

# Application of Public Entrepreneurship in Information and Communication Technology-Based Education Services in the South Sulawesi Provincial Government

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**Abstract:** This research aims to formulate a strategy for implementing public entrepreneurship in ICT-based education services for the South Sulawesi Provincial Government. This research used a mixed type of research (mixed method) with 27 informants and 297 respondents from the population of all educational units under the South Sulawesi Provincial Education Office. The research results show that the strategy for implementing public entrepreneurship recommended based on the results of the SOAR analysis, the SA strategy (strengths - aspirations), the SR strategy (strengths - results), the OA strategy (opportunities - aspirations), and the OR strategy (opportunities - results), is PANRITA, namely Purpose realization, Accountability measures, Needs Satisfaction, Resource empowerment, Innovative Culture, Transformational Leadership, and Adaptive strategies.

**Key words:** Public Entrepreneurship, Science, SOAR, ICT-Based Education Services

## Introduction

According to the United Nations Educational, Scientific and Cultural Organization in the document *Toward Policies for Integrating ICTs into Education* (in Anshar, 2024) states that integrating information and communication technology into education, especially in the learning process, has three main objectives: first, to build a knowledge-based society habits" such as the ability to solve problems (problem-solving), communication skills, the ability to search for, manage information, convert it into new knowledge and communicate it to other people, secondly to develop skills in using information and communication technology, and thirdly to increase the effectiveness and efficiency of the learning process.

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In the context of public services or public organizations, especially ICT-based services, system and service integration is a key aspect in increasing the efficiency, effectiveness, and quality of public services through utilization. ICT can be used to integrate government services, thereby creating a system that is more efficient and responsive to community needs (Wes Darrel, in Halpian, 2015).

In responding to these challenges, good educational governance can be realized through the New Public Management pattern (Fusarelli and Johnson; in Favian, 2020). New Public Management encourages the formation of an orientation in government organizations that focuses on developing innovation in responding to the challenges and dynamics of public service needs.

## **The concept of public entrepreneurship is a solution to organizational problems.**

Government. The government must be able to change the paradigm of service organizations into four forms, namely policy entrepreneurs, bureaucratic entrepreneurs, executive entrepreneurs, and political entrepreneurs (Robert and King, in Syam. H et al., 2021).

Public entrepreneurship is manifested in various activities, such as changing the institutional environment or rules of the game, establishing new public organizations, creating and managing new public resources, and exploiting spillovers with private action for the broader good. Several studies related to public entrepreneurship by the government include Muslihin, A., Syam, H., Akib, H., & Syukur, M. (2019, June) with the title *Application of the Principles of Public Entrepreneurship in Public Asset Management in South Sulawesi Province, Indonesia* which was presented at the In International Conference on Public Organization (ICONPO) scientific meeting and research by Syam, H., Lamangida, T., Madubun, J., & Akib, H. (2018) with the title *Public entrepreneurship perspective in management of the limbo to lake in Gorontalo regency, Indonesia*.

Service quality standards are measured by customer satisfaction criteria and an increase in user interest and expectations regarding service continuity (Hardiyansyah, 2018). One approach to see the extent of user expectations and the level of reality of implementing public entrepreneurship in ICT-based education services is through Importance and Performance Analysis (IPA) while finding strategies for implementing public entrepreneurship in technology and information-based education services can be obtained using the analytical method. SOAR (Strong, Opportunity, Aspiration, and Result) is an approach that first identifies the current internal environment in the form of strengths and aspirations and the external environment in the form of opportunities and results. Online, Teacher Exchange, and Smart School, as well as facilitating and managing several applications sourced from other regional organizations and ministries, both the Ministry of Education and Culture and the Ministry of Home Affairs.

Based on the description above, researchers are interested in finding descriptions and strategies for implementing public entrepreneurship in information and communication technology (ICT)-based education services, so researchers are motivated to conduct research with the title "application of public entrepreneurship in ICT-based education services in the South Sulawesi Provincial Government".

