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# STRATEGIC PLANNING OF WORK TRAINING CENTER INFORMATION SYSTEM USING TOGAF ADM AND ITIL

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# ABSTRACT

This study aims to develop an implementation model of TO-GAF and ITIL frameworks in enterprise architecture (EA) for the Technical Implementation Unit (UPTD) of the Tegal Regency Vocational Training Center (BLK) and determine the improvement of services provided by BLK after the develop-ment of enterprise architecture. This type of research is a case study research where data collection is done by direct observation or observation, interviews and surveys using questionnaires. The population in this study were employees and students of BLK Tegal Regency, totaling 100 people. While the sample was 15 people. TOGAF ADM is used to un-derstand the strategic planning process systematically, from problem identification to the development of measurable solutions. Analysis and design of enterprise architecture is prelimenary phase, requirement management, architecture vision, business architecture, information systems architecture and opportunities and solutions. While the ITIL approach in addition to providing practical guidance in managing BLK IT services, ITIL is also used to test the level of maturity of the system against the blueprint produced so that a tested sys-tem design is obtained. The results of the maturity level of the service operation domain system are at level 4 with a value of 3.94 and have not yet reached level 5 which means that some activities have not been fully carried out to the maximum. To achieve the expected maturity process, management must always supervise every decision making in accordance with existing procedures.

KEYWORDS	Strategic Planning, IT, TOGAF ADM, ITIL
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# **INTRODUCTION**

The tight competition to enter the world of work makes prospective workers must equip themselves with the skills needed by the industrial world. One of the causes of high unemployment is the low competence of the workforce. Therefore, the Tegal Regency Vocational Training Center, which is a Technical Implementation Unit (UPTD) of the Tegal Regency Industry and Manpower Office, strives to improve the competence of the workforce through competency-based training (PBK) for the community for free. In order to provide maximum job

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training services for the community based on good governance, BLK requires Information Systems / Information Technology (SI / IT) which is realized in the form of Information Technology Strategic Plan / Master Plan (ITSP / ITMP) which is aligned with its business strategy. To align the business strategy and ITSP/ ITMP.

Many problems arose in the process of developing the SI strategy plan at the Tegal Regency Job Training Center, outlining the problems that occurred, among others (a) there was no information system application that could summarize all training program planning activities to produce targeted training needs, (b) there was no information system strategic plan that provided information as one of the optimal decision making and (c) there was no integration between data processing systems, causing duplication of work. With these conditions, an information system is needed by BLK as one of the values of improving the quality and quality of information services, both for ASN, training participants and the general public.

An effective solution in the development of information systems for various reasons that focus on alignment, efficiency, and risk management in organizations is to use Enterprise Architecture (EA). The flexibility and scalability offered by EA allows information systems to be easily customized or upgraded according to changing business needs without a major overhaul (Dumitriu et al 2020). With EA, organizations can efficiently manage human resources, technology, and budgets, avoid duplication and optimize the use of resources.( Kotusev, 2021)

In creating enterprise architecture in this study, the TOGAF ADM framework was chosen as a framework in preparing the right enterprise architecture design and the needs and focus on designing the company into architectural targets in accordance with the TOGAF framework in the field of information technology, especially the service management area, which refers to ITIL best practices. (Santosa, et al, 2023)

TOGAF ADM also states a clear vision and principles on how to conduct enterprise architecture development. These principles are used as a measure in assessing the success of enterprise architecture development by the organization (Rengga, et al 2019).

In this case, the EA methodology development study is based on TOGAF and Information Technology infrastructure Library (ITIL), where the TOGAF methodology focuses more on concepts and architecture. While the ITIL methodology focuses on operational services to provide information technology business services. The advantages that ITIL has are a general concept and an integrated set of best practices that can help meet market needs in a continuous cycle (Hendriques, et al, 2019). By combining the addition of Service Operation in ITIL into the TOGAF ADM methodology, it will be more complete and will produce an Enterprise Architecture Framework which can later be used by organizations to achieve their strategic goals (Fajrillah, et al, 2022).

