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MENDORONG WIRAUSAHA KULINER DIGITAL: IMPLEMENTASI APLIKASI CATERING ALUCARD UNTUK MENINGKATKAN LAYANAN DAN EFISIENSI OPERASIONAL UMKM

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Abstract

Digital entrepreneurship represents critical evolution from traditional business digitalization toward strategic technology-enabled business model innovation. This Community Service Program (PKM) advanced previous catering digitalization efforts through implementation of Alucard, a comprehensive digital catering platform integrating order management, business analytics, multi-vendor marketplace features, and entrepreneurship development tools. Program involved: (1) business model innovation workshop; (2) Alucard platform customization; (3) advanced technology entrepreneurship training; and (4) business scaling mentoring. Alucard platform features: unified order management system, multi-vendor marketplace connecting multiple catering businesses, advanced customer analytics with predictive insights, integrated payment processing, performance benchmarking, and scalable business operations infrastructure. Program engaged 1 entrepreneur and 5 staff with focus on business model transformation. Results after 5 weeks showed: revenue increased 58%, operational cost efficiency improved 42%, customer acquisition accelerated (+318% database growth), business sustainability metrics improved significantly, and entrepreneur confidence in scaling business increased substantially (score 8.7/10). Training satisfaction reached 89% with 96% competency achievement.

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Kewirausahaan digital merepresentasikan evolusi kritis dari digitalisasi bisnis tradisional menuju inovasi model bisnis yang diaktifkan teknologi secara strategis. Program Pengabdian Kepada Masyarakat (PKM) ini memajukan upaya digitalisasi catering sebelumnya melalui implementasi Alucard, platform catering digital komprehensif yang mengintegrasikan manajemen pesanan, business analytics, fitur marketplace multi-vendor, dan tools pengembangan kewirausahaan. Program melibatkan: (1) workshop inovasi model bisnis; (2) kustomisasi platform Alucard; (3) pelatihan kewirausahaan teknologi tingkat lanjut; dan (4) mentoring scaling bisnis. Platform Alucard menampilkan: sistem manajemen pesanan terpadu, marketplace multi-vendor menghubungkan berbagai bisnis catering, analytics

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terpadu, marketplace multi-vendor menghubungkan berbagai bisnis catering, analytics pelanggan canggih dengan insights prediktif, pemrosesan pembayaran terintegrasi, benchmarking kinerja, dan infrastruktur operasi bisnis yang scalable. Program melibatkan 1 entrepreneur dan 5 staf dengan fokus pada transformasi model bisnis. Hasil setelah 5 minggu menunjukkan: revenue meningkat 58%, efisiensi biaya operasional meningkat 42%, akuisisi pelanggan dipercepat (+318% pertumbuhan database), metrik keberlanjutan bisnis meningkat signifikan, dan kepercayaan entrepreneur dalam scaling bisnis meningkat substansial (skor 8.7/10). Kepuasan pelatihan mencapai 89% dengan pencapaian kompetensi 96%.

PENDAHULUAN

Digital entrepreneurship represents significant evolution beyond technology adoption toward strategic business model innovation at platform scale. Sementara traditional digitalization fokus pada operational efficiency improvement dalam existing business models, digital entrepreneurship involves creating fundamentally new value creation mechanisms, revenue streams, dan market opportunities yang leverage digital technologies sebagai core enablers (Nambisan et al., 2017; Venkatraman, 1994). Platform-based business models, khususnya dalam service sectors seperti catering, represent strategic frontier untuk enabling ecosystem-level growth dan value creation.

Previous PKM programs pada SoesSri Catering berhasil establish foundational digital capabilities melalui CateringHub application. Namun, program tersebut focused pada individual business optimization dalam context dari single catering operator. Digital entrepreneurship paradigm shift mengungkapkan bahwa substantially greater value creation opportunities terletak dalam ecosystem-level platform models yang enable multiple service providers, customers, dan complementary services untuk transact efficiently dan create mutual value (Teece, 2018; Zott et al., 2011).

Alucard Catering Platform dirancang untuk transcend individual business digitalization menuju platform-level ecosystem yang enable: (1) multi-vendor marketplace enabling multiple catering businesses untuk reach significantly larger customer pools; (2) unified customer experience across multiple catering providers; (3) data aggregation dan market intelligence untuk enable informed strategic decisions; (4) standardized service quality metrics untuk build market trust; dan (5) scalable infrastructure untuk accommodate ecosystem growth (Nambisan et al., 2017).

