ethics, norms, customs, behavior and individual character in social life. Based on the science of axiology, ethics can be said to be right and wrong, moral and immoral or immoral and immoral actions

Moral education is closely related to religion and Sufism (Ratna, 2015). The essence of moral education is related to the goodness and badness of one's soul. Al-Ghazali stated that humans live to get pleasure. The essence of the pleasure that every human being hopes for is the pleasure of eternal life in the hereafter. The expected moral education in Al-Ghazali's view is to prepare every individual who has good and perfect morals and reason, a clean soul and piety to Allah SWT.

Ethics is a science that explains morals and decency. Moral is an action that makes individuals behave properly and correctly. Moral invites individuals to act in accordance with the norms and rules. While morality is a matter of rules that must be carried out by individuals who aim to form good character. Basically every rule will make individuals feel watched and act to be limited. However, it will make the community environment safe, peaceful and peaceful. If each individual acts, behaves and makes decisions by considering the applicable rules, an institutionalization process has occurred. The institutionalization process is a series of activities in which the community makes decisions and acts using existing rules (Powell & DiMaggio, n.d.)

Pojman in (Al-Aidaros et al., 2013) describes the purpose of moral thinking, namely creating peace in the community, improving the quality of individual life, increasing individual abilities and potential to create a better

\*name of corresponding author



life, creating decisions based on agreement every time a conflict occurs. , the creation of rewards and sanctions (punishment). (Sofyan, 2010) stated that in essence every human being desires to do good, have good character in order to create a good life as well. Although some individuals do good because of an obligation or want to be seen by others. In social life, every individual must behave based on moral behavior. Humans as social beings must behave according to norms, customs, care for others, and respect others.

Moral behavior in social life is closely related to sociology. Emile Durkheim in (Basuki, 2008) explains the moral problems that occur in European countries. When European countries experienced a crisis that resulted in conflict in society. European countries say that this condition is experiencing moral degradation, so a solution is needed to create harmony between communities. At that time the theory of sociological development was created by paying attention to aspects of moral education. Moral education is raised from the aspects of deductive, objective, rationalism and positivism. Moral education is very important in social life. Moral education creates peace, tranquility, harmony in society. The practice of moral education in social life helps create peace, harmony and tranquility for the nation and state

### Indonesian Perspective Moral Education

Moral conflict is a conflict that until now has been a debate in the community regarding what is right or wrong, appropriate or inappropriate for an individual in his environment. Moral education is very dependent on how to educate parents, association with friends, the environment in which they live. All of this is the basis for the formation of individual moral behavior. Our country is seen as a country rich in cultural diversity, hospitality and also people with good ethics. In fact, there are still many unethical behaviors seen everywhere, such as corruption, collusion, nepotism, promiscuity and drug abuse, sexual harassment, theft, robbery, and murder. This incident did not only occur in Indonesia. This can be said as a sign that society is experiencing a moral decline, especially in the younger generation. The spearhead of the nation's future is in the hands of the younger generation. If this immoral incident continues to occur in the younger generation, then this country's success in the future will be lost. Moral decline can also be said as a decline in behavior, temperament, morals and individual or societal character. If we look at the results of a Reckitt Benckiser survey of 500 young people spread across Indonesia, it was found that one out of three young people had had casual sex. The results explained again that half had free sexual intercourse at the age of less than 20 years and were not married. In 2008, research on drug abuse among young people in Indonesia was found to be around 4 percent. In the Jakarta area itself, the moral problems of school children can be seen from the brawls and fights everywhere that lead to death. Besides that, there are moral problems in school children who dare to face their teachers, such as fighting, saying harshly, and hurting their teachers. One of the moral damage to school children is disobedience and respect for teachers and elders.

Anticipation of moral decline in school children and adolescents is very dependent on the participation of parents, family, community and school environment. Family is the main factor in the moral development of children. Family is the first school for children. But in reality, there are parents who do not understand their role as the first moral educators. Many parents view that the task of educating is in the hands of the school, both cognitive and moral education. Parents focus on the results seen from the report card. This illustrates that parents only see results, not see the process. If the child is wrong, they are immediately reprimanded and blamed without being given an understanding of their mistake. One of the main keys to educating children is good communication between parents and children. In addition to the problem of the relationship between parents and children. Many parents do not differ in views from teachers. Parents protest against the teacher who has given punishment to the wrong child. Not just protesting, even reporting to the authorities. So that students become brave to the teacher. Parents have an obligation to monitor the behavior of their children, because actions that exceed the limits of reasonableness can damage the morale of children.