The principles and best practices in ITIL help align IT department actions and budgets with business needs and adapt them as the business evolves or undergoes strategic change (Pamungkas, et al, 2023). Assessment evaluation results that contribute to defining the architecture vision and designing technology architecture targets. Things that need to be considered in the design of enterprise architecture strategic plans and issues that exist in the company (Togarotop, et al, 2023). This process provides a comprehensive understanding of the company's initial requirements. TOGAF will then help you prioritize your requirements as can be seen in Figure 2. The concept of service level management complements the management of business relationships related to non-functional requirements (Fajrillah, et al, 2022).





Both methodologies have a fundamental quality cycle. In TOGAF this is referred to as the 'Architecture Development Method (ADM)' and in ITIL it is called the 'IT Service Lifecycle' (Setiawan, 2021). Another similarity between the frameworks is that they are both IT-derived. The two main differences are: TOGAF develops the business architecture within the framework (as shown in the Architecture vision stage). (Putra, et al, 2017)

The combination of TOGAF and ITIL not only strengthens the structure of IT architecture but also improves service management which is the goal of system development at BLK, so this research provides an overview of how to develop an implementation model of TOGAF and ITIL frameworks in enterprise architecture for UPTD Balai Latihan Kerja (BLK) Tegal Regency.

### **RESEARCH METHOD**



Figure 2. Research method

As seen in Figure 2, the stages of this research begin with the formulation of the background of the problems that underlie this research itself and then formulate the problem so that the objectives of this research are known to solve these problems. The next process is data collection, this data collection itself is carried out by several methods including literature study by looking for literature from various sources then interviews with stakeholders of the Job Training Center and direct observation to the research location and surveys using questionnaires. The population in this study were employees and students of the Tegal Regency Job Training Center (BLK), the total population involved in the study was 100 people. While the sample was 15 people.

After the data collection process is completed and valid data is obtained, the next process is to apply it to the TOGAF method which consists of several stages including prelimenary phase, requirement management, architecture vision, business architecture, information systems architecture and opportunities and solutions so as to produce a Blueprint containing data architecture, application architecture and application and technology architecture.

### Information Technology Infrastructure Library (ITIL)

Furthermore, Maturity System testing is carried out on the Blueprint produced using the Infrastructure Information Technology Library (ITIL) Framework so that information is obtained about the level of maturity of the system in the blueprint and then poured into a report. ITIL itself consists of five parts, namely Service Strategy, Service Design, Service Transition, Service Operations and Continuous Service Improvement, by emphasizing the life cycle management of services provided by information technology, the five parts of ITIL as mentioned above are usually referred to as part of a cycle which is often called the ITIL Service Cycle (Siburian, et al, 2020).



Figure 3: ITIL Cycle (http://www.hci-itil.com/ITIL\_v3/references/ITIL\_v3.html)

Figure 3 shows that the *service strategy* is placed at the center of the other modules, which means that the *service strategy* provides practices and techniques, as well as direction in terms of how to design, develop, and implement *service management* from the perspective of organizational capabilities and strategic assets and directs the principles underlying *service management* that are useful for developing policies in it, and processes throughout the ITIL service cycle, namely *Service Design, Service Transition, Service Operations and Continuous Service Improvement* (Pamungkas, et al, 2023).

Service Operation is the main focus of system maturity testing in this study, service operation is about how an organization provides service value to its users (Setyoningrum, 2018). The Service Operations domain has a number of processes involving (Anam, et al, 2019): (a) Event Management which refers to managing changes in circumstances that have value in organizing service elements that aim to understand the response and approach and steps to be taken in response to these actions. (b). Incident Management refers to a state of unexpected problems or disruptions in Information Technology (IT) services or can even include a decrease in the optimality of IT services. *Incident management* focuses on efforts to restore suddenly degraded or disrupted services as quickly as possible for users. The goal is to minimize the impact on the business or related activities. (c) Request Fulfillment refers to the process of responding to requests from users for fulfillment of needs in the development of information, services, and recommendations related to changes in standards or alignment of IT services. This subdomain manages and processes the entire service request lifecycle, from initial request to fulfillment, using a separate logging record or system to record and track the status of the request. (d). Problem Management refers to Root cause analysis aims to identify, select, and address the root causes of incidents or other active measures. One important aspect of this analysis is the creation of records or documentation related to the problems that occur. This allows for more effective evaluation in the case of similar errors or problems in the future. (e) Access Management Involves setting access rights for authorized users to use available services based on the ability to identify users and their access rights, then managing their ability to obtain the required services, specifically according to their organizational role or job function.

To measure this level of maturity involves the Process Maturity Framework (PMF), which consists of six levels, as shown in the table below, which reflect the level of maturity of information technology management (Anam, et al, 2019).

Table 1; Maturity Level Table				
Level	Maturity Model			
0	Non-exsitsent			
1	Initial			
2	Repeatable			
3	Defined			
4	Managed			
5	Optimized			

The higher the value or score achieved in the maturity level, the better the information technology service management process. This indicates that information technology support in achieving organizational goals becomes more reliable and trustworthy. In other words, the higher the maturity level, the stronger the confidence that information technology can effectively support the achievement of organizational goals. The formula for determining process coverage is as follows:

 $Index = \frac{\sum (Total Jumlah Jawaban)}{(Jumlah Pertanyaan X Jumlah Responden)}$ 

### **RESULT AND DISCUSSION**

## The Open Gorup Architecture Framework (TOGAF) Preliminary Phase

The Principle Catalogue in the TOGAF architecture development method aims to provide a solid framework for formulating the principles that will guide the development of an organization's architecture. The Principle Catalogue is an important document in the architecture development process, containing fundamental principles that will guide architectural decision-making.

The Catalog of Principles in Strategic Planning of the Information System of the Work Training Center (BLK) using TOGAF Architecture Development Method (TOGAF ADM) and Information Technology Infrastructure Library (ITIL) in Tegal Regency aims to provide a strong foundation in formulating the principles that will guide the development of 10290 information systems effectively. The Principles Catalog becomes ystem1029010290 a key era in the strategic planning process, containing fundamental principles that guide architectural decisionmaking. These principles not only reflect the values and strategic goals of the Tegal Regency BLK, but also take into account business needs related to job training and human resource development in the area.

No.	Domain	Principle	Description			
1	Architecture	Modularity	Modular system design for increased scalability and ease of maintenance.			
		Standardization	Use standardized system architectures and frameworks for interoperability and integration.			
2	Business	Stakeholder Collaboration	Engage stakeholders throughout the system development cycle to ensure alignment with objectives.			
		Service Excellence	Prioritize service quality and user satisfaction in all aspects of system design and delivery.			
3	Data	Data Governance	Implement policies and procedures to ensure data integrity, security, and compliance.			
	_	Single Data Source	Establish a centralized system for authorized data to avoid duplication and inconsistencies.			
4	Application	Scalability	Design applications to accommodate user growth and data volume without compromising performance.			
		Interoperability	Ensure systemized interaction between applications to facilitate data exchange and workflow automation.			

Table 2. Princi	ples Catalog
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#### Stakeholder Analysis

Stakeholder Analysis is a critical process in evaluating the impact, importance and involvement of the various parties involved in a project or initiative. In the context of the strategic planning of 10291 information system of BLK Tegal Regency, Stakeholder Analysis helps to identify potential barriers, support the development of a relevant and appropriate 10291 system, and manage expectations and contributions from various groups. 10291 By analyzing the level of involvement, understanding, and commitment of each stakeholder, BLK can design appropriate strategies to build positive relationships and ensure ongoing support throughout the information system development process.

Table 3. Stakeholder Analysis Stakeholder Stakeholders Ability to Required Current Commitment Current Support Understanding Understanding Group Disrupt Commitment Required Needed Change Medium Tegal High High High High High Government Regency Government High High High High High High Head of Management BLK and Staff Operations Instructors High High High High High Staff and Trainers Medium-High End User High High Training Low Medium High Low Participants Industry Industry High Medium-High Medium High High High and Employers Manpower Medium Medium High Medium High High Employment Channeling Center Agency

Description:

High (5)	:	Indicates the highest level of ability, understanding, commitment, or support
Medium-High (4	4) :	Indicates ability or understanding that is above average but not
Medium (3)	:	Indicates an intermediate level of ability, understanding, commitment, or support.
Low (1-2): support	Indicat	es the lowest level of ability, understanding, commitment, or

#### **Business Architecture**

This Business Requirement Catalog is an important first step in the strategic planning of the10292 information system of the Work Training Center (BLK) in Tegal Regency. This Catalog aims to outline the essential business requirements for the effective and sustainable development of the10292 BLK information system. Through identifying these needs, we hope to provide clear direction to the development team to design appropriate solutions to optimize the training services provided by BLK to the community and ystem e102921029210292 yste. In this Catalog, each need will be described in detail, including priority, date of identification, and owner of the need, making it possible to develop a structured and sustainable plan in developing10292 information systems that are in accordance with the vision and mission of BLK Tegal Regency. This Catalog is expected to be a solid foundation in realizing a positive transformation in the management of human resources and job training in the region.