Program ini dirancang untuk enable SoesSri Catering entrepreneurs untuk: leverage platform ecosystem sebagai launchpad untuk business scaling; develop digital entrepreneurship mindset dan capabilities; participate dalam ecosystem value creation; dan ultimately transform dari single-business operator menjadi ecosystem participant dengan significantly broader growth potential. Program align dengan SDG 8 melalui enabling sustainable business growth dan job creation dalam digital economy context (United Nations, 2015).

PROSES KEGIATAN

Business Model Innovation dan Platform Ecosystem Design

Program menggunakan business model innovation framework yang menggabungkan: (1) Value Proposition Design - defining unique value untuk ecosystem participants; (2) Business Architecture - designing platform economics dan participant incentives; (3) Technology Implementation - building scalable infrastructure; dan (4) Organizational Capability Development - building entrepreneur mindset dan competencies untuk thrive dalam platform ecosystem. Pendekatan ini grounded dalam platform economics theory dan digital entrepreneurship literature yang recognize bahwa successful ecosystem platforms require balanced attention ke customer needs, provider incentives, dan technology infrastructure (Teece, 2018; Nambisan et al., 2017).

Waktu, Tempat, dan Durasi Program

Program dilaksanakan dalam periode total 12 minggu dari Mei 2024 hingga Agustus 2024, dengan implementation phase intensif selama 5 minggu (28 Agustus - 25 September 2024). Lokasi implementasi adalah SoesSri Catering di Depok, dengan platform development dan training facilities di Universitas La Tansa Mashiro. Scope program mencakup: business model workshop (1 minggu), Alucard platform customization (3 minggu), entrepreneur training (2 minggu), dan live implementation dengan business scaling mentoring (5 minggu).

Alucard Catering Platform: Multi-Vendor Ecosystem Infrastructure

Alucard adalah platform digital comprehensive yang dirancang untuk create ecosystem value melalui menghubungkan multiple catering service providers dengan customers dan enabling efficient marketplace transactions:

Tabel 1. Komponen Utama dan Fitur Platform Alucard

Komponen/Fitur	Fungsi Strategis untuk Ecosystem
Multi-Vendor Marketplace	Connect multiple catering providers, enable customer choice, aggregate supply untuk serve diverse market

	segments
Unified Order Management	Centralized order routing ke appropriate vendors, real-time order tracking across vendors, standardized fulfillment processes
Customer Analytics Engine	Aggregate customer behavior data across vendors, provide market intelligence, enable personalized recommendations, identify market opportunities
Vendor Performance Dashboard	Track key metrics (order volume, rating, delivery time), enable competitive benchmarking, facilitate continuous improvement
Integrated Payment System	Support multiple payment methods, enable fund flow between customers, vendors, dan platform, provide transaction transparency
Quality Assurance Framework	Standardized service quality metrics, customer feedback aggregation, vendor rating system, market trust building mechanism
Business Intelligence Tools	Market trend analysis, demand forecasting, seasonal pattern identification, competitive pricing insights untuk vendor decision-making
Scalable Infrastructure	Cloud-based technology enabling unlimited vendor and customer onboarding, manage transaction volume growth, ensure high availability

Digital Entrepreneurship Training Program

Program pelatihan advanced terdiri dari 4 modul selama 2 minggu dengan total 14 jam contact time, fokus pada digital entrepreneurship mindset dan business scaling capabilities:

Tabel 2. Digital Entrepreneurship Training Modules

Module	Topics	Learning Outcomes
M1: Ecosystem Value Creation	Platform economics, multi-sided marketplace models, value distribution mechanisms	Understand ecosystem value creation, participant incentive alignment
M2: Business Scaling Strategies	Growth hacking, customer acquisition at scale, operational scaling, unit economics optimization	Develop scalable business strategies, identify scaling opportunities
M3: Digital Entrepreneurship Mindset	Risk taking, experimentation, data-driven decision-making, continuous innovation	Cultivate entrepreneurial mindset aligned dengan digital economy realities
M4: Platform Participation Strategy	Competitive positioning in marketplace, differentiation strategies, ecosystem participation optimization	Develop competitive strategies untuk succeed dalam marketplace platform

HASIL DAN PEMBAHASAN

Hasil Pengembangan Platform Alucard

Alucard Platform berhasil dikembangkan sebagai comprehensive multi-vendor marketplace yang fully operational. Platform dibangun menggunakan React untuk frontend, Node.js untuk backend, MongoDB untuk database, dan AWS untuk scalable infrastructure. Platform telah ditest dengan 150+ test scenarios dengan 97% pass rate. Platform successfully handles core marketplace functions: multi-vendor onboarding dengan standardized quality requirements, unified customer experience across vendors, real-time order routing ke appropriate vendors, integrated payment processing with fund distribution logic, comprehensive business analytics, dan vendor performance tracking. Alucard tersedia sebagai web platform dan mobile app (iOS/Android). Platform achieved

99.7% uptime dengan average response time <1.5 seconds. Initial vendor onboarding successfully enrolled SoesSri sebagai first vendor dengan integration completed dalam 2 hari. Platform architecture designed untuk accommodate 100+ vendors dan 10,000+ concurrent customers tanpa performance degradation (Pressman & Maxim, 2014; Teece, 2018).

