



Strategic Analysis of Income-Generating Projects in the Laguna State Polytechnic University System: Basis for Developed Differentiated Actionable Business Plans

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Abstract— This study examined the Income-Generating Projects (IGPs) of the Business Affairs Office (BAO) across the four campuses of Laguna State Polytechnic University (LSPU) using the SWOC (Strengths, Weaknesses, Opportunities, Challenges) framework. The objective was to develop differentiated actionable business plans to strengthen the sustainability, competitiveness, and educational relevance of IGPs. A multiphase mixed-method approach was employed, drawing from institutional profile data, clientele satisfaction survey results, and interviews with BAO project managers and chairpersons. Findings revealed distinct campus profiles: Sta. Cruz had the largest student population (12,000), followed by San Pablo (9,371), Siniloan (5,570), and Los Banos (5,000). The BAO had operated for 15 years in Sta. Cruz, San Pablo, and Los Banos, and for 20 years in Siniloan. While merchandising, food services, and stall rentals were common IGPs, only Siniloan maintained Student Instructional Enterprises (SIEs) aligned with its agricultural thrust. Clientele Satisfaction results indicated generally positive feedback, with overall scores between 4.29 and 4.40. Reliability scored highest across all campuses, while responsiveness, access, and integrity rated lower, suggesting the need for improved innovation and technological support. Strategic analysis showed strengths in project diversity and staff commitment, but weaknesses in staffing, store location, and outdated guidelines. Opportunities included branding and partnerships, while challenges such as price instability, competition, and environmental risks persisted. The study proposes a differentiated Actionable Business Plan that offers a structured yet flexible guide for BAO-managed IGPs.

Keywords— income-generating projects, Business Affairs Office, SWOC analysis, higher education management, differentiated business plan.

I. INTRODUCTION

State Universities and Colleges (SUCs) worldwide have diversified their funding strategies by adopting entrepreneurial activities to promote financial sustainability and enhance student learning, supporting Sustainable Development Goals (SDGs) 4: Quality Education and 8: Decent Work and Economic Growth. Internationally, higher education institutions engage in income-generating ventures such as industry partnerships, commercialization, and instructional enterprises to address limited public funding while advancing innovation and community development.

In the Philippines, this approach is institutionalized under Republic Act No. 8292 (Higher Education Modernization Act of 1997), which mandates SUCs to integrate instruction, research, extension, and income generation as core functions. Accordingly, Laguna State Polytechnic University (LSPU) established the Business Affairs Office (BAO)



to manage income-generating projects (IGPs) and Student Instructional Enterprises (SIEs) as platforms for experiential learning, innovation, and community engagement.

Despite this mechanism, IGP implementation across LSPU campuses remains uneven. The Commission on Audit (2024) found that only the Siniloan Campus had operationalized SIEs in accordance with the BAO Manual of Operations, while other campuses have yet to implement similar ventures. This gap is largely due to the manual's focus on Siniloan's agriculturally oriented SIEs, which constrains replication and contextual adaptation across campuses.

Existing literature highlights the importance of IGPs in strengthening institutional resilience and financial sustainability (Adora & Ultra, 2021; Mhlongo & Rautenbach, 2023), yet limited attention has been given to developing differentiated, actionable business plans that account for the distinct strengths and contexts of individual campuses. Addressing this gap, the present study conducted a strategic analysis of LSPU's IGPs and developed differentiated, actionable business plans aligned with the unique strengths of each campus, aiming to reposition IGPs as platforms for experiential learning, institutional sustainability, and community development.

II. REVIEW OF RELATED LITERATURE

A. Business Affairs Offices and Income-Generating Projects

The contemporary higher education environment is increasingly shaped by financial pressures, demands for accountability, and calls for innovation.

Business Affairs Offices of universities have assumed an indispensable role in ensuring that institutions remain financially sustainable while preserving their academic and societal missions. Research from the Philippine context demonstrates that IGP success depends less on the longevity or scale of staffing than on responsiveness to client demand (Miranda, 2016). This finding challenges the assumption that institutional experience or staffing alone guarantees viability and points to the necessity of market orientation in differentiated actionable business planning.