Table 4. Dustness Requirement						
Requirement Item	Description	Category	Priority	Date	Source	Owner
BR-001	Integration with 10292 trainee management system	Integration	High	2024- 05-15	Stakeholders	IT Manager
BR-002	Reporting of trainee progress to stakeholders	Reporting	High	2024- 05-20	Management	Project Lead
BR-003	Training management system and flexible training schedule	Scheduling	High	2024- 05-25	User Request	IT Manager
BR-004	High accessibility for trainees	Accessibility	Medium	2024- 06-01	Stakeholders	IT Manager
BR-005	Training equipment inventory management	Inventory	Medium	2024- 06-05	Management	Project Lead
BR-006	Trainee evaluation and	Assessment	High	2024- 06-10	User Request	IT Manager

Table 4: Business Requirement

	assessment system					
BR-007	Integration with marketing platforms and resellers	Integration	High	2024- 06-15	Stakeholders	IT Manager
BR-008	Tight data security	Security	High	2024- 06-20	Management	Project Lead
BR-009	Course search and filtration capabilities	Search	Medium	2024- 06-25	User Request	IT Manager
BR-010	Integration with 10293 financial system	Integration	High	2024- 06-30	Stakeholders	IT Manager
Description:	· Nooda tha	t oro voru	important	and m	ust ha mat s	

High (4-5)	:	Needs that are very important and must be met as soon as
		possible. 10293Inability to fulfill this need can cause a major
		failure of the project or system.
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Medium (3) : Needs that are important but not urgent. These needs must be met, but delays will not cause major failures.

Low (1-2) : Needs that are not very important and can be met after more urgent needs are met. These needs have little impact on the project or10293 system.

### **Data Architecture**

This *Data Requirement Catalog* is an important stage in planning an effective information system strategy for the Work Training Center (BLK) in Tegal Regency, using the TOGAF ADM and ITIL approaches. 10293This catalog aims to identify essential data requirements for the development of a system that can meet the strategic objectives of BLK. By presenting the data requirements in detail, including description, category, priority, identification date, source, and requirement owner, this catalog provides clear guidance to the development team to design a robust data infrastructure.

	Table 5: Data Requirement						
ID	Requirement	Description	Category	Priority	Date	Source	Owner
	Item						
1	DR-001	Trainee data	Data	High			IT
			Collection		2024-	Stakeholders	Manager
					05-15		
2	DR-002	Participant	Data	High			Project
		attendance data	Collection		2024-	Management	Lead
					05-20	-	
3	DR-003	Training outcome	Data	High		User	IT
		evaluation data	Collection		2024-	Request	Manager
					05-25	-	
4	DR-004	Training	Data				IT
		equipment	Collection	Medium	2024-	Stakeholders	Manager
		inventory data			06-01		•

5	DR-005	Marketing and	Data				Project
		distribution data	Collection	Medium	2024-	Management	Lead
					06-05		
6	DR-006	BLK financial	Data	High	2024-	User	IT
		data	Collection		06-10	Request	Manager
7	DR-007	Security data	Data	High	024-		IT
		-	Security	-	06-15	Stakeholders	Manager
8	DR-008	Relevant training	Data	High	2024-		Project
		data for needs	Collection		06-20	Management	Lead
		ystem1029410294					
		e					
		•					
9	DR-009	Evaluation data	Data			User	IT
9	DR-009	Evaluation data on participants'	Data Collection	Medium	2024-	User Request	IT Manager
9	DR-009	Evaluation data on participants' performance in	Data Collection	Medium	2024- 06-25	User Request	IT Manager
9	DR-009	Evaluation data on participants' performance in training	Data Collection	Medium	2024- 06-25	User Request	IT Manager
9	DR-009 DR-010	Evaluation data on participants' performance in training Training	Data Collection Data	Medium High	2024- 06-25	User Request	IT Manager IT
9	DR-009 DR-010	Evaluation data on participants' performance in training Training administration	Data Collection Data Collection	Medium High	2024- 06-25 2024-	User Request Stakeholders	IT Manager IT Manager
9	DR-009 DR-010	Evaluation data on participants' performance in training Training administration data	Data Collection Data Collection	Medium High	2024- 06-25 2024- 06-30	User Request Stakeholders	IT Manager IT Manager
9 10 De	DR-009 DR-010 scription:	Evaluation data on participants' performance in training Training administration data	Data Collection Data Collection	Medium High	2024- 06-25 2024- 06-30	User Request Stakeholders	IT Manager IT Manager
9 10 De	DR-009 DR-010 scription: gh (4-5)	Evaluation data on participants' performance in training Training administration data	Data Collection Data Collection	Medium High	2024- 06-25 2024- 06-30	User Request Stakeholders	IT Manager IT Manager