Educational institutions have an equally important role in shaping the moral character of students. In the school environment, students receive education to develop cognitive, psychomotor and affective. Apart from that, students also get religious, social, emotional and moral education at school. Students study at school almost 6 - 8 hours. Therefore the school environment is very supportive in the formation of student morale. Especially with the view of parents that moral education is sufficiently taught in schools. In fact, many schools have not been able to develop the moral education of their students. Teachers are given the responsibility to educate from the intellectual or cognitive side of students only. Most educators have not taught about moral education. So that students consider high grades and being smart is the main thing compared to moral education. This view must be straightened out and studied in more depth by educational institutions and parties who have authority. The decline in morale in the younger generation can be overcome if the roles of parents, teachers, educational institutions, the community work together and support the creation of a young generation with good morals.

\*name of corresponding author



This is an Creative Commons License This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

## RESULT

Preliminary phase, namely the phase of readiness from the beginning of the activity to the end. Preparation is intended to achieve targets that are adjusted to the establishment of a moral school. Everything will be done directed, planned on business processes. Its activities include preparing business architecture, application architecture, information architecture, technology architecture. Logically, the architecture is in accordance with the principles of the TOGAF framework. The established school has a vision of moral education as the main target. The information system in educational schools is as a support. Then the system used must be able to help school operations. Therefore the system has a lot of controlling character without being seen by students.

Architecture Vision, is an activity of TOGAF ADM which carries out the creation of the vision and mission of organizational management and stakeholders to formulate enterprise architecture including reviewing the needs of organizational management to develop enterprise architecture. Determination of the scope of the planned enterprise architecture to be built, identification of stakeholders and obtaining approval from the organization's management in developing the enterprise architecture. This Vision Architecture is actually a step towards planning for the future of an organization. In this case, how to create an enterprise architecture in a moral-based school in order to produce quality education for good school students who excel in morals. This vision architecture will determine the development of application architecture, information architecture and technology architecture for moral education schools.

Business Architecture, is a stage that is used as a reference in planning processes that are in accordance with the architecture to be built. This stage is adapted to the workflow of the information system in accordance with organizational conditions, in this case the school business. Please note that school organizations aim to educate students and are not profit organizations. Its main target is moral education. So the rules used are prioritizing the school curriculum in accordance with the vision of moral education. Not only the moral education curriculum, but science is still given so as not to be left behind by the times. Of course moral education and science education have a balanced curriculum. By applying the principle of balanced education, students become individuals who are superior in terms of knowledge and have noble character. Later from the development of this information system the same as information systems in general, the difference is that there is material that introduces culture, polite, religious morals which makes students' views more tolerant and teaches superior and cultured behavior.

Information System Architecture, is a stage of a combination of data architecture and application architecture. The goal is to develop target information systems (data and applications) that will be used by the organizational management of moral education schools. Data architecture emphasizes the flow of databases that are used to meet the needs of business processes and services. Meanwhile, application architecture places more emphasis on planning application requirements and the application model to be built.

Table 2. Information System Architecture

No	List Information System Architecture	No	List Information System Architecture
1	Student and teacher attendance system	6	Religious practice system
2	Education curriculum administration system	7	Indonesian cultural practicum system
3	Student assessment information system	8	Psychology practicum system
4	Moral and science education monitoring system	9	Indonesian culture practicum system
5	Library information system	10	Science practicum system

Technology Architecture, this stage is a container of information systems that have been built. Where the construction is planned and adjusted to the budget of the school of moral education. In fig 2, it can be seen using cloud infrastructure. Use of infrastructure or by another name Infrastructure As A Service (IAAS), such as Devices (UPS, Servers, Rack Servers, Routers, Switches), Software (Operating systems, Windows, Linux). Platform As A Service (PAAS) such as Platform Management devices, Database Servers, Web Servers. Software As A Service (SAAS) such as Software management.