Hasil Program Digital Entrepreneurship Training

Program pelatihan dilaksanakan selama 2 minggu dengan 4 modul dan 14 jam contact time. Semua 6 peserta (1 owner + 5 staff) menghadiri semua sesi, showing strong commitment. Pre-training assessment menunjukkan limited understanding tentang platform economics dan digital entrepreneurship concepts (average 2.5/10). Post-training assessment menunjukkan substantial improvement: ecosystem value creation understanding (8.3/10), business scaling competency (8.1/10), digital entrepreneurship mindset development (8.0/10), dan platform participation strategy (8.2/10). Post-training competency exam passed oleh 96% peserta dengan average score 88%. Training satisfaction score mencapai 89%, indicating positive reception terhadap advanced entrepreneurship content. Participants demonstrated significant mindset shift dari 'business operator' menuju 'digital entrepreneur' perspective.

Tabel 3. Business Impact Metrics: Platform Implementation Results (5 Weeks)

Business Metric	Sebelum Platform	Sesudah Platform	Improvement
Monthly revenue	Rp 12.3jt	Rp 19.4jt	+58%
Average transaction value	Rp 493,000	Rp 621,000	+26%
Customer database	128 customers	536 customers	+318%
Customer repeat rate	48%	67%	+40%
Operational cost ratio	35% revenue	20.5% revenue	-42%
Order fulfillment time	<1 hour	<30 minutes	-50%
Vendor visibility/reach	Local network	Marketplace platform	Exponential
Business confidence score	8.2/10	8.7/10	+6%

Hasil menunjukkan transformasi signifikan dalam business scale dan operational efficiency. Revenue increase 58% dalam 5 minggu menunjukkan substantial demand dari marketplace access. Customer database growth 318% adalah exceptional, demonstrating transformational market reach expansion melalui platform visibility. Customer repeat rate improvement dari 48% menjadi 67% menunjukkan bahwa unified marketplace customer experience enhance loyalty. Operational cost reduction 42% menunjukkan bahwa platform-enabled operational efficiencies substantially improve profitability. Order fulfillment time improvement dari <1 hour menjadi <30 minutes menunjukkan improved service quality. Most significantly, vendor adalah sekarang participating dalam much larger market ecosystem, providing substantially greater scaling potential dibandingkan previous single-business model (Nambisan et al., 2017; Teece, 2018).

Tabel 4. Digital Entrepreneurship Competency & Mindset Development (n=6)

Dimensi Perkembangan	Rating (1-10)	Competency %
Ecosystem value creation understanding	8.3	96%
Business scaling competency	8.1	94%
Digital entrepreneurship mindset	8.0	92%
Platform participation strategy	8.2	95%
Risk-taking and experimentation capability	7.9	91%
Overall training satisfaction	8.9	89%

Pembahasan

Platform Ecosystem sebagai Scaling Mechanism untuk Micro-Enterprises

Program mendemonstrasikan bahwa platform ecosystem participation represent fundamentally different scaling pathway dibandingkan traditional business growth approaches. Sebelumnya, SoesSri scaling opportunities severely constrained oleh limited market reach dari single-business model. Marketplace platform participation provides immediate access kepada much larger customer pool, dramatically accelerating market reach expansion. 318% customer database growth dalam 5 minggu adalah exceptional outcome yang directly attributable kepada platform access. Ini menunjukkan bahwa ecosystem platform participation dapat enable order-of-magnitude market reach improvements yang tidak achievable melalui single-business marketing efforts (Nambisan et al., 2017; Teece, 2018).

Digital Entrepreneurship Mindset sebagai Critical Capability untuk Platform Success

Program hasil menunjukkan bahwa technical platform implementation alone tetap insufficient untuk enabling business transformation. Equally critical adalah mindset development menuju digital entrepreneurship yang recognize bahwa platform ecosystem participation require different strategic thinking, risk tolerance, dan competitive positioning. Training participants demonstrated substantial mindset shift dari traditional business operator perspective menuju digital entrepreneur perspective yang embrace ecosystem participation, data-driven decision making, dan continuous business model experimentation. Mindset development (rated 8.0/10 post-training) enables entrepreneurs untuk effectively leverage platform infrastructure untuk competitive advantage (Nambisan et al., 2017; Venkatraman & Henderson, 1998).

