# AI Transformation Playbook

## 30+ Best Practices for Your Organization's Automation and AI Journey

INSIGHIA VENTURES PARTNERS

in partnership with

fileAI WIZ.AI aws

# Table of Contents

Part 1

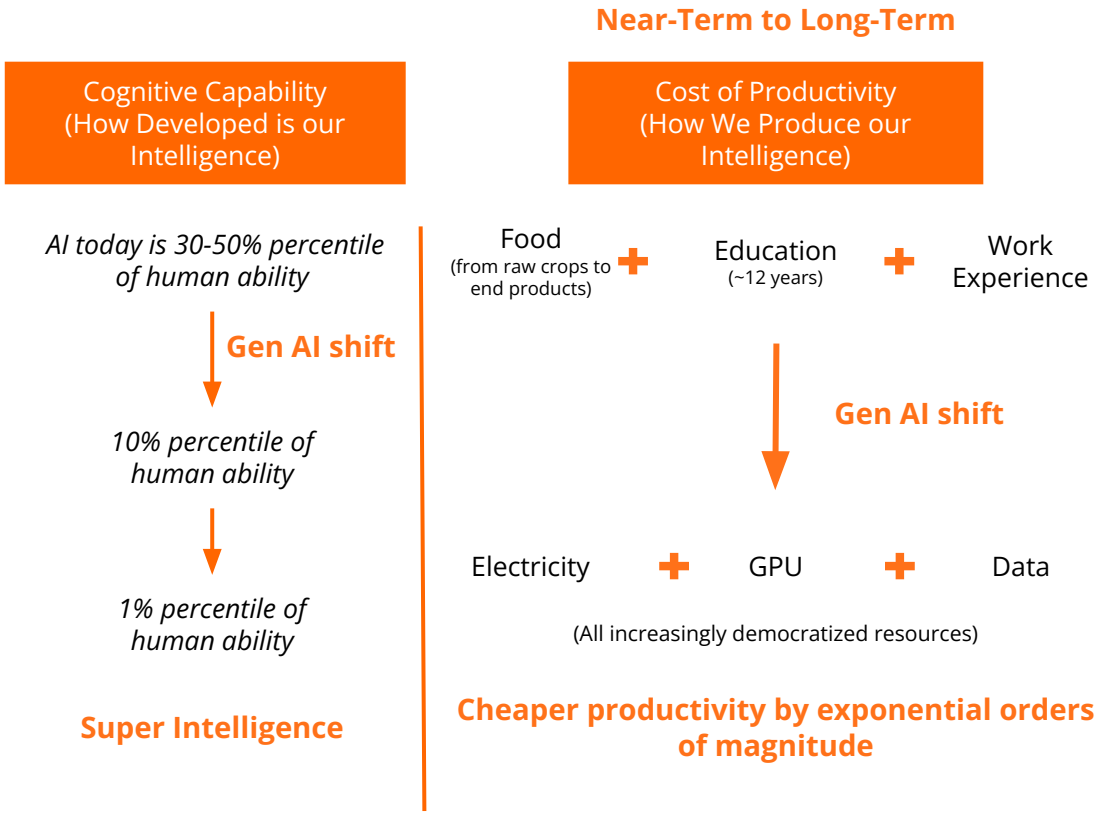
# Refreshing What We Have Learned About Generative AI

**An introduction (or re-introduction for those familiar) to the context of generative AI in terms of shaping human productivity and becoming the next leap from automation and machine learning which have become key facets of digital transformation in our organizations today. Insights are taken from Insignia Business Review's ongoing AI Notes series.**

# Gen AI is radically shifting two aspects of productivity

Mobile internet technology transformed global communication, introducing a new age of connectivity. Location-based services like Uber, Gojek, and Grab have revolutionized transportation and food delivery, while user-generated content platforms like TikTok have redefined media consumption. With the advent of 5G connectivity, superapps are now further consolidating multiple online functions into single, user-friendly platforms.