\*name of corresponding author



This is an Creative Commons License This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

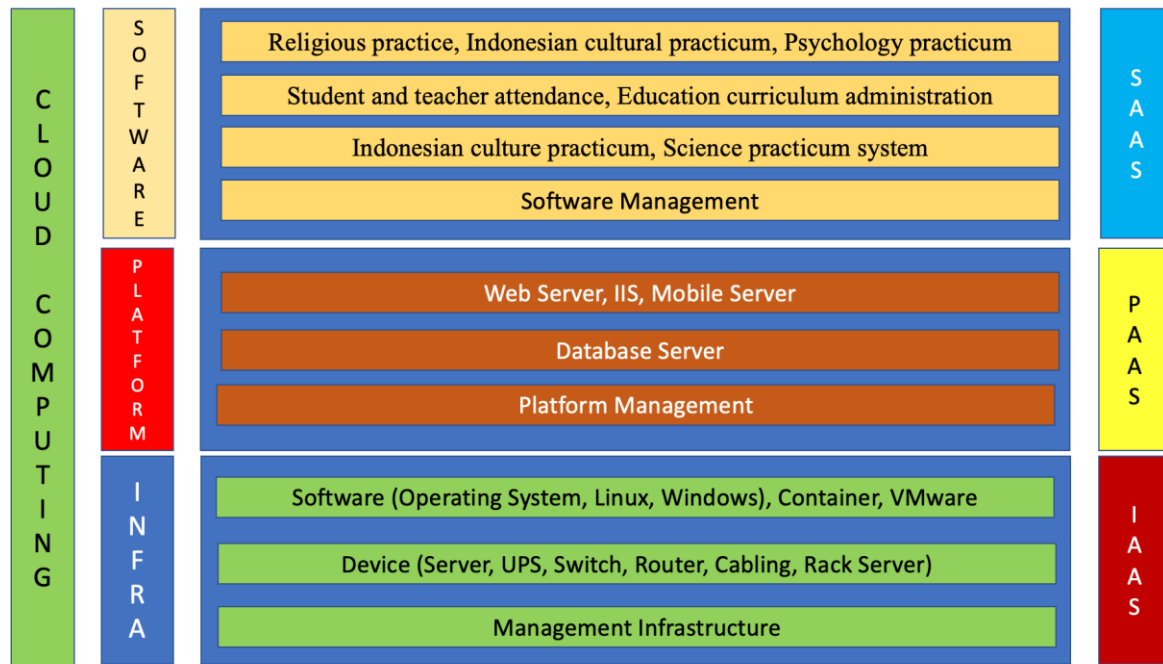


Fig. 2 Technology Architecture  
Source: Property Researcher

Opportunities & Solutions, this phase focuses on defining the benefits derived from enterprise architecture which includes business architecture, information system architecture, and technology architecture that have been created at the Business Architecture, Information System Architecture, and Technology Architecture stages. This stage is the basis for stakeholders to choose and determine the architecture that will be implemented in the organization. At this stage the system evaluates the model that has been built for the current architecture. Identification of the main system is carried out for the application of the objective architecture for the development of new systems and the addition of old system features.

Migration Planning, this stage describes the implementation plan from the baseline to the target enterprise architecture that has been made. One of the activities of migration planning is an evaluation to carry out an information system migration plan. Doing or upgrading the old system version to a higher version is also an activity in migration planning. Migration planning is a very crucial activity, so it requires careful steps. Like doing migration simulation activities. The most important thing about migration is the creation of migration scenarios that have been tested in a simulation environment. If there is a problem in migrating, the fastest way to overcome it is to do a rollback stage so that the system can return everything before migration.

Implementation Governance, this phase aims to make governance recommendations from the implementation of the enterprise architecture that has been carried out. This governance process includes organizational governance, information technology governance, and architectural governance. More details in carrying out at this stage requires a project management method. Currently there are many project management tools that can be used in managing a project. Starting from Scrum, Agile, Waterfall and Project Management Institute (PMI) based project management. The advantage of using the project management method is the ease of managing projects and monitoring a project.