igh (4-5) : Needs that are very important and must be met as soon as possible. 10294Inability to fulfill this need can cause a major failure of the project or system.

Medium (3) : Needs that are important but not urgent. These needs must be met, but delays will not cause major failures.

Low (1-2) : Needs that are not very important and can be met after more urgent needs are met. These needs have little impact on the project or system.

### **Technology** Architecture

This *Technology Requirement Catalog* is an important step in planning the development strategy of a robust information10294 system and system1029410294 era for the Balai Latihan Kerja (BLK) in Tegal Regency, using the TOGAF ADM and ITIL approaches. This catalog aims to identify essential technology needs to support BLK's strategic objectives in providing quality and up-to-date training services. By presenting the technology requirements in detail, including description, category, priority, date of identification, source, creation/amendment status, and associated standard classes, the Catalog provides clear guidance to the development team to design and implement a technology infrastructure that meets the needs of BLK. It is hoped that the Catalog will be a valuable tool in ensuring that the BLK's10294 information system can operate efficiently, securely, and can continue to evolve in accordance with evolving technological demands and business needs.

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ID	Requirement Item	Description	Category	Priority	Date	Source	Standards Class
1	TR-001	Reliable and fast network infrastructure	Network Infrastructure	High	2024- 05-15	Stakeholders	Networking

2	TR-002	Strong database	Database	High			Database
		management	Management	U	2024-	Management	
		system	-		05-20	-	
3	TR-003	Flexible		High		User	
		application	Development		2024-	Request	Development
		development	Platform		05-25		
		platform					
4	TR-004	Content	Content				Content
		management	Management	Medium	2024-	Stakeholders	Management
		system for online			06-01		
		learning					
5	TR-005	Integrated	Information	High			Security
		information	Security		2024-	Management	
	<b>TD</b> 004	security system	<b>.</b>	<b>TT</b> 1	06-05	<b>T</b> T	÷ .
6	TR-006	Application	Integration	High	2024	User	Integration
		integration	Platform		2024-	Request	
		platform that is			06-10		
		ystem1029510295					
7	TD 007	Sombisticated	Data	ILah			Analytica
/	1K-007	data analysis	Analytics	nign	2024	Stakeholders	Analytics
		tools	Analytics		2024-	Stakenolders	
8	TR-008	Identity and	Identity and	High	00-15		Security
0	110-000		Access	Ingn	2024-	Management	Security
		management	Management		06-20	Mulugement	
		solutions	management		00 20		
9	TR-009	Efficient IT	IT Service			User	IT Service
-		service	Management	Medium	2024-	Request	Management
		management			06-25	1	8
		system					
	TR-010	Scalable cloud	Cloud	High			Cloud
10		infrastructure	Infrastructure	2	2024-	Stakeholders	Computing
					06-30		

Description:

High (9-10)	:	Needs that are very important and must be met as soon as
		possible. 10295Inability to fulfill this need can cause a major
		failure of the project or system.

- Medium (5-8) : Needs that are important but not urgent. These needs must be met, but delays will not cause major failures.
- Low (1-4) : Needs that are not very important and can be met after more urgent needs are met. These needs have little impact on the project or system

### **Application Architecture**

Application Architecture Application architecture is built to identify and define the main applications needed by the enterprise to manage data and support business functions. Application architecture is identified and defined based on information needs to support decision making in each business function and information exchange between business functions. The application architecture is built based on the data architecture that has been built and the business functions that have been determined previously.