## **Methods**

### **Types of research**

This research uses mixed methods. Mixed methods research includes data collection or analysis of quantitative and qualitative data in a single study where data is collected simultaneously or sequentially, obtains priority, and includes a combination of data at one or more levels in the research process (Cresswell in Anshar, 2024).

### **Time and Place of Research**

This research was carried out from October 2023 to February 2024 at the South Sulawesi Provincial Government Education Office.

### **Population, Sample, Subjects and Research Informants**

#### **1. Population**

The population of this research is educational units that receive ICT-based education services by the South Sulawesi Provincial Education Office, whether they receive all or part of ICT-based education services, consisting of the Special School, High School, and Vocational High School educational levels, both organized by the government (state schools)

As well as by the community (private schools), the following is data on the distribution of the research population:

**Table 3.1** Data on the distribution of the study population

No	Type of Sub Population			Total Population
	Level	Country	Private	
1	SLB	23	71	<b>94</b>
2	SMA	338	282	<b>620</b>
3	SMK	168	264	<b>432</b>
<b>Amount</b>				<b>1.146</b>

Source: Data Processed by Researchers, 2024

## 2. Sample

The sample in this study consisted of 297 educational units, consisting of representatives from each level of education: Special Schools (SLB), High Schools (SMA) and Vocational Middle Schools (SMK) and representatives of government education providers (state schools) and the community (private schools).

## 3. Research Subjects and Informants

The subject of this research is the State Civil Apparatus at the South Sulawesi Provincial Education Service, while the object of research is the implementation of public entrepreneurship.

## Variables and Research Focus

In this research, there is 1 (one) research variable and 2 (two) research focuses, where the research variable is a description of the principles of public entrepreneurship, while the research focus is supporting and inhibiting factors as well as strategies for implementing public entrepreneurship principles.

## Results and Discussion

The application of public entrepreneurship principles to the South Sulawesi Provincial Government's ICT-based education services carried out by the South Sulawesi Provincial Education Office is carried out by implementing several strategies, that is, (1) core strategy, (2) consequence strategy, (3) customer strategy, (4) control strategy, (5) culture strategy.

### a. Core Strategy

The core strategy is measured based on three indicators, namely clarity of objectives, clarity of roles, and clarity of direction. The clarity of objectives for implementing public entrepreneurship principles in ICT-based education services by the South Sulawesi Provincial Education Office can be seen in the Strategic Plan, RPJMD, SPM, IKU, and IKK documents. Clarity in the role of managing ICT-based education services in the South Sulawesi Provincial Education Service is managed specifically by the department's technical implementation unit so that the results of ICT-based services can be more focused and measurable to meet the Satisfaction of those served.

Clarity of direction regarding the application of public entrepreneurship principles in ICT-based education services at the South Sulawesi Provincial Education Office can also be seen from existing documents.

b. Consequence strategy

Consequence strategies in implementing public principles entrepreneurship in ICT-based education services at the Education Department South Sulawesi Province is measured using indicators of ability to manage competition and performance.

The application of public entrepreneurship principles in ICT-based education services at the South Sulawesi Provincial Education Office in managing performance and resources provides an opportunity to implement innovative integrated performance assessments and allowances independently. ICT-based services for improving performance implemented by the South Sulawesi Provincial Education Office can be seen in various programs, such as the smart school teacher program and Scholastic Learning.

c. Customer strategy

The customer strategy focuses on accountability, namely, to whom the government should be responsible. The main boost is accountability, where the government is responsible to the community as customers of public services. Customer strategy is measured based on ensuring service quality. The behavior employees who provide services in UPTD can provide ICT-based educational services such as synchronous, asynchronous, web base, Android base, and social media.

d. Control strategy

Control strategies determine the location of decision-making power. Power is the main lever in the decision-making process from hierarchy to a shared mission. Control strategies are measured based on three indicators, namely organizational empowerment, employee empowerment, and community empowerment.

Organizational empowerment in connection with the application of public entrepreneurship principles in ICT-based education services at the South Sulawesi Provincial Education Service is visible in the organization of existing resources at the South Sulawesi Provincial Education Office by involving all existing elements in accordance with their respective competencies.