Architecture Change Management, is used to ensure that the enterprise architecture that is built gets business value that has been agreed upon by school management. This stage is a change from the old condition to the new condition which changes more according to school management. Change management is very necessary for the sustainability process of an organization in accordance with the latest technological developments. Sustainability (Hindarto et al., 2021) of the information system so that the existing information system can support school management operations. To support a good information system, it is necessary for the information system to maintain system security, so that the school information system produces an information system that is free from threats, malware (Hindarto & Santoso, 2022) and all types of system threats that are detrimental. The use of anti-virus, anti-malware (Hindarto & Handri Santoso, 2021), intrusion detection prevention systems are measures to protect information and data systems.

\*name of corresponding author

## DISCUSSIONS

How to use the TOGAF framework in moral-based school development? (RQ1). It has been explained that planning an information system for moral education schools requires adequate infrastructure to support schools. The school information system was built using the TOGAF ADM framework, so that in carrying out system development it has been adjusted to the needs.

What are the opportunities and solutions for dealing with school development problems using Information Technology as a moral-based school development solution? (RQ 2). The system that has been running for a certain period begins to experience some problems. One of them is the lack of features needed. For example, a feature to make it easier to enter data via the keyboard feels boring, this causes the use of a scanner to avoid wrong data entry. These problems cause the application system to have deficiencies in the application system features. Therefore the opportunity to develop application systems by adding features that suit the needs of moral-based schools. The addition of features that are tailored to the needs of the school is a solution to improve the school's information system.

## CONCLUSION

Moral-based school education produces graduates with high intellectual insight accompanied by morals, good character and noble character. The goal of moral-based school education is urgently needed in the condition of the Indonesian nation which is experiencing a decline in morale, along with the progress of the times. This research proposes a solution to moral degradation by establishing schools that are intellectually minded and behave and have noble character. For people of productive age who are exposed to bad morals such as corruption and other crimes, even though most of the people who are corrupt have good intellectuals, these people do not have good morals. However, apart from being given insight into science and technology education, this young generation is also given moral education by improving noble character. One of the right answers is the establishment of a moral-based school. The development of moral education schools in carrying out activities requires good management in its management. One of them is by implementing TOGAF ADM in the development of enterprise architecture. There are several parts of the TOGAF ADM that are discussed in all domains. With the intention of providing a good insight for the implementation of enterprise architecture. Even though the TOGAF ADM discussion is not detailed, all aspects of the nine domains are discussed.

## REFERENCES

- Al-Aidaros, A.-H., Mohd. Shamsudin, F., & Md. Idris, K. (2013). Ethics and Ethical Theories from an Islamic Perspective. *International Journal of Islamic Thought*, 4(1), 1–13. <https://doi.org/10.24035/ijit.04.2013.001>
- Basuki, A. (2008). Perbandingan Antara Pemikiran Karl Marx Perubahan Sosial. *Humaniora*, 20(3), 306–314.
- Daimah, D. (2018). Pendidikan Inklusif Perspektif QS. Al-Hujurat Ayat 10-13 Sebagai Solusi Eksklusifisme Ajaran di Sekolah. *Jurnal Pendidikan Agama Islam Al-Thariqah*, 3(1), 53–65. [https://doi.org/10.25299/althariqah.2018.vol3\(1\).1837](https://doi.org/10.25299/althariqah.2018.vol3(1).1837)
- Deris Santika. (2016). Perancangan Arsitektur Enterprise Sistem Informasi Sekolah Dengan Menggunakan TOGAF ADM (Studi Kasus : SMK Informatika Sumedang). *Jurnal Ilmu-Ilmu Informatika Dan Manajemen STMIK2*, 10(2), 12–25. <https://ejournal.stmik-sumedang.ac.id/index.php/infomans/article/view/43/35>
- Fatwa Anbiya, B., Syarif Nurdin, E., & Syamsu Rizal, A. (2020). Filsafat Progresivisme dan Implikasinya terhadap Pendidikan Kewarganegaraan Sebagai General Education di Indonesia. *Civic-Culture : Jurnal Ilmu Pendidikan PKN Dan Sosial Budaya*, 4(1), 301–311. <http://194.59.165.171/index.php/CC/article/view/195>
- Fauzi, F., Mukodimah, S., & Hamid, A. (2022). Enterprise Architecture Planning (Eap) As a Strategic Plan for Information System Management To Improve the Service Quality for Multazam Vocational School in Gisting. *Jurnal TAM (Technology Acceptance Model)*, 13(1), 17. <https://doi.org/10.56327/jurnaltam.v13i1.1177>
- Hindarto, D., & Handri Santoso. (2021). Android APK Identification using Non Neural Network and Neural Network Classifier. *Journal of Computer Science and Informatics Engineering (J-Cosine)*, 5(2), 149–157. <https://doi.org/10.29303/jcosine.v5i2.420>
- Hindarto, D., Indrajit, R. E., & Dazki, E. (2021). Sustainability of Implementing Enterprise Architecture in the Solar Power Generation Manufacturing Industry. *Sinkron*, 6(1), 13–24. <https://jurnal.polgan.ac.id/index.php/sinkron/article/view/11115>
- Hindarto, D., & Santoso, H. (2022). PERFORMANCE COMPARISON OF SUPERVISED LEARNING USING NON-NEURAL NETWORK AND NEURAL NETWORK. *Janapati*, 11, 49–62.
- Ibrahim, R. (2018). Filsafat Progresivisme Perkembangan Peserta Didik. *Al-Riwayah: Jurnal Kependidikan*, 10(1), 151–166. <https://doi.org/10.32489/al-riwayah.156>
- Lathifah, L., Suaidah, S., F, M. B., Anam, M. K., & Suandi, F. (2021). Pemodelan Enterprise Architecture