Figure 4: Application Concept

In Figure 4, we can see the application concept that will be applied by BLK, the application concept diagram presented is the result of identification of the problems found in BLK. In this application concept diagram, it can be seen how applications communicate with each other, the data storage process, system security and the network to be used. In addition, the principles of architecture are also seen in this diagram, where data can be shared, because the data is stored in a database that is integrated between applications, making reports according to management needs precisely and quickly so as to provide good service to stakeholders. Although there is a need for different teams and tools, TOGAF requires an EA framework and ITIL requires database management so that the two frameworks complement each other.

### Information Technology Infrastructure Library (ITIL)

Based on the third version of ITIL, which essentially consists of five parts and emphasizes more on managing the life cycle of services provided by information technology. The five parts are service strategy, service design, service transition, service operation and continual service improvement.

### Service Strategy

Service Strategy provides guidance to ITSM implementers on how to view the ITSM concept not only as an organizational capability (in delivering, managing and operating IT services), but also as a strategic corporate asset. The guide is presented in the form of basic principles of the ITSM concept, references and core processes that operate throughout all stages of the ITIL Service Lifecycle.

Topics covered in this lifecycle stage include the establishment of a market for selling services, types and characteristics of internal and external service providers, service assets, the concept of a service portfolio and the overall implementation strategy of the ITIL Service Lifecycle.

No.	Objective	Description
1	Understand Busines	s Understand BLK's business objectives, including vision, mission, and
	Objectives	long- and short-term goals, as well as customer needs.
2	Define Service Assets	Define the service assets required to support BLK's business objectives,
		including human resources and technology.
3	Develop Servic	e Develop a service portfolio that includes the services provided by BLK,
	Portfolio	their priorities, and their relationship to business needs.
4	Analyze Market an	d Analyze market demand and customer needs to ensure that the services
	Customer Demand	provided are in line with customer expectations.
5	Identify Opportunitie	s Identify opportunities for growth and innovation in service delivery that
	for Growth an	d can improve the effectiveness and efficiency of BLK.
	Innovation	
6	Define Financia	l Define a financial management approach that enables BLK to provide IT
	Management Approach	services at a measurable and controllable cost.
7	Establish Governance	Establish a governance structure that ensures that strategic decisions
	Structure	related to IT services are well supported and integrated with BLK's
		business objectives.
8	Develop Servic	e Develop a continuous service improvement plan based on evaluation of
	Improvement Plan	the effectiveness and efficiency of BLK IT services.

Table 7. Service Strategy

#### Service Design

In order for IT services to provide benefits to the business, these IT services must first be designed with reference to the business objectives of the customer. Service Design provides guidance to IT organizations to be able to systematically and best practice design and build IT services and ITSM implementation itself. Service Design contains principles and design methods to convert the strategic goals of the IT organization and business into a portfolio/collection of IT services and service assets, such as servers, storage and so on.

The scope of Service Design is not only to design new IT services, but also the processes of change and improvement of service quality, service continuity and performance of services.

	Table 8. Service Design		
No.	Aspect	Description	
1	Service Catalog Design	Design a service catalog that includes all services provided by BLK	
		along with descriptions, features, and prices.	
2	Service Level Agreement	Design clear and measurable service level agreements between BLK	
	(SLA) Design	and service users for each IT service.	
3	Availability Management	Devise an availability management strategy to ensure that BLK IT	
		services are available as needed.	
4	Capacity Management	Design a capacity management process to ensure that BLK's IT	
		infrastructure can handle service demands.	
5	IT Service Continuity	Devise plans and procedures for the recovery of BLK IT services in	
	Management	disaster scenarios or unexpected disruptions.	
6	Information Security	Design an information security management strategy to protect	
	Management	sensitive data and BLK's IT infrastructure from threats.	
7	Supplier Management	Design a supplier management process to ensure that suppliers of	
		BLK IT services and products meet established requirements and	
		standards.	
8	Service Design Package	Create a service design package that includes all the information an	
		documents required to implement a new or updated service.	

#### Maturity Level

The measurement scale or weight on the maturity level as shown in table 9.