However, while mobile internet has extensively solved the problem of connectivity, it hasn't adequately addressed productivity. The ability to process, understand, and generate insightful outputs from the plethora of information available still largely falls under human responsibility. This is where generative AI, or "Gen AI," is stepping in.

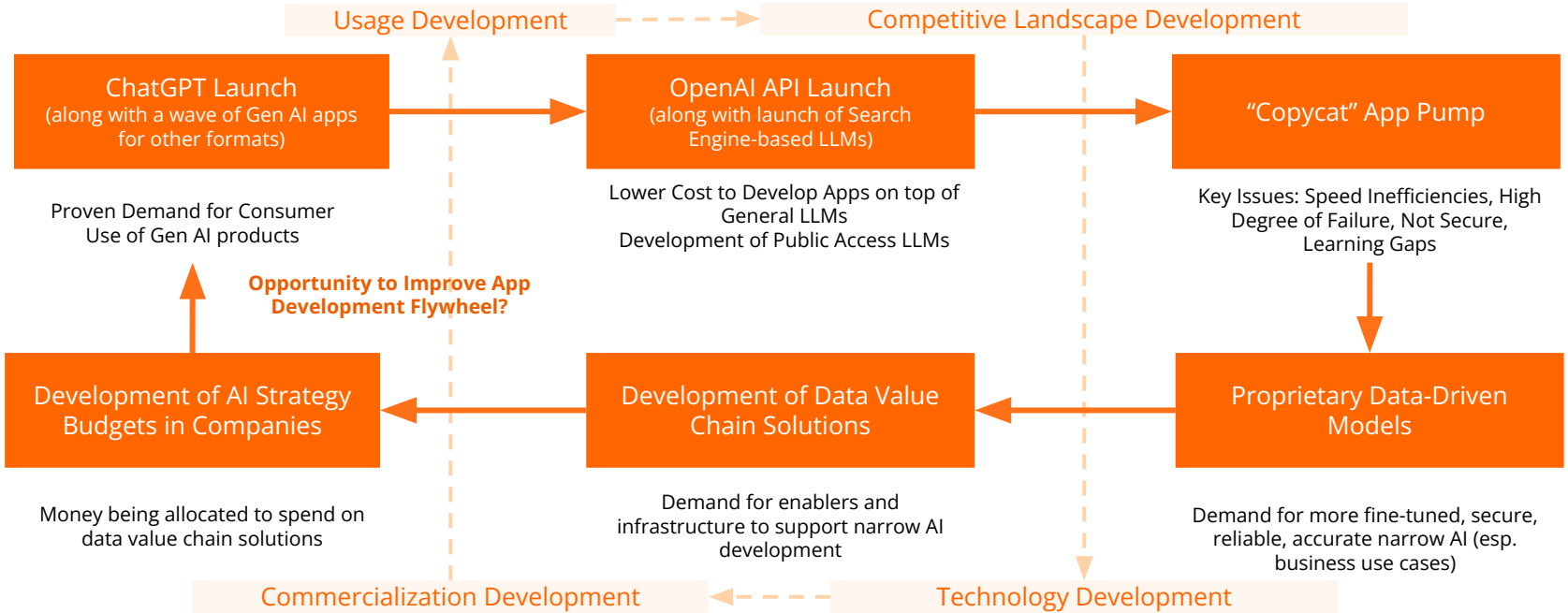


**ChatGPT led to a "market creating" domino effect**

INSIGNIA VENTURES PARTNERS

# Not all "Gen AI" is equal, however…

Varying in architecture, training, and the quality of input data, different AI systems display a wide range of capabilities and potential output quality. A critical understanding here is that AI is as good as its training data, implying the need for unbiased, accurate data to prevent flawed outputs.