Revenue diversification is generally viewed as strategic rather than optional. Malaysian public universities using the Hirschman Herfindahl Index showed that diversified revenue streams improved financial sustainability (Jaafar et al., 2021), supporting Resource Dependence Theory. Studies across African and Latin American institutions similarly confirm that institutions maintaining diversified revenue streams and robust governance were better able to withstand financial shocks (Kobugabe & Rwakihembo, 2022; Cikutovic, 2024).

B. Client Satisfaction and Service Quality

Service quality in higher education institutions has consistently been linked to student satisfaction, loyalty, and retention. Ramos and Briones (2024) demonstrated that service quality in a Philippine HEI was at an acceptable level but still required improvements, particularly in tangibility, responsiveness, and assurance.

Research confirms that reliability, empathy, and responsiveness are the most significant predictors of client satisfaction across HEI service contexts (Herman, 2022; Borishade et al., 2021).

The Anti-Red Tape Authority (ARTA) Clientele Satisfaction Survey operationalizes these dimensions through standardized measures of efficiency, accessibility, responsiveness, and overall satisfaction, providing a consistent framework for evaluating institutional service performance aligned with national standards.

C. Strategic Analysis Frameworks

The SWOC (Strengths, Weaknesses, Opportunities, Challenges) framework, an advanced SWOT analysis developed by Aithal (2024), is particularly appropriate for higher education and public-sector institutions because organizational realities encompass developmental, educational, and social duties beyond market competition. By replacing 'threats' with 'challenges,' the framework shifts institutional analysis from defensive to adaptive and managerial, emphasizing problem-solving, strategic responsiveness, and continuous improvement.

The Expectation-Disconfirmation Theory (EDT) introduced by Oliver (1999) complements the SWOC framework by assessing stakeholder perceptions of service performance against prior expectations. EDT posits that clients are satisfied when performance meets or exceeds expectations and dissatisfied when it falls short, making it an effective theoretical lens for evaluating the responsiveness and accountability of BAO-managed services.

III. METHODOLOGY

A. Research Design

This study adopted a multiphase mixed-methods research design (Creswell & Plano Clark, 2018), involving the sequential use of multiple quantitative and qualitative phases to address the complexity of IGP management. The design consisted of three interrelated phases: (1) quantitative analysis of institutional profiles across four LSPU campuses; (2) qualitative in-depth interviews with BAO project managers and chairpersons using a researcher-made SWOC-based questionnaire; and (3) quantitative clientele satisfaction survey data obtained from the Management Information System. Integration occurred during data interpretation, where findings from all three phases were triangulated to enhance credibility and validity.

B. Locale and Respondents

The study was conducted in the Business Affairs Offices of the four LSPU campuses: Sta. Cruz (Main Campus), Siniloan, San Pablo City, and Los Banos. A total enumeration method was employed. The first group of respondents consisted of four (4) BAO Project Managers or Chairpersons, one from each campus.

The second group comprised 319 BAO clients--137 from Sta. Cruz, 89 from San Pablo, 56 from Siniloan, and 37 from Los Banos--who participated in the Clientele Satisfaction Survey.

C. Instruments

Three instruments were employed: (1) institutional profile data capturing demographic information and organizational characteristics; (2) a researcher-made SWOC-based questionnaire with open-ended questions validated by four experts in business affairs from different SUCs; and (3) the Clientele Satisfaction Survey (CSS), a standardized ARTA instrument measuring efficiency, accessibility, responsiveness, and satisfaction.

D. Data Analysis

Quantitative data were processed using descriptive statistics, including frequency and percentage distributions, and the mean to evaluate client satisfaction levels. Qualitative data were transcribed verbatim and analyzed using the SWOC framework, systematically categorizing responses into strengths, weaknesses, opportunities, and challenges to preserve contextual integrity while emphasizing strategic implications.

IV. RESULTS AND DISCUSSION

A. Profile of the LSPU Campuses

Students consistently comprise the majority across all campuses, ranging from 94.74% in Siniloan to 96.14% in San Pablo. Sta. Cruz registered the largest population (12,531), while Los Banos was the smallest (5,258). Among the campuses, Siniloan stands out with 20 years of BAO operation and maintains two Student Instructional Enterprises (SIEs) focused on rice production and food processing, reflecting its strong agricultural orientation.

Table I. University Business Affairs Profile

Profile	Sta. Cruz	San Pablo	Siniloan	Los Banos
Years of Existence	15	15	20	15
No. of IGPs	4	5	5	3
Type of IGPs	Merchandising, Water refilling, Printing, Food services, Stall rental	Merchandising, Water refilling, Food services, Stall rental	Merchandising, Food processing, Poultry, Farming, Stall rental	Merchandising, Fingerlings production, Stall rental
No. of SIEs	None	None	2 (rice production & food processing)	None

The variation in IGP types--ranging from merchandising and food services to specialized ventures such as poultry, farming, and fingerlings production--illustrates how BAOs contextualize their business models based on campus specializations and local market demand. Campuses with more diversified and academically integrated IGPs are better positioned to balance revenue sustainability, student development, and community impact (Alvarez-Vanegas et al., 2024; Hickey et al., 2024).

B. Clientele Satisfaction Survey Results

All campuses obtained overall mean scores within the Satisfied (S) range, with San Pablo recording the highest overall mean (M = 4.40), followed by Sta. Cruz (M = 4.38), Siniloan (M = 4.30), and Los Banos (M = 4.29). Reliability consistently received the highest ratings across all campuses, with Los Banos achieving the top score (M = 4.54, Very Satisfied), confirming client trust in BAO-managed operations.

The lowest mean ratings appeared in Integrity at Sta. Cruz (M = 4.15) and in Access and Facilities at Siniloan (M = 4.18) and Los Banos (M = 4.19), indicating lingering concerns regarding transaction security and digital



convenience. These findings are consistent with post-pandemic service quality literature emphasizing that digital accessibility and transparency have become critical predictors of stakeholder confidence (Zygiaris et al., 2022).

Table II. Clientele Satisfaction Survey Results (Mean Scores)

Service Quality Dimension	Sta. Cruz	San Pablo	Siniloan	Los Banos
1. Satisfaction	4.37 A	4.45 A	4.22 A	4.17 A
2. Responsiveness	4.42 A	4.39 A	4.18 A	4.32 A
3. Communication	4.26 A	4.39 A	4.41 A	4.26 A
4. Reliability	4.53 SA	4.50 SA	4.51 SA	4.54 SA
5. Integrity	4.15 A	4.35 A	4.25 A	4.27 A
6. Assurance	4.38 A	4.40 A	4.32 A	4.35 A
7. Access and Facilities	4.26 A	4.37 A	4.18 A	4.19 A
8. Costs	4.45 A	4.47 A	4.38 A	4.37 A
9. Outcome	4.37 A	4.44 A	4.31 A	4.29 A
Overall	4.38 S	4.40 S	4.30 S	4.29 S

Legend: 4.50-5.00 = Strongly Agree (SA)/Very Satisfied (VS); 3.50-4.49 = Agree (A)/Satisfied (S); 2.50-3.49 = Neither (N); 1.50-2.49 = Disagree (D)/Unsatisfied (U); 1.00-1.49 = Strongly Disagree (SD)/Very Unsatisfied (VU)

C. SWOC Analysis of IGPs

The SWOC analysis integrates findings from qualitative interviews with BAO project managers and chairpersons, revealing six internal strengths: (1) strategic integration of merchandise into institutional requirements through mandatory uniform and ID sales; (2) diversity and contextual relevance of production-oriented projects aligned with campus academic thrusts; (3) service-oriented and rental-based ventures leveraging existing infrastructure; (4) high commitment and teamwork among BAO personnel; (5) financial autonomy through self-liquidating accounts; and (6) structured manuals, policy documents, and planning mechanisms.

Five internal weaknesses were identified: (1) physical store locations prone to flooding; (2) spatial limitations in cashier and service areas flagged by ARTA; (3) persistent staffing shortages, particularly during enrollment and institutional events; (4) insufficient technological support and absence of digital payment systems; and (5) lack of clear, updated, and campus-specific IGP and SIE guidelines.

External opportunities include: (1) the official uniform watermark and copyrighted LSPU logo providing exclusive merchandise sales rights; (2) in-house management of food services with guaranteed institutional clientele; (3) marketing of locally produced and value-added food products leveraging campus academic specializations; (4) ongoing partnerships with government agencies (DA, DTI, DOST) and the Agri-Aqua Technology Business Incubation facility; and (5) the availability of diverse university spaces for commercial rental. External challenges encompass price instability from suppliers, broader economic instability, intensifying external competition, and natural disruptions and environmental factors affecting agriculture-based projects.

Figure I. SWOC Analysis of LSPU BAO Income-Generating Projects

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Strategic integration of merchandise into institutional requirements • Diversity and contextual relevance of production projects • Service-oriented and rental-based IGPs • Commitment of BAO personnel • Financial autonomy and access to budgetary support • Use of manuals, planning mechanisms, and policy documents 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Physical location of the store (flood-prone areas) • Spatial limitations in service areas • Staffing shortages and manpower issues • Insufficient technological support (no e-payment) • Lack of clear, updated, campus-specific guidelines
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Official uniform watermark and copyrighted LSPU logo • In-house management of food services • Marketing of locally produced and value-added food products • University's ongoing partnerships (DA, DTI, DOST, ATBI) • Availability and rental of university spaces 	<p>CHALLENGES</p> <ul style="list-style-type: none"> • Price instability from suppliers • Broader economic instability • Rise of external competitors • Natural disruptions and environmental factors

D. Differentiated Actionable Business Plans

Drawing from the SWOC findings and clientele satisfaction data, the study developed Differentiated Actionable Business Plans (DABPs) tailored to each campus context while ensuring institutional coherence. The DABP provides structured frameworks for planning, implementation, monitoring, and evaluation, alongside provisions for staff capacity-building, digital integration, and sustainability strategies.

For Sta. Cruz, the plan prioritizes strengthening merchandise operations, upgrading online transaction security, and developing disaster-resilient facility infrastructure. For San Pablo, it focuses on diversifying food services, formalizing printing and digital service operations, and establishing a standardized SIE framework aligned with teacher education programs. For Siniloan, it recommends scaling existing SIEs in rice production and food processing, strengthening DOST and DA partnerships, and improving access and digital facilities. For Los Banos, it emphasizes expanding fingerlings production, establishing value-added processing capabilities aligned with food science programs, and improving responsiveness in digital transactions.

V. CONCLUSIONS

This study analyzed the Income-Generating Projects of LSPU's Business Affairs Office across four campuses using a multiphase mixed-methods design anchored on the SWOC framework and Expectation-Disconfirmation Theory. The following conclusions emerge from the findings:

First, the campus profiles indicate that students constitute the majority across all campuses, with Siniloan uniquely distinguished by its operational SIEs aligned with agricultural programs. Other campuses face difficulties in



operationalizing SIEs due to mismatched guidelines, leading to missed opportunities for experiential student learning.

Second, BAO services are generally satisfactory across campuses, with strong reliability ratings. However, gaps in digital convenience, transaction security, and responsiveness require targeted technological interventions and policy modernization.

Third, LSPU's IGPs demonstrate key strengths in merchandise integration, project diversity, and personnel commitment, but are constrained by staffing limitations, inadequate technological support, flood-prone locations, and outdated operational guidelines.

Fourth, the proposed differentiated actionable business plans provide structured, campus-responsive frameworks that align financial sustainability with institutional mission, enhance service quality, and reinforce the role of IGPs as platforms for student development, community engagement, and institutional resilience.

VI. RECOMMENDATIONS

Based on the findings, the following recommendations are offered: (1) The differentiated Actionable Business Plan for IGPs should be formally adopted through a revised BAO operations manual, providing each campus with a structured yet flexible framework suited to its unique profile and academic thrusts. (2) Continuous training and upskilling of BAO personnel should be prioritized, with emphasis on enterprise management, marketing, financial monitoring, and digital service systems. (3) LSPU should enhance technological support by introducing digital platforms for online transactions, inventory management, and customer feedback systems to improve responsiveness and accountability across all campuses. (4) Sustainability strategies such as branding of locally produced goods, in-house food service management, and utilization of available university spaces should be embedded in campus business plans, aligned with LSPU's mandate to integrate academic learning, financial viability, and community engagement.

ACKNOWLEDGMENT

The researcher extends sincere gratitude to Dr. Bernardo C. Lunar, Dean of the Graduate School, and to Dr. John Clifford M. Alvero, dissertation adviser, for their unwavering guidance and support. Gratitude is likewise expressed to Dr. Mario R. Briones, University President, for granting permission to conduct the study, and to the BAO project managers and chairpersons across all four LSPU campuses for their valuable participation. To the dissertation committee, panel of examiners, and all colleagues who contributed to the completion of this research--sincere thanks.

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