Scale	Description
0	Management is not aware of the problem
1	Settlement based on personal cases with no organizational process and no process standards.
2	There is a standard procedure for the task, but there is no socialization and training.
3	The existence of standardized procedures
4	The management supervises and monitors the procedures.
5	Organizations are more sensitive to facing business competition.

Table 9: System maturity assessment scale table

This calculation consists of several parts, namely the numbers 1 - 5 which are commonly referred to as maturity levels. The calculation of the maturity level is carried out by finding the average value in each activity and subdomain from the reference to the results of the offline questionnaire given to respondents.

The population in this study were employees and students of the Tegal Regency Job Training Center (BLK), the total population involved in the study was 100 people. While the sample of 15 people obtained the following results:

Sub Domain	Total Answer	Respondents	quesioner	Average
Event Management	182	15	3	4.04
Incident Management	172	15	3	3.83
Request Fullfilment	170	15	3	3.79
Problem Management	179	15	3	3.98
Access Management	183	15	3	4.07
	886	75	15	

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The results of this study are the measurement of the maturity level of BLK information systems using the ITIL framework at the Tegal Regency Job Training Center, it can be concluded based on the results of questionnaire analysis and subdomain calculations by finding the average. Determination of the level of maturity starting from level 1-5, as for the results of the calculation of maturity level per subdomain, namely:

Table 11. Calculation Results of Subdomains				
Subdomain	Value			
Event Management	4.04			
Incident Management	3.83			
Request Fullfilment	3.79			
Problem Management	3.98			
Access Management	4.07			
Average	3,94			

After obtaining the average in each subdomain, the calculation is carried out with the formula



Strategic Planning of Work Training Center Information System Using TOGAF ADM and ITIL 10298 The results of the maturity level of service operation are obtained, namely 3.94 (Managed and Measurable), it can be concluded that the results of the calculation of the maturity level are not yet optimal and have not reached scale 5 (Optimized) to achieve the maximum level of implementation with the service operation stage in accordance with the procedures or guidelines that have been made so that if there is a problem with system services, it can be managed with good management.

The conclusions that can be drawn regarding the measurement of the maturity level of the BLK information system using the ITIL framework are (a) Event management has a maturity value that shows level 4 with a value of 4.04 managed information, (b) Incident management has a maturity value that shows level 4 with a value of 3.83 managed information, (c) Request fullfilment has a maturity value that shows level 4 value 3.79 managed information, (d) Problem management has a maturity value that shows level 4 with a value of 3.98 managed information, (e) Access management has a maturity value that shows level 4 with a value of 4.07 managed information.

The service operation domain maturity level results are at level 4 with a value of 3.94 and has not yet reached level 5, which means that some activities have not been fully carried out to the maximum. To achieve the expected maturity process, management must always supervise every decision making in accordance with existing procedures. So that every system service can run more effectively

#### **CONCLUSION**

Based on the discussion that has been presented above, the researcher draws conclusions, namely (a) the application of TOGAF ADM makes it possible to understand the strategic planning process systematically, from problem identification to the development of measurable solutions. On the other hand, the ITIL approach provides practical guidance in managing the BLK IT service lifecycle, from strategy to operations, with a focus on delivering sustainable business value, (b) the results of this study indicate that BLK Tegal Regency has the potential to improve the governance, security, and management of its IT services. (c) The application of TOGAF ADM and ITIL in the strategic planning of the Tegal Regency BLK Information System has great potential to improve the effectiveness, efficiency, and quality of IT services. The results of measuring the maturity level of the BLK information system using the ITIL framework, namely (a) Event management has a maturity value that shows level 4 with a value of 4.04 managed information, (b) Incident management has a maturity value that shows level 4 with a value of 3.83 managed information, (c) Request fullfilment has a maturity value that shows level 4 value 3.79 description managed, (d) Problem management has a maturity value that shows level 4 with a value of 3.98 description managed, (e) Access management has a maturity value that shows level 4 with a value of 4.07 description managed, with the service operation domain the results of the maturity level are at level 4 with a value of 3.94 and have not reached level 5 which means that some activities have not been fully carried out to the maximum.

Integrating this framework into IT planning and management practices, BLK can be more responsive to environmental changes, more adaptive to business needs, and more efficient in the utilization of information technology resources.

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