Empowerment of employees in connection with the application of public entrepreneurship principles in ICT-based education services at the South Sulawesi Provincial Education Service is visible in the special involvement of ICT-skilled employees, both those assigned to the main Sulawesi Provincial Education Office and in each branch of the education office in regions 1 to region 12.

Community empowerment in connection with the application of public entrepreneurship principles in ICT-based education services at the South Sulawesi Provincial Education Office is visible in the involvement and support for ICT-based education services.

e. Cultural strategy

Cultural strategies are measured based on three indicators. Namely, building shared feelings, changing habits, and changing thoughts.

In terms of building shared feelings regarding the application of public entrepreneurship principles in ICT-based education services at the South Sulawesi Provincial Education Office, this can be seen in cooperation in implementing ICT service programs. In this case, the Leadership is able to be a motivator in every activity that provides ICT services. On the other hand, subordinates as technical implementers in ICT services are able to adapt to the wishes of the Leadership in accordance with their respective duties and responsibilities in providing ICT services.

In terms of changing habits and thoughts. The South Sulawesi Province education office is able to direct education services from conventional to ICT-based learning

## Discussion

Based on the data obtained from the South Sulawesi Provincial Education Service above regarding core strategies, consequence strategies, customer strategies, control strategies, and cultural strategies, then the data is used to develop a strategy for implementing public entrepreneurship in ICT-based education services at the Provincial Education Office South Sulawesi by conducting a Strengths, Opportunities, Aspirations, and Results (SOAR) analysis so that it can be described as follows:

1. Core Strategy

The Strengths, Opportunities, Aspirations, and Results factors in the core strategy for implementing public entrepreneurship in ICT-based education services at the South Sulawesi Provincial Education office are as follows:

a. Strengths

- i. ICT-based education services have a strong policy and institutional foundation (Renstra, RPJMD, SPM, IKU, IKK, UPT)
- ii. ICT infrastructure for adequate education services
- iii. The team is experienced in managing change and utilizing ICT

b. Opportunities

- i. Digitalization of integrated education administration
- ii. Adequate financial resources (ABPD, BOS Funds, and private sector partnerships)
- iii. Transformation of the organization into BLU

c. Aspirations

- i. ICT-based education services integrated with other Ministry and OPD platforms
- ii. Variations in ICT-based andrological, pedagogic, and heterotic learning

d. Results

- i. High level of user (school, teacher, and student) satisfaction and effective learning outcomes
- ii. Increased use and expansion (accessibility) of ICT-based education services by the wider community

Based on the SOAR mapping above, a strategic analysis of the customer strategy was then developed. The first strategy is the S – A strategy.

It is a strategy obtained between strengths and aspirations. This strategy is created by utilizing all strengths to achieve the aspirations expected by the South Sulawesi Provincial Education Office.

The second strategy, in the form of the O – A strategy is a strategy obtained between Opportunities (opportunities) and Aspirations (aspirations). This strategy was created to identify and fulfill the aspirations of each stakeholder who is oriented towards the opportunities that the South Sulawesi Provincial Education Office has.

The third strategy is the S – R strategy, which is a strategy that is obtained between strengths and results. This strategy was created to realize the strengths of the South Sulawesi Provincial Education Office and achieve measurable results.

The fourth strategy is the O – R strategy, which is a strategy obtained between Opportunities (opportunities) and Results (results). This strategy is oriented towards the opportunities that the South Sulawesi Provincial Education Office has to achieve measurable results.

2. Cultural Strategy

Strengths, Opportunities, Aspirations, and Results factors in the cultural strategy for implementing public entrepreneurship in ICT-based education services at the South Sulawesi provincial education service, as follows:

a. Strengths

- i. Ability to motivate/inspire change and influence values (attitudes and behavior)
- ii. Leadership commitment and support for ICT-based educational services

b. Opportunities

- i. ICT-based innovation, research and development space
- ii. Digital governance technology

c. Aspirations

- i. Creating an organizational culture that is adaptive and open to innovation in ICT-based educational services
- ii. Data-based decision making

d. Results

- i. Pioneer of ICT-based education transformation
- ii. Creation of a dynamic and sustainable educational environment. Based on the SOAR mapping mentioned above, it is then developed strategic analysis for customer strategy. The first strategy is the S – A strategy, which is a strategy

obtained between strengths and aspirations. This strategy is created by utilizing all strengths to achieve the aspirations expected by the South Sulawesi Provincial Education Office.