\*name of corresponding author



This is an Creative Commons License This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

- Menggunakan Togaf Pada Universitas X Palembang. *Jurnal Teknoinfo*, 15(1), 7. <https://doi.org/10.33365/jti.v15i1.865>
- Machali, I. M. (2015). RETHINKING MARKETING MADRASAH Menimbang Pola dan Strategi Pemasaran Jasa Pendidikan Madrasah. *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan*, 13(1), 1–14. <https://doi.org/10.32729/edukasi.v13i1.230>
- Mahardiani, Y., & Pradhanawati, A. (2013). Pengaruh stres kerja dan lingkungan kerja fisik terhadap kinerja karyawan outsourcing pada Pt. Bank Jateng Cabang Koordinator dan Cabang Pembantu Wilayah Kota Semarang. *Jurnal Administrasi Bisnis*, 2(1), 98–104.
- Powell, W., & DiMaggio, P. (n.d.). *The New Institutionalism in Organizational Analysis*. The University of Chicago Press CONTACT INFORMATION.
- Ratna, R. (2015). Konsep Pendidikan Moral Menurut Al-Gazali Dan Émile Durkheim. *Lentera Pendidikan : Jurnal Ilmu Tarbiyah Dan Keguruan*, 18(1), 73–81. <https://doi.org/10.24252/lp.2015v18n1a6>
- Rest, J. R. (1982). A Psychologist Looks at the Teaching of Ethics. *The Hastings Center Report*, 12(1), 29. <https://doi.org/10.2307/3560621>
- Sofyan, A. (2010). *Kapita Selekta Filsafat*. PUSTAKA SETIA.
- Suhendri. (2015). Perancangan Arsitektur Sistem Informasi Sekolah dengan The Open Group Architecture Framework(Togaf) (Studi Kasus: Pondok Pesantren Ar-Rahmat). *Infotech Journal*, 1, 40–46. <https://jurnal.unma.ac.id/index.php/infotech/article/view/43>
- Sylfania, D. Y., Juniawan, F. P., & Agusti, L. (2019). Implementasi Sistem Informasi Akademik Berbasis Android pada SMA Negeri 1 Tempilang. *Jurnal Edukasi Dan Penelitian Informatika (JEPIN)*, 5(3), 301. <https://doi.org/10.26418/jp.v5i3.33276>
- Wiranti, Y. T., Eliviani, R., Daningrum, V., & Atrinawati, L. H. (2019). *Pemodelan Arsitektur Enterprise Menggunakan Metode Togaf Pada Sekolah Tinggi Ilmu Ekonomi Madani Balikpapan*. 15–26.

\*name of corresponding author



This is an Creative Commons License This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.