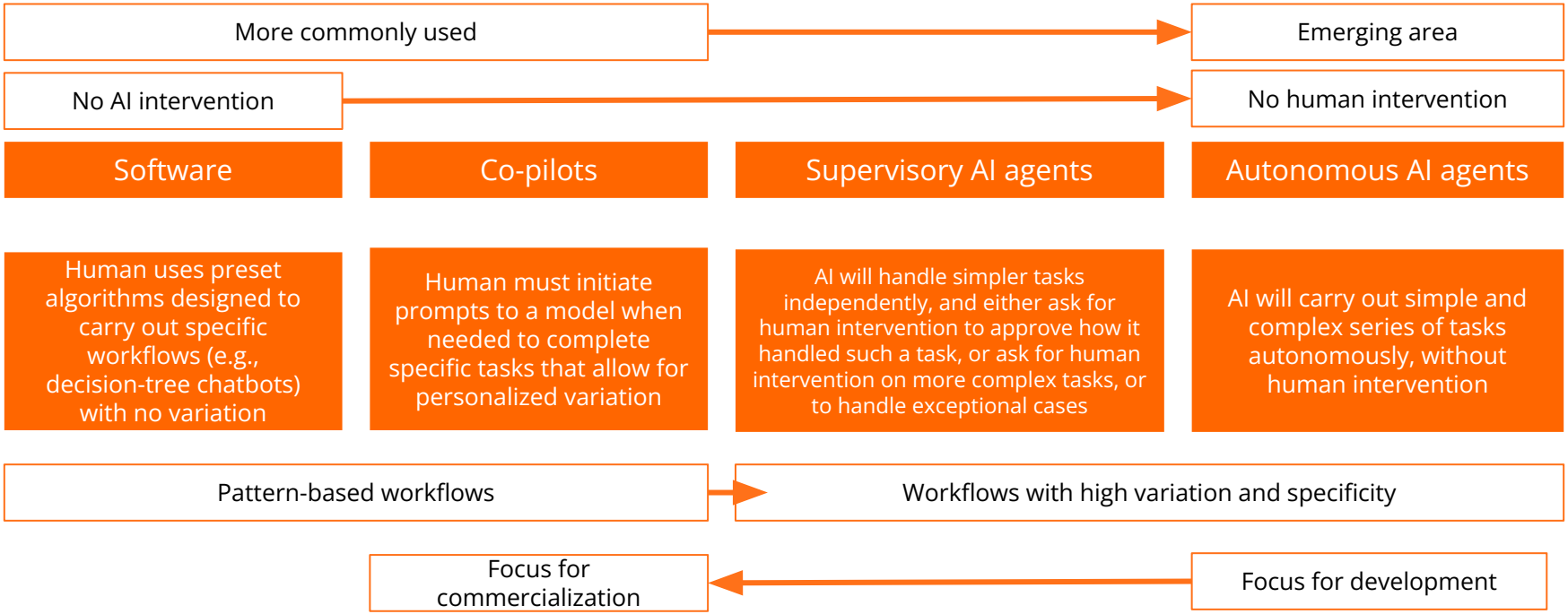
INSIGNIA VENTURES PARTNERS

# Generative AI adds another layer of capability to automation and machine learning

| | Automation | "Traditional" AI / ML | Generative AI |
|---|---|---|---|
| **Approach** | Machines do repetitive tasks or processes (rules need to be present) | Uses supervised or unsupervised learning algorithms to produce predictions or insights based on patterns in existing data | Generates new and unique content based on patterns learned from training data |
| **Limitations** | Limited to the type of tasks and robustness of rules and scope of tasks | Limited to the predefined requirements on output of the model | Limited in terms of interpretability (i.e., how do we know it is accurate?) |
| **Incremental value on automation** | | ML brings in predictive and diagnostic capabilities based on inputs into automated processes | Generative models can create novel output from larger sets of "noisy" data (but needs discriminative models to interpret and verify) |
| **Use Cases** | Manufacturing, Inventory Management, Data Processing | Fraud detection (Identity verification), Recommendation feeds, Marketplace pricing | Customer engagement, virtual assistants, content creation, documentation generation |
| *Primary Impact* | Cost-savings | + Customer retention | +New customer-specific products |

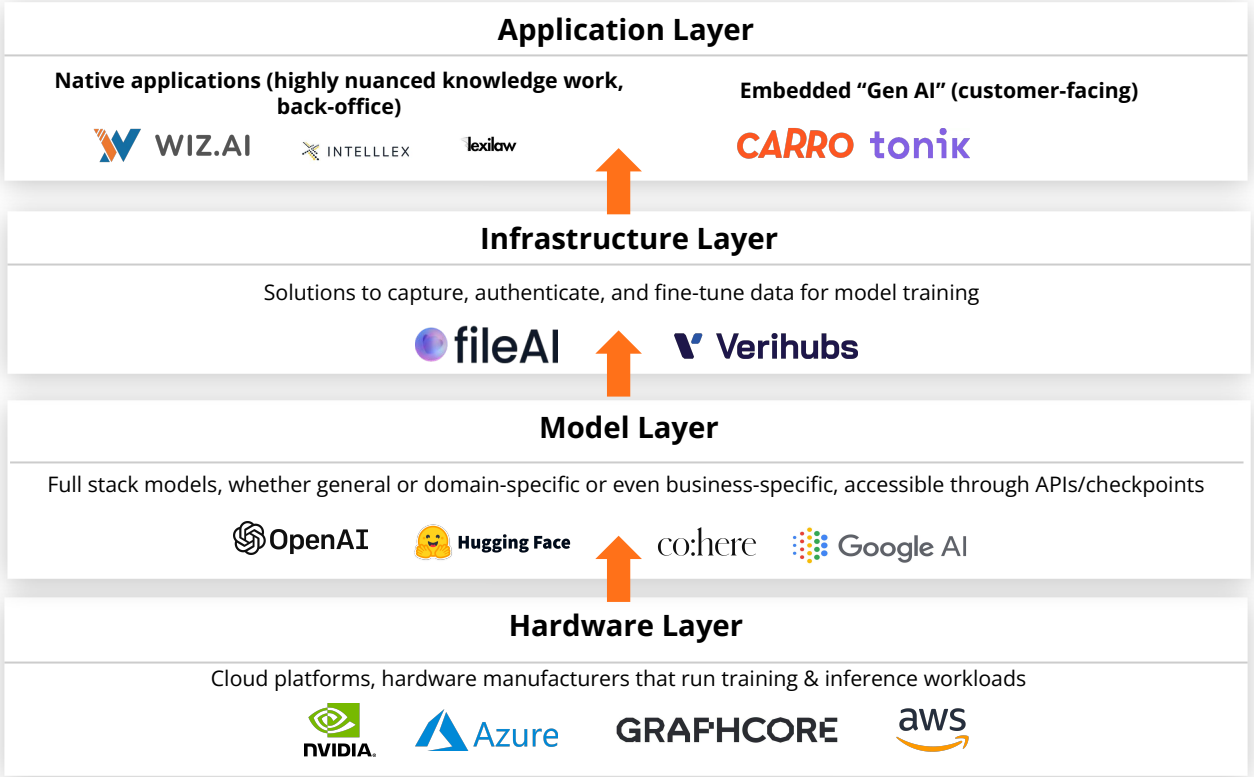
INSIGNIA VENTURES PARTNERS

# How Gen AI (through AI agents) redefines the Human Machine Collaboration Spectrum



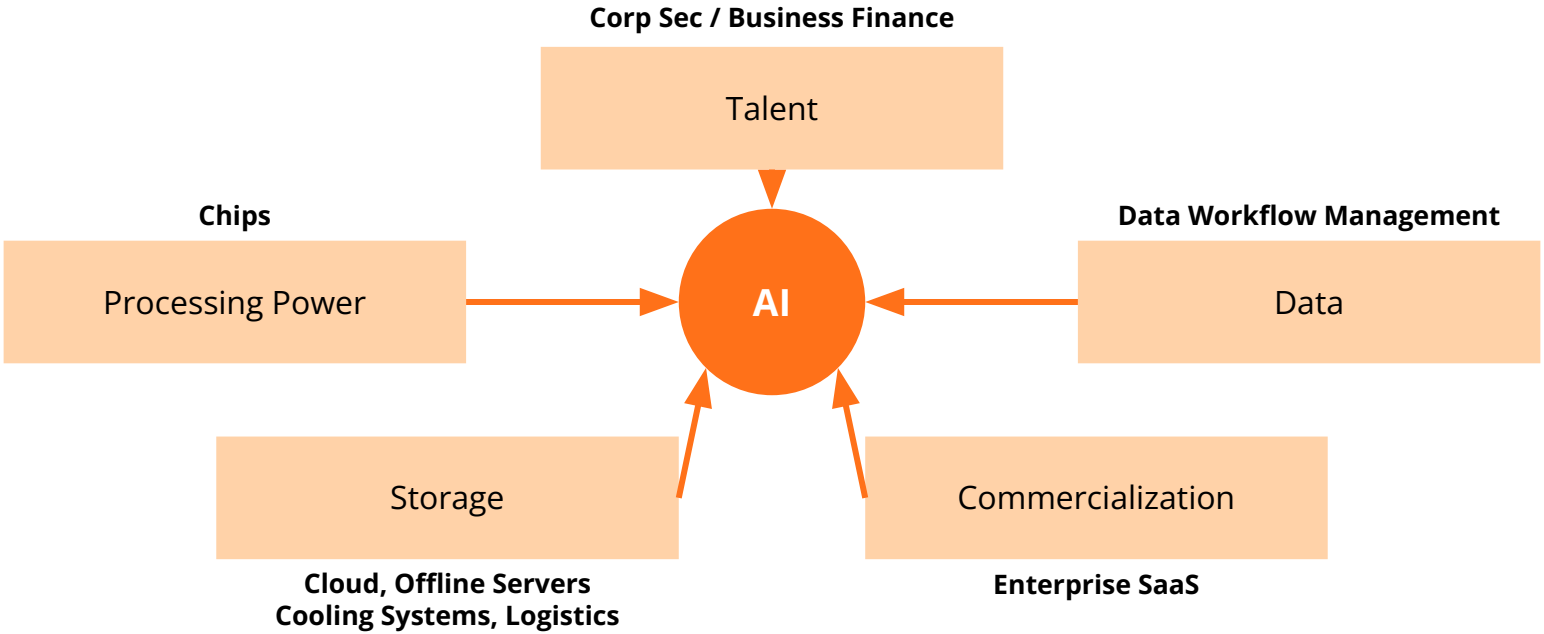
INSIGNIA VENTURES PARTNERS

# There are multiple layers of opportunity in Generative AI



INSIGNIA VENTURES PARTNERS

# The Gen AI boom impacts industries key to AI development



INSIGNIA VENTURES PARTNERS

# So you're not an AI company or Gen AI company, what does this matter?

Even for companies that are not inherently AI-driven, "operating in Gen AI mode" can reap operational efficiencies..

| Practices to Reap Operational Gains from AI / Gen AI applications | Key prerequisite in the organization to implement | Benefits in Action |
|---|---|---|
| Speed Up Tech Development with Coding Co-pilots | Pre-existing discipline around product sprints that serves as baseline for improvement | Sped up product sprints by 50% |
| Dedicated cross-functional task force to uncover and test use cases for Gen AI for potential to integrate into user experience | Availability of talent with necessary functional capabilities to form task force | Internal usage of financial advisor co-pilot feature trains models for external adoption |
| Enhance internal operational efficiency based on gains from customer adoption of automation | Initial customer adoption | |
| Enhance user experience with GPT-driven tools (from customer support to co-pilot) | Efficient system of record for data; model engineer | More human-like responses for customer support |
| Host internal hackathons to uncover potential applications of AI (not just Gen AI) in the organization | Needs existing resources (employees, data, infrastructