



PAPER – OPEN ACCESS

Strategy to Increase the Number of Users and Intensity of Use of Bank Sumut Mobile Banking

Author : Faisal Agus Nugraha, et al
DOI : 10.32734/lwsa.v9i2.2861
Electronic ISSN : 2654-7066
Print ISSN : 2654-7058

Volume 9 Issue 2 – 2026 TALENTA Conference Series: Local Wisdom, Social, and Arts (LWSA)



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

Published under licence by TALENTA Publisher, Universitas Sumatera Utara



Strategy to Increase the Number of Users and Intensity of Use of Bank Sumut Mobile Banking

Faisal Agus Nugraha¹, Meilita Tryana Sembiring², Wahyu Ario Pratomo³

¹Student at Master of Management Study Program, Postgraduate School, Universitas Sumatera Utara, Medan, 20155, Indonesia

²Department of Industrial Engineering, Faculty of Engineering, Universitas Sumatera Utara, Medan, 20155, Indonesia

³Department of Economic Development, Faculty of Economic and Business, Universitas Sumatera Utara, Medan, 20155, Indonesia

faisal.gowsal@gmail.com

Abstrak

Pesatnya perkembangan teknologi informasi, khususnya perkembangan internet dan telepon pintar, telah memberikan pengaruh yang signifikan terhadap transaksi perbankan. Mobile banking telah menjadi layanan penting yang memberikan kemudahan bagi nasabah untuk bertransaksi kapan saja dan di mana saja. Meskipun adopsi mobile banking semakin meningkat di Indonesia, tingkat penggunaan layanan mobile banking Bank Sumut (Sumut Mobile) masih relatif rendah. Penelitian ini menyelidiki faktor-faktor yang berkontribusi terhadap terbatasnya adopsi dan intensitas penggunaan Sumut Mobile. Penelitian ini bertujuan untuk mengidentifikasi alasan utama di balik rendahnya adopsi dan intensitas penggunaan Sumut Mobile. Selanjutnya, penelitian ini berupaya untuk mengembangkan strategi yang efektif untuk meningkatkan jumlah pengguna dan keterlibatan mereka dengan layanan mobile banking di Bank Sumut. Penelitian ini menggunakan pendekatan analisis akar penyebab dengan menggunakan Diagram Tulang Ikan dan metode 5W1H (Apa, Di mana, Kapan, Mengapa, Siapa, Bagaimana). Analisis Pareto juga diterapkan untuk menentukan hambatan yang paling signifikan. Data dikumpulkan melalui observasi, wawancara mendalam dengan nasabah dan karyawan Bank Sumut, dan analisis ulasan pengguna dari platform daring. Hasil awal menunjukkan beberapa faktor yang berkontribusi terhadap rendahnya adopsi dan penggunaan Sumut Mobile, termasuk kurangnya informasi dan promosi kepada nasabah, tantangan antarmuka pengguna, motivasi karyawan, ketersediaan sistem, dan keterbatasan fitur dibandingkan dengan pesaing Bank. Lebih lanjut, studi menunjukkan bahwa banyak pengguna yang ada hanya memanfaatkan fitur-fitur dasar non-finansial, sementara transaksi keuangan masih kurang dimanfaatkan. Untuk meningkatkan adopsi dan keterlibatan pengguna pada Aplikasi Sumut Mobile, Bank Sumut perlu menyederhanakan proses pendaftaran, meningkatkan antarmuka pengguna mobile banking, menerapkan kampanye pemasaran yang tepat sasaran, dan menjaga ketersediaan sistem untuk kepuasan nasabah. Memperkuat fungsi mobile banking dan pengalaman pengguna akan sangat penting dalam menumbuhkan minat nasabah dalam menggunakan mobile banking Bank Sumut.

Kata Kunci: Penanaman Ulang Kelapa Sawit; Analisis SWOT; Strategi Percepatan; PTPN IV.

Abstract

The rapid advancement of information technology, particularly the development of the Internet and smartphones, has significantly influenced banking transactions. Mobile banking has become an essential service providing convenience for customers to transact, providing convenience for customers to transact anytime and anywhere. Despite the increasing adoption of mobile banking in Indonesia, the usage rate of Bank Sumut's mobile banking service (Sumut Mobile) remains relatively low. This study investigates the factors contributing to the limited adoption and usage intensity of Sumut Mobile. The research aims to identify the key reasons behind the low adoption and usage intensity of Sumut Mobile. It further seeks to develop effective strategies to increase the number of users and their engagement with mobile banking services at Bank Sumut. The study employs a root cause analysis approach using the Fishbone Diagram and the 5W1H method (What, Where, When, Why, Who, How). A Pareto analysis is also applied to determine the most significant barriers. Data is gathered through observations, in-depth interviews with Bank Sumut customers and employees, and analysis of user feedback from online platforms. Preliminary results indicate several factors contribute to the low adoption and usage of Sumut Mobile, including lack of information and promotions to customers, user interface challenges, employee motivation, system availability, and feature limitations compared to Bank competitors. Furthermore, the study shows that many existing users only utilize basic non-financial features, while financial transactions remain underutilized. To improve user adoption and engagement on the Sumut Mobile Application, Bank Sumut needs to simplify the registration process, enhance the mobile banking user interface, implement targeted marketing campaigns, and maintain system availability for customer satisfaction. Strengthening the mobile banking function and user experience will be very important in growing customer interest in using Bank Sumut's mobile banking.

Keywords: mobile banking; strategy development; fishbone analysis

1. Introduction

The People's Palm Oil Replanting Program (PSR) forms part of the implementation of the National Strategic Program, carried out through collaboration among the government, palm oil companies, and smallholder farmers. With the establishment of a new entity, PTPN IV PalmCo, in December 2023, the PSR has become more systematically structured to support the transformation of the national palm oil plantation sector. This initiative aims to assist small-scale farmers in renewing their oil palm crops by adopting high-quality, sustainable, and environmentally friendly varieties. Additionally, the program contributes to preventing illegal land clearing and helps mitigate negative impacts associated with land use, land use change, and forestry.

Through the implementation of the PSR program, smallholder farmers can enhance land productivity without the need for land expansion, thereby supporting the principles of sustainable agricultural intensification. To facilitate funding for this initiative, the Oil Palm Plantation Fund Management Agency (BPDPKS) has been mandated to collect, manage, and allocate palm oil funds aimed at strengthening the national palm oil sector. The disbursement of PSR funds is regulated under Presidential Regulation (Perpres) No. 61 of 2015 in conjunction with Perpres No. 66 of 2018. Officially, the PSR program was launched by the President of the Republic of Indonesia, Joko Widodo, on October 13, 2017, in Musi Banyuasin Regency, South Sumatra Province, marking an initial step towards promoting an inclusive and participatory approach to the sustainability of the palm oil industry.

In 2023, the implementation of the People's Palm Oil Replanting Program (PSR) by PTPN IV Regional IV in Jambi Province covered an area of 289 hectares and involved 72 farmers, out of a set target of 2,400 hectares and 600 farmers. This translates to a program achievement rate of only 12.07 percent. In contrast, the 2022 PSR implementation recorded no progress, with zero hectares realized from a target of 1,200 hectares resulting in a 0 percent achievement rate. The program in 2022 encountered numerous obstacles, affecting nearly every stage of the implementation process. Therefore, a comprehensive problem mapping is essential to formulate effective strategies that can accelerate the implementation of the People's Palm Oil Replanting Program.

The objective of this research is to analyze optimal strategies for improving the acceleration of the People's Palm Oil Replanting Program (PSR) implementation. This study adopts a descriptive quantitative approach, utilizing structured interviews as the primary data collection method. Respondents were selected based on specific criteria to ensure the relevance and reliability of the data gathered. This technique was employed to obtain objective, relevant, and measurable primary data, particularly concerning respondents' perceptions, experiences, and evaluations of internal and external factors influencing the implementation of the People's Palm Oil Replanting Program (PSR) within the operational scope of PTPN IV Regional IV. The interview guidelines were developed based on indicators aligned with the four key dimensions of SWOT analysis. The data collected from the interviews were subsequently coded and quantitatively summarized to construct the IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrices. Respondents assigned weights and ratings to each strategic factor, which were then analyzed using descriptive quantitative techniques to generate weighted scores. Based on these results, alternative strategies were formulated through a SWOT matrix—comprising SO (Strengths-Opportunities), WO (Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weaknesses-Threats) strategies to develop targeted recommendations for accelerating the implementation of the PSR program. This study adopts a strategy analysis model based on the SWOT (Strengths, Weaknesses, Opportunities, Threats) approach to formulate acceleration strategies for the implementation of the People's Palm Oil Replanting Program (PSR) in PTPN IV Regional IV. This model enables a comprehensive evaluation of both internal and external factors that influence the success of the program.

The key performance indicator examined in this study is the achievement level of the Technical Recommendation (Rekomtek) for the People's Palm Oil Replanting Program (PSR) within the operational area of PTPN IV Regional IV in 2024. The program sets a target of 3,500 hectares for replanting, involving 875 smallholder farmers as participants. The realization of Rekomtek serves as a benchmark for assessing the success of PSR acceleration strategies, while also reflecting the effectiveness of program governance in terms of land selection, administrative completeness, and the institutional readiness of farmer organizations.

2. Literature Review and Hypothesis Development

The replanting target set for 2022 was 1,200 hectares; however, this goal was not achieved, as no land was replanted, resulting in a 0% success rate. The implementation of the People's Palm Oil Replanting Program in 2022 faced obstacles across nearly all stages of the process. For 2024, PTPN IV Regional IV has set a target of 3,500 hectares involving 875 farmers, up to the stage of obtaining the technical recommendation (Rekomtek). The failure to meet previous targets in Jambi Province is closely linked to farmers' perceptions of the replanting program, which significantly shape their attitudes and decisions regarding participation. Although numerous studies have sought to support and accelerate the smallholder oil palm replanting process, the actual realization has remained slow. Therefore, the development of an effective strategy is critical to speeding up the replanting efforts—ensuring long-term economic sustainability for smallholder farmers (Wulandari, 2024).

Darviansyah et al. (2021) found that farmers' reluctance to participate in the People's Palm Oil Replanting (PSR) program is primarily due to the continued productivity of their oil palm plantations, which consist of trees aged between 21 and 24 years. This implies that, from the farmers' perspective, the current palms remain sufficiently productive, thus diminishing the perceived

need for replanting.

Retno et al. (2024) emphasize that strengthening training and technical assistance represents a critical strategy in addressing the challenges faced by both facilitators and farmers in the smallholder oil palm replanting program. They recommend that government bodies and relevant institutions increase the frequency and quality of capacity-building initiatives. Such efforts can significantly enhance the ability of stakeholders to navigate administrative and technical complexities. Furthermore, establishing collaborative partnerships with key actors—such as palm oil processing companies, research institutions, and local communities—is essential. These partnerships are instrumental in advancing program implementation and maximizing economic outcomes for smallholder oil palm farmers.

The study conducted by Siregar et al. (2024) identifies three primary factors influencing smallholders' decisions regarding participation in the replanting program: limited access to funding and financial services, difficulties in securing land ownership and business registration certificates, and challenges in adopting good agricultural practices. Encouraging smallholder participation is vital to limiting further land expansion, which poses a serious threat to forested and protected areas. The findings—derived from analyses of both smallholders' intentions and actual program implementation—offer critical insights into their perspectives on replanting. These insights highlight the urgent need for comprehensive policy formulation and execution to ensure full engagement of smallholders in the program, which serves as a key strategy to mitigate environmental degradation, particularly deforestation driven by oil palm expansion.

Petri et al. (2024) emphasize the need for policy interventions to support smallholder replanting, given its significant environmental and socioeconomic implications. They argue that smallholders require accessible training and information covering the importance, timing, and procedures of replanting, alongside guidance on where to obtain technical and financial assistance. Incorporating sustainable replanting practices into training is essential, as demonstrating their benefits can enhance acceptance among farmers and contribute to both environmental sustainability and income security.

Recent studies highlight various constraints and strategic responses associated with smallholder oil palm replanting. According to Petri et al. (2024), structural challenges such as elevated production costs, limited access to farm inputs, financial services, and technical knowledge continue to hinder smallholder participation, underscoring the importance of targeted policy interventions that address these disparities. Jelsma et al. (2024) stress that fostering collective action and promoting sustainable intensification can significantly improve long-term productivity and resilience among smallholders. Complementing this, Soliman et al. (2016) argue that relatively simple agronomic improvements—such as regular pruning, timely weeding, and adoption of improved planting materials—can effectively reduce yield gaps without necessitating complete replanting.

Building on this perspective, Hendrawan et al. (2024) propose that identifying and categorizing smallholders into specific typologies can allow for more tailored interventions that increase replanting preparedness. In addition, Susanti et al. (2021) point out that social and institutional challenges limiting agroforestry adoption among smallholders can be overcome through inclusive support systems, which in turn help sustain replanting efforts. Woittiez et al. (2024) further emphasize that while holistic management approaches may not deliver immediate yield improvements, they play a critical role in enhancing overall plant health. Legal and administrative challenges also remain prominent, with Mustofa et al. (2024) identifying land tenure conflicts as a major obstacle to effective and equitable replanting program implementation.

Replanting efforts among Indonesia's smallholder oil palm farmers are shaped by a range of structural, legal, and socio-economic constraints, necessitating locally adapted and integrated strategies. Research has emphasized that the effectiveness of certification systems and good agricultural practices varies widely depending on individual farmer characteristics, making uniform policy applications largely ineffective (Schoneveld et al., 2019). The broader social and economic context in which smallholders operate is critical, as their livelihoods are closely intertwined with plantation management cycles, including replanting phases (Rist et al., 2010; Santika et al., 2019). Strategically, replanting has been identified as a key intervention supporting the achievement of sustainability targets in agriculture and environmental stewardship (Purba, 2019; Sukiyono et al., 2022).

Despite its importance, the replanting program has encountered significant implementation barriers, particularly concerning land tenure issues and bureaucratic delays, which have contributed to low completion rates—only 27% to 73% of planned targets were achieved between 2017 and 2022 (ICASEPS & MoA Indonesia, 2023). Prolonged postponement of replanting initiatives threatens national productivity and may lead to future supply chain instability at the global level (PwC Indonesia, 2023). In addition, unregulated expansion of smallholder plantations in the absence of coordinated replanting policies has exacerbated deforestation pressures, highlighting the urgent need for more ecologically sustainable alternatives (Erniwati et al., 2017; Claire et al., 2024).

Innovative participatory models have begun to offer viable replanting solutions tailored to local capacities, such as combining clear-cutting with compost application and intercropping systems, which lower costs and enhance land recovery (Turinah, 2024). Nonetheless, smallholders often face financial vulnerability during the early years of replanting cycles unless supported by food crop diversification and ecological safeguards (CIRAD, 2025). Moreover, stricter international environmental regulations—such as the EU Deforestation Regulation—have increased the burden of compliance for small farmers, reinforcing the need for improved governance structures and transparent supply chains (Reuters, 2023).

Research plays a key role in identifying the specific challenges smallholders face during replanting and can inform the design of targeted, practical training programs. Making such training widely accessible should be a policy priority. One recommended approach is to reform the PSR program to embed training components and better reflect the diverse characteristics of smallholder groups, particularly independent farmers who often lack access to resources and information.

Additionally, improving access to quality inputs, financing, and alternative markets is vital. Reforming land tenure regulations under the PSR scheme can make program participation more appealing. Farmer groups and cooperatives can serve as intermediaries between smallholders and policymakers, yet their full potential remains untapped due to issues of trust and limited capacity. These institutions must improve transparency, promote inclusive community engagement, and receive support to strengthen their organizational capacity. Future research should explore the prevalence, challenges, and development needs of these grassroots institutions to enhance their effectiveness in supporting smallholders.

SWOT analysis is a systematic approach used to assess an organization's condition by identifying internal and external factors that influence the achievement of its objectives. This method enables organizations to evaluate internal strengths and weaknesses, as well as external opportunities and threats. The primary goal of SWOT analysis is to formulate the most relevant and adaptive strategies in response to the organization's current circumstances.

Understanding several key concepts is essential for the accurate application of SWOT analysis. Strengths refer to internal activities or resources that are functioning effectively and offer a competitive advantage. In contrast, weaknesses indicate underperforming areas or resource limitations that hinder organizational performance. Opportunities represent positive external conditions that can be leveraged for organizational development, while threats are external factors that may pose risks to sustainability if not properly anticipated.

The SWOT matrix serves as a strategic tool for aligning internal and external factors to generate alternative policy directions. This matrix enables the formulation of strategies by examining how internal strengths and weaknesses can be adaptively aligned with external opportunities and threats. Based on this integration, four main strategic types are derived:

- SO (Strengths–Opportunities) Strategies: Aim to leverage internal strengths to capture and optimize available external opportunities.
- WO (Weaknesses–Opportunities) Strategies: Focus on utilizing external opportunities to address and improve internal weaknesses.
- ST (Strengths–Threats) Strategies: Use internal strengths to counter or neutralize potential external threats.
- WT (Weaknesses–Threats) Strategies: Represent defensive approaches aimed at minimizing the impact of internal weaknesses while avoiding external risks.

This framework allows organizations to develop more focused and responsive strategic actions that adapt to dynamic environmental changes.

According to Fatimah (2020), SWOT analysis is a systematic method for identifying strategic factors to formulate effective policies, including in the context of replanting smallholder oil palm plantations. The method is grounded in a logical framework that emphasizes optimizing strengths and leveraging opportunities while minimizing weaknesses and anticipating threats. As noted by Rangkuti (2018), SWOT analysis is highly valuable in strategy development because it integrates internal (strengths and weaknesses) and external (opportunities and threats) elements. This integration provides a foundation for designing strategies that are adaptive, realistic, and context-specific to the conditions of smallholder farmers, thereby enabling the development of more targeted and sustainable replanting policies.

3. Methods

This study employs a descriptive-analytical method with a case study approach, aimed at thoroughly examining the organization's strategic position in the context of accelerating the implementation of the smallholder oil palm replanting program. The primary objective of this approach is to identify and analyze both internal and external factors that influence organizational performance. The analysis utilizes a set of strategic tools, namely the Internal Factor Analysis Summary (IFAS) and the External Factor Analysis Summary (EFAS) matrices. The IFAS matrix is applied to assess strengths and weaknesses originating within the organization, while the EFAS matrix focuses on identifying external opportunities and threats. The outcomes of these matrices are further analyzed using the SWOT approach to formulate alternative strategies that are well-aligned and responsive to the dynamic conditions faced by the organization on the ground.

4. Result and Discussions

The identification of internal factors affecting the acceleration of the People's Palm Oil Replanting Program (PSR) at PTPN IV Regional IV indicates that the most prominent strength lies in the comprehensive support provided by the Head Office, which achieved the highest weighted score of 0.427. This reflects the alignment with the company's strategic initiative through the national program "PTPN for Smallholder Palm Oil", under which PTPN IV PalmCo actively engages independent smallholders

across multiple regions by offering technical assistance, financial schemes, and institutional support. The second key internal strength is the company's policy framework that facilitates PSR implementation, scoring 0.342, demonstrating a strong internal commitment to integrating the program into its corporate strategic agenda. The availability of eligible smallholder land ranks third, with a score of 0.173, indicating the presence of target areas that are ready for replanting activities. Additional strengths include the presence of a dedicated PSR unit or sub-division (score: 0.130), and well-established institutional relationships with relevant agencies such as the Plantation Office and BPDPKS (score: 0.071). Conversely, the primary internal weakness identified is the absence of field personnel, which received the highest score among weaknesses at 0.516. All PSR-related operational responsibilities remain centralized at the regional office without the support of field-based technical staff, thereby limiting the effectiveness of coordination and verification processes. The second major weakness is the administrative and technical complexity of PSR requirements (score: 0.484), which often hinders farmers' ability to fulfill formal documentation and program compliance. Other weaknesses include the limited competence and experience of PSR implementation staff (score: 0.179), the relatively small number of Village Unit Cooperatives (KUD) currently partnered with PTPN IV (score: 0.119), and the broad span of control across the two operational provinces—Jambi and West Sumatra—which presents logistical challenges, reflected in a score of 0.080.

Table 1. Internal Factor Analysis Summary (IFAS) PTPN IV Regional IV

Key Internal Factors	Weighted Average	Rating Average	Score	Rank
Strength				
1. Company Policy Supporting People's Palm Replanting (PSR)	0,107	3,200	0,342	2
2. Smallholder Oil Palm Land that meets PSR criteria Available	0,087	2,000	0,173	3
3. There is a sub-section specifically handling PSR	0,081	1,600	0,130	4
4. Relationships to PSR related agencies are well established	0,071	1,000	0,071	5
5. Full Head Office support for PSR acceleration	0,119	3,600	0,427	1
Sub Total	0,465	11,400	1,144	
Weakness				
1. Low Personnel Competence and Experience	0,099	1,800	0,179	3
2. Complexity of People's Palm Oil Replanting Requirements	0,134	3,600	0,484	2
3. List of partnered cooperatives is still small	0,085	1,400	0,119	4
4. Span of control is difficult (Jambi-West Sumatra)	0,080	1,000	0,080	5
5. Field Personnel Not Available	0,136	3,800	0,516	1
Sub Total	0,535	11,600	1,379	
Total	1,000	23,000	2,522	

Overall, the results of the IFAS matrix indicate that although PTPN IV benefits from strategic support from the head office and possesses a substantial amount of eligible land for replanting, the success of accelerating the PSR program is highly dependent on the availability of field personnel and the simplification of administrative procedures for smallholders. Therefore, future strategies should prioritize strengthening the operational human resource capacity and enhancing the institutional effectiveness of field-level partner organizations.

Based on the analysis of external factors influencing the acceleration of the People's Palm Oil Replanting Program (PSR) at PTPN IV Regional IV, the primary opportunity identified is the availability of funding support from the Palm Oil Plantation Fund Management Agency (BPDPKS), which received the highest weighted score of 0.486. The grant scheme managed by BPDPKS provides a significant incentive for smallholders to undertake sustainable palm oil replanting. Since its launch in 2016, the PSR program has aimed to ensure the long-term viability of the smallholder palm oil sector, covering 364,552 hectares and benefiting over 160,000 farmers across Indonesia. Other external opportunities supporting program acceleration include favorable government regulations promoting replanting efforts (score: 0.362), the presence of farmer groups or organizations (0.357), active involvement of palm oil associations (0.252), and relatively stable Fresh Fruit Bunch (FFB) price dynamics (0.101).

Conversely, the primary external threat to implementation is the complexity of fulfilling administrative requirements for PSR participation, with a threat score of 0.443. Common challenges include land legality documentation, the economic dependence of farmers on the current land, and limited community trust in the replanting program. These findings are consistent with the study by Syafira et al. (2024), which notes that although farmers generally show strong interest in replanting, financial limitations remain a key constraint.

Other external threats include unstable FFB price fluctuations (score: 0.359), force majeure events such as natural disasters and pandemics (0.201), restrictions on palm oil exports (0.161), and the impact of the global economic crisis (0.071). The

combination of these opportunities and threats provides a critical foundation for formulating adaptive and collaborative strategies to ensure the success of the PSR program at PTPN IV Regional IV.

Table 2. External Strategic Factor Analysis (EFA) PTPN IV Regional IV

Key External Factors	Weighted Average	Rating Average	Score	Rank
Opportunity				
1. Government Regulation of People's Palm Oil Replanting Program	0,113	3,200	0,362	2
2. Existence of BPD (Palm Oil Grant Fund)	0,128	3,800	0,486	1
3. Existence of Oil Palm Plantation Association	0,105	2,400	0,252	4
4. Existence of Farmer Groups/Institution	0,119	3,000	0,357	3
5. FFB Price Development	0,084	1,200	0,101	5
Sub Total	0,549	13,600	1,557	
Threat				
1. Fluctuation of FFB Price	0,112	3,200	0,359	2
2. Force Major (perubahan iklim/bencana alam/pandemi)	0,084	2,400	0,201	3
3. Force Major (climate change/natural disaster/pandemic)	0,123	3,600	0,443	1
4. Economic Crisis	0,059	1,200	0,071	5
5. Palm oil export ban	0,073	2,200	0,161	4
Sub Total	0,451	12,600	1,235	
Total	1,000	26,200	2,792	

Based on the interpretation of the SWOT analysis results, eight alternative strategies have been identified to accelerate the implementation of the People's Palm Oil Replanting Program (PSR) within the operational areas of PTPN IV Regional IV. These strategies include:

1. **Educational collaboration with BPDPKS**, through the organization of workshops aimed at providing farmers with a comprehensive understanding of the administrative and technical requirements of the PSR program.
2. **Maximizing support from the Head Office**, particularly in facilitating and providing technical assistance to farmer groups to ensure timely compliance with PSR requirements.
3. **Recruiting and strengthening field personnel**, to ensure the availability of adequate human resources capable of assisting throughout the replanting process, especially during the verification and administrative facilitation stages.
4. **Synergy with farmer groups and associations**, as a response to personnel shortages, by developing sustainable and participatory cooperation frameworks at the grassroots level.
5. **Optimizing BPDPKS support**, in combination with PTPN IV Head Office's full commitment, to expedite both administrative and technical program implementation.
6. **Developing a systematic checklist of PSR requirements**, to streamline the monitoring of document compliance by farmers and enhance accountability during verification processes.
7. **Empowering farmer institutions and plantation associations**, such as farmer group unions (gapoktan) and cooperatives, to proactively ensure that PSR activities are carried out in a structured and collective manner.
8. **Adapting to fluctuations in Fresh Fruit Bunch (FFB) prices**, by leveraging corporate support through integrated food programs and advocating for increased per-hectare grant funds from BPDPKS as an incentive for participating farmers.

According to the weighted results of the SWOT analysis, the **Weakness–Opportunity (WO)** strategic combination obtained the highest score of **2.936**, outperforming the other strategy types: **SO (2.701)**, **ST (2.379)**, and **WT (2.614)**. This indicates that the **WO strategy is the most promising option** for supporting the acceleration of PSR implementation at PTPN IV Regional IV. The WO approach emphasizes leveraging external opportunities to address internal weaknesses.

From this analysis, the primary strategy proposed is to establish collaboration with farmer associations and groups to develop adaptive cooperation models that can mitigate the shortage of field personnel. Additionally, a key recommendation is to partner with BPDPKS to conduct educational initiatives, such as workshops for farmers, particularly focusing on administrative compliance within the replanting program. This approach is expected to enhance the effectiveness and inclusivity of PSR implementation, especially in the operational areas of PTPN IV Regional IV, including Jambi.

Table 3. SWOT Matrix Analysis

		<i>Strengths</i>	<i>Weakness</i>
Internal Factor Analysis (IFA)		1. Company Policy Supporting People's Palm Replanting (PSR)	1. Low Personnel Competence and Experience
		2. Smallholder Oil Palm Land that meets PSR criteria Available	2. Complexity of People's Palm Oil Replanting Requirements
		3. There is a sub-section specifically handling PSR	3. The list of partnering cooperatives is still small
		4. Relationships with PSR-related agencies are well recognized.	4. Span of control is difficult (Jambi-West Sumatra)
		5. Full Head Office support for the acceleration of PSR	5. Field Personnel Not Available
External Strategic Factor Analysis (EF)			
Opportunities	S – O Strategy	W – O Strategy	
1. Government Regulation on People's Palm Oil Replanting Program	1. Optimize the existence of BPDP with full support from the head office to accelerate the PSR program.	1. Collaboration with Associations and farmer groups for cooperation patterns with limited field personnel	
2. Existence of BPDP (Palm Oil Grant Fund)	2. Optimize the existence of plantation associations and farmer group associations to ensure that the People's Palm Oil Replanting Program is implemented. (S5, S1, O2, O3, O4)	2. Collaborate with BPDP to hold a workshop with farmers on the requirements for smallholder oil palm replanting (W5, W2, O2, O3, O4)	
3. Existence of Palm Oil Plantation Association			
4. Existence of Farmer Groups/Institutions			
5. Development of FFB Price			
Threats	S – T Strategy	W – T Strategy	
1. Fluctuation in FFB Price	1. Optimize the condition of FFB price fluctuations with the support of food integration program companies and the increase in BPDP per hectare grants.	1. Fulfillment of field personnel in fulfilling the requirements of smallholder oil palm replanting.	
2. Force Major (climate change/natural disaster/pandemic)		2. Compile a comprehensive list of the requirements for smallholder oil palm replanting to facilitate the monitoring of progress. (W5, W2, T1, T3)	
3. Fulfillment of People's Palm Rejuvenation Requirements	2. Optimize the full support of the head office to help farmer groups meet the requirements for smallholder oil palm replanting. (S5, S1, T1, T3)		
4. Economic Crisis			
5. Palm oil export ban			

5. Conclusion

Based on the results of the SWOT analysis, the **Weakness–Opportunity (WO)** strategy emerged as the most optimal, achieving the highest score of **2.936**, outperforming the SO (2.701), ST (2.379), and WT (2.614) strategies. The WO strategy focuses on leveraging external opportunities—particularly financial support from BPDPKS—to address internal weaknesses such as the limited number of field personnel and the complexity of administrative requirements in the PSR program.

Strategy implementation was carried out through active partnerships with BPDPKS, notably through educational initiatives such as farmer workshops. These activities significantly enhanced farmers' technical and administrative understanding of the replanting program. This model has proven effective in accelerating the implementation of the People's Palm Oil Replanting Program (PSR) in an efficient, inclusive, and sustainable manner across PTPN IV Regional IV operational areas. **The training and assistance model was developed through collaboration between PTPN IV Regional IV and farmer associations or groups**, considering the limited availability of field staff. This approach was strengthened by outreach and technical guidance activities regarding the procedural stages and administrative requirements of the PSR program, facilitated by BPDPKS and other relevant institutions.

A key performance indicator—the Technical Recommendation (Rekomtek) target for the PSR Program in 2024—was successfully achieved, with 3,505 hectares realized, exceeding the initial target of 3,500 hectares. This achievement was supported by a substantial increase in the number of partnering farmers, from 72 in 2023 to 875 in 2024, as well as the successful implementation of workshops, which significantly contributed to expanded farmer participation and accelerated land verification for the replanting program.

References

- [1] Ardi, A., Santoso, H., & Lestari, R. (2024). Income analysis and satisfaction level of oil palm smallholders with the Smallholder Oil Palm Replanting Program in OKU District. *International Journal of Social Science (IJSS)*, 4(1), 25–32. <https://doi.org/10.53625/ijss.v4i1.7718>
- [2] Bloomberg & PwC Indonesia. (2023). *Palm oil production crisis lurks as replanting lags*. PwC Indonesia. <https://www.pwc.com/id>

- [3] CASEPS & Ministry of Agriculture, Indonesia. (2023). *Status replanting kecil di Indonesia: Target vs realisasi*. FFTC Agricultural Policy Platform. <https://ap.ffc.org.tw>
- [4] CIRAD. (2025, January 6). The renewal of palm plantations: A huge challenge for Indonesian agriculture. *Science at Work*. <https://www.cirad.fr/en/press-area/news/2025/the-renewal-of-palm-plantations>
- [5] Darviansyah, D., Rinaldi, F., & Purnomo, H. (2021). *Kajian peremajaan sawit rakyat di perkebunan rakyat di Provinsi Jambi*. Fakultas Pertanian, INSTIPER.
- [6] David, F. R. (2002). *Manajemen strategis: Konsep*. Prenhallindo.
- [7] David, F. R. (2011). *Manajemen strategis* (Jilid 1, Edisi ke-12). Salemba Empat.
- [8] Dirgantoro, C. (2001). *Manajemen strategis: Konsep, kasus, dan implementasi*. Grasindo.
- [9] Direktorat Jenderal Perkebunan. (2024). *Statistik Perkebunan Indonesia 2022–2024: Kelapa sawit*. Direktorat Jenderal Perkebunan.
- [10] Elisa, N., Marimin, & Siregar, H. (2019). *Kelembagaan KUD PIR kelapa sawit*. Unsri Press.
- [11] Erniwati, E., Naito, D., Yamada, T., & Sakurai, K. (2017). Independent smallholder oil palm expansion and its impact on deforestation: Case of Kampar, Riau. *Jurnal Manajemen Hutan Tropika*, 23(3), 119–127. <https://doi.org/10.7226/jtfm.23.3.119>
- [12] Firdaus, A. Y. (2022). *Seri panduan praktis: Memahami kebijakan dan permasalahan skema plasma perkebunan kelapa sawit 1986–2022*. Forest Peoples Programme.
- [13] Jelsma, I., Turinah, T., Gay, F., Ollivier, J., & Rapidel, B. (2024). Collective action, replanting and resilience: Key lessons from 40 years of smallholder oil palm cultivation in the Ophir plantation, Indonesia. *Agricultural Systems*, 213, 103801. <https://doi.org/10.1016/j.agsy.2022.103801>
- [14] Hendrawan, D., & Musshoff, O. (2024). Smallholders' preferred attributes in a subsidy program for replanting overaged oil palm plantations in Indonesia. *Ecological Economics*, 224, 108278. <https://doi.org/10.1016/j.ecolecon.2024.108278>
- [15] Hendrawan, A., Chrisendo, D., & Musshoff, O. (2024). Typology and livelihood resilience of Indonesian oil palm smallholders. *Scientific Reports*, 14, 8492. <https://doi.org/10.1038/s41598-024-50717-0>
- [16] Hendrikus, A., Suryadi, R., & Wibowo, T. (2024). The implementation process of the People's Palm Oil Rejuvenation Program (PSR) in Sungai Melayu Sub-District, Ketapang Regency. *International Journal of Social Science and Human Research*, 7(3), 1615–1620. <https://doi.org/10.47191/ijsshr/v7-i03-15>
- [17] Hernanto, F. (1998). *Ilmu usahatani*. Penebar Swadaya.
- [18] Hombert, J., & Matray, A. (2018). Can innovation help U.S. manufacturing firms escape import competition from China? *Journal of Finance*, 73(5), 2003–2039. <https://doi.org/10.1111/jofi.12691>
- [19] Junaidi, E. (2020). *Data dan fakta sawit Indonesia: Luas, sebaran dan tantangannya* [Webinar]. Webinar Ngopini#2, PPHBUN Kementerian Pertanian.
- [20] Limanseto, H. (2021). *Program peremajaan sawit rakyat mendorong tenaga kerja dan menciptakan multiplier effect* (HM.4.6/283/SET.M.EKON.3/09/2021). <https://ekon.go.id/publikasi/detail/3312/program-peremajaan-sawit-rakyat-mendorong-penyerpapentana-kerja-dan-menciptakan-multiplier-effect>
- [21] Mubiyarto. (1989). *Pengantar ekonomi pertanian*. Lembaga Penelitian, Pendidikan dan Penerangan Ekonomi dan Sosial (LP3ES).
- [22] Mudradjad, K. (2003). *Metode riset untuk bisnis dan ekonomi*. Erlangga.
- [23] Mustofa, R., Maulana, M. I., Wulandari, C., & Fauzi, M. A. (2024). Land tenure conflicts: Obstacles to rejuvenation of small-scale oil palm plantations in Indonesia. *International Journal of Law and Management*, 66(2), 202–218. <https://doi.org/10.1108/IJLMA-10-2023-0256>
- [24] Petri, D., Santosa, D. A., Wicaksono, A., & Lestari, M. (2024). Replanting challenges among Indonesian oil palm smallholders: A narrative review. *Environment, Development and Sustainability*, 26, 19351–19367. <https://doi.org/10.1007/s10668-023-03527-z>
- [25] Petri, F., Hendrawan, D. C. P., Bähr, T., Irhyan, R., & Ekowati, D. (2024). Challenges and opportunities for smallholder oil palm replanting in Indonesia: A narrative literature review. *Environment, Development and Sustainability*, 26, 19351–19367. <https://doi.org/10.1007/s10668-023-03527-z>
- [26] Purba, J. H. V. (2019). Replanting policy of Indonesian palm oil plantation in strengthening SDGs implementation. *IOP Conference Series: Earth and Environmental Science*, 336, 012012. <https://doi.org/10.1088/1755-1315/336/1/012012>
- [27] Rainer, R. K., Prince, B., & Cegielski, C. G. (2014). *Introduction to information systems* (5th ed.). John Wiley & Sons.
- [28] Rangkuti, F. (2015). *Analisis SWOT: Membedah kasus bisnis*. Gramedia Pustaka Utama.
- [29] Retno, S., Zulkifli, N., & Charloq. (2024). Analisis kendala Program Peremajaan Sawit Rakyat (PSR) terhadap potensi pertumbuhan ekonomi petani sawit rakyat. *Jurnal Ilmiah Global Education*, 5(1). <https://doi.org/10.55681/jige.v5i1.2355>
- [30] Rist, L., Feintrenie, L., & Levang, P. (2010). The livelihood impacts of oil palm smallholders in Indonesia. *Biodiversity and Conservation*, 19, 1009–1024. <https://doi.org/10.1007/s10531-010-9815-z>
- [31] Santika, T., Wilson, K. A., Budiharta, S., Law, E. A., Poh, T. M., Ancrenaz, M., Struebig, M. J., Meijaard, E., & Sherman, J. (2019). Changing landscapes, livelihoods and village welfare in oil palm development. *Land Use Policy*, 87, 104097. <https://doi.org/10.1016/j.landusepol.2019.104097>
- [32] Sapitri, R., Hasibuan, B., & Siregar, M. (2014). Faktor-faktor yang mempengaruhi persepsi petani terhadap peremajaan kelapa sawit. *Jurnal Ilmiah Sosio-Ekonomika Bisnis*, 17(1), 1–10.
- [33] Schoneveld, G. C., van der Haar, S., Ekowati, D., Andrianto, A., Komarudin, H., Okarda, B., & Jelsma, I. (2019). Certification, good agricultural practice and smallholder heterogeneity: Towards a better understanding of sustainability certification in Indonesian palm oil. *Global Environmental Change*, 57, 101936. <https://doi.org/10.1016/j.gloenvcha.2019.101936>
- [34] Sembiring, R., Hasan, M., Abdullah, L., & Yuliana, S. (2025). Sustainable replanting practices to meet increasing palm oil demand in Indonesia and Malaysia. *IOP Conference Series: Earth and Environmental Science*, 1469, 012052. <https://doi.org/10.1088/1755-1315/1469/1/012052>
- [35] Siregar, H., Perdana, A., Lubis, D. P., & Prasetyo, E. B. (2024). The oil palm replanting imperative: Are smallholder farmers willing to participate? *Forest Policy and Economics*, 169, 103362. <https://doi.org/10.1016/j.forpol.2024.103362>
- [36] Soliman, T., Lim, F. K. S., Lee, J. S. H., & Carrasco, L. R. (2016). Closing oil palm yield gaps among Indonesian smallholders through industry schemes, pruning, weeding and improved seeds. *Royal Society Open Science*, 3(1), 160292. <https://doi.org/10.1098/rsos.160292>
- [37] Sukiyono, K., Anugrah, G., Fahmi, E., Fitriani, E., Fitriani, D., & Muhandi, M. (2022). The contribution of oil palm smallholder farms to the implementation of the Sustainable Development Goals—Measurement attempt. *Sustainability*, 14(11), 6843. <https://doi.org/10.3390/su14116843>
- [38] Suratiyah, K. (2006). *Ilmu usahatani*. Penebar Swadaya.
- [39] Susanti, A., Marhaento, H., Permadi, D. B., & Budiadi, B. (2021). Smallholders' oil palm agroforestry: Barriers and factors influencing adoption. *Jurnal Ilmu Kehutanan*, 15(1), 69–81. <https://doi.org/10.22146/jik.v15i1.1513>
- [40] Turinah. (2024). *Co-constructing agro-ecological replanting models with oil palm smallholders in Jambi, Indonesia* (Doctoral dissertation, Universitas Jambi)
- [41] Yanita, M., HD, E., Zulkifli, Z., Napitupulu, D., & Fauzia, G. (2021). Skema pola peremajaan kelapa sawit swadaya yang berkelanjutan di Provinsi Jambi. *Jurnal Ilmiah Sosio-Ekonomika Bisnis*, 24(1), 21–27.
- [42] Woittiez, L. S., Dubos, B., Witte, J., Feindt, P. H., Dijkman, W., & Giller, K. E. (2024). People, palms, and productivity: Testing better management practices in Indonesian smallholder oil palm plantations. *Agriculture*, 14(9), 1626. <https://doi.org/10.3390/agriculture14091626>
- [43] Wulandari, S. A. (2024). *Strategi percepatan peremajaan kelapa sawit rakyat di Provinsi Jambi*. Universitas Jambi.

- [44] Zulkarnain, A., Yuliani, R., & Febrian, R. (2018). Analysis of IFE, EFE and QSPM matrix in business development strategy. *IOP Conference Series: Earth and Environmental Science*, 126, 012062. <https://doi.org/10.1088/1755-1315/126/1/012062>