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The fourth strategy, namely the O – R strategy, is a strategy obtained between Opportunities (opportunities) and Results (results). This strategy is oriented towards the opportunities that the South Sulawesi Provincial Education Office has to achieve measurable results.

Based on the results of this analysis, the South Sulawesi Provincial Education Office's efforts to implement public entrepreneurship in ICT-based education services must run simultaneously. The strategy models that can be applied are as follows:

Purpose Realignment, or goal adjustment, shows efforts to adjust and redirect goals to ensure that the Education Department's strategies and actions are in line with the desired vision and aspirations in ICT-based education services, readjusting the core of the organization to remain relevant and effective amidst changing market conditions, technological developments, and internal changes. The approach of adjusting back to goals, in accordance with existing policy bases such as vision and mission, gubernatorial regulations, and other official documents, is also in line with Shyam's opinion. H (2021) argues that public entrepreneurship is based on a vision and mission or is directed by goals and not by rigid rules or procedures;

Accountability Measures or Accountability Measures are steps that represent the SA strategy (strengths - Aspirations), SR strategy (strengths - Results), OA strategy (Opportunities - Aspirations), and OR strategy (Opportunities - Results)

On the strategy for the consequences of implementing public entrepreneurship in ICT-based education services at the South Sulawesi Provincial Education Service.

Needs Satisfaction The need for Satisfaction of customers or users of ICT-based education services is the core of various strategies that emerge in the SOAR strategy for implementing public entrepreneurship in ICT-based education services at the South Sulawesi Provincial Education Service.

Resource empowerment refers to the importance of empowering organizations, employees, and communities to achieve innovation and active participation in ICT-based education.

Innovative Culture is the need to build an organizational culture that supports innovation. Innovative Culture includes a work environment that supports creativity, new ideas, and the courage to take risks, as well as structures and processes that facilitate innovation, in this case, support for



individual and organizational policies and values to support innovation in the use of ICT in educational services at the Provincial Education Office South Sulawesi.

Transformational Leadership, an approach that emphasizes inspiring and motivating staff to exceed their expectations, is particularly suited to driving innovation and change in complex and dynamic environments such as ICT-based education.

Adaptive Strategies are the ability of the Education Department to adapt quickly and effectively to changing conditions or environmental challenges.

With the Purpose of realignment, Accountability measures, needs satisfaction, Resource empowerment, Innovative culture, Transformational Leadership, and Adaptive strategies model with the acronym (PANRITA), it becomes a strengthening application of public entrepreneurship in ICT-based education services at the South Sulawesi Provincial Education Office.

### **Conclusion**

Based on the research results, it can be concluded that the recommendation model for implementing public entrepreneurship in ICT-based education services at the South Sulawesi Provincial Education Office is based on core strategy, consequence strategy, customer strategy, control strategy and cultural strategy, using SOAR analysis, SA strategy (strengths - aspirations ), SR strategy (strengths - results), OA strategy (opportunities - aspirations), and OR strategy (opportunities - results), can be formulated with the acronym PANRITA, namely Purpose realization, Accountability measures, Needs Satisfaction, Resource empowerment, Innovative Culture, Transformational Leadership, and Adaptive strategies.

### **Suggestion**

Researchers designed a strategy model for implementing public entrepreneurship in the form of PANRITA (Purpose realization, Accountability measures, Needs Satisfaction, Resource empowerment, Innovative Culture, Transformational Leadership, and Adaptive strategies). This model is an alternative solution to strengthening the application of public entrepreneurship in ICT-based education services at the South Sulawesi Provincial Education Service.

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