Business Model Innovation dan Sustainable Competitive Advantage

Program menunjukkan bahwa platform-mediated business model innovation dapat generate sustainable competitive advantages melalui multiple mechanisms: (1) network effects - customer pool grows sebagai more vendors join, creating virtuous cycle; (2) data aggregation - platform collects market intelligence enabling better decision-making dibandingkan single vendors; (3) standardized quality - marketplace quality standards improve overall market perception dan customer trust; (4) ecosystem complementarity - participation dalam larger ecosystem creates opportunities untuk complementary services dan revenue diversification. Revenue increase 58% dan operational efficiency improvement 42% menunjukkan bahwa platform-enabled business

model menghasilkan superior unit economics dibandingkan previous single-operator model (Zott et al., 2011; Teece, 2018).

Marketplace Trust dan Quality Assurance sebagai Platform Foundation

Untuk marketplace platforms mencapai scale, customer trust adalah critical foundation. Program implement standardized quality metrics, vendor rating system, dan customer feedback mechanisms untuk build market trust. Operational efficiency improvements (fulfillment time -50%, cost ratio -42%) demonstrate bahwa standardized processes dan quality assurance enable superior customer experience dan operational performance. Customer repeat rate improvement dari 48% ke 67% menunjukkan bahwa marketplace trust dan quality assurance significantly enhance customer retention (Nambisan et al., 2017; Pressman & Maxim, 2014).

Sustainability dan Scaling Challenges

Ecosystem Governance dan Multi-Vendor Coordination - Successful marketplace require effective governance mechanisms untuk ensure fair vendor treatment, customer protection, dan ecosystem health. Recommendation: (a) establish vendor council untuk enable vendor voice dalam platform decisions; (b) implement transparent service level agreements; (c) develop dispute resolution mechanisms; (d) continuous monitoring vendor satisfaction.

Competitive Marketplace Dynamics dan Vendor Differentiation - Sebagai marketplace grow dan attract multiple competing vendors, individual vendor differentiation becomes increasingly critical untuk competitive success. Recommendation: (a) enable vendors untuk develop unique value propositions; (b) provide differentiation tools (customized branding, service offerings); (c) facilitate premium positioning untuk quality leaders.

Network Effects dan Critical Mass Challenges - Marketplace platform success depend pada achieving critical mass dari both customers dan vendors. Early stage hasil promising, namun sustained momentum require continuous customer acquisition. Recommendation: (a) aggressive customer acquisition campaign; (b) vendor incentive programs untuk early adopters; (c) marketing emphasis pada network benefits.

KESIMPULAN

Program Pengabdian Kepada Masyarakat ini mendemonstrasikan bahwa platform ecosystem participation combined dengan digital entrepreneurship development represent powerful pathway untuk enabling micro-enterprises mencapai significant business scale dan sustainability. Melalui

kombinasi strategic platform infrastructure, entrepreneurship training, dan business model innovation, program berhasil transform SoesSri dari single-business operator menjadi platform ecosystem participant dengan substantially greater scaling potential. Revenue growth 58% combined dengan 318% customer database expansion dalam timeframe hanya 5 minggu adalah testament terhadap transformational power dari ecosystem platform business models.

Key Findings dan Theoretical Contributions:

- Platform ecosystem participation enable order-of-magnitude market reach expansion (318% customer growth) impossible melalui traditional single-business scaling.
- Digital entrepreneurship training successfully develop business model innovation mindset enabling entrepreneurs effectively leverage platform infrastructure.
- Platform-mediated business models generate superior unit economics: revenue +58%, profitability improvement +42% operational efficiency dalam 5 minggu.
- Marketplace quality assurance dan trust-building mechanisms significantly enhance customer retention (repeat rate +40%) dan operational performance.
- Network effects dalam marketplace create sustainable competitive advantages dan growth momentum beyond individual vendor capabilities.
- Model program successfully replicable untuk numerous service-based industries, with potential untuk systemic economic impact di UMKM sector.

Rekomendasi untuk Platform Scaling dan Policy Support:

- Develop marketplace platform programs sebagai systematic offering dari university-industry collaboration, scaled beyond individual implementations.
- Create government support mechanisms untuk enable critical mass dalam marketplace platforms melalui vendor subsidies, customer acquisition incentives, dan financing facilities.
- Establish digital entrepreneurship certification programs dalam vocational education untuk develop talent pipeline dengan platform ecosystem-ready competencies.
- Build policy framework supporting platform governance, consumer protection, dan fair competition dalam digital marketplace ecosystem.
- Facilitate industry associations untuk coordinate marketplace best practices dan standardization efforts across catering dan other service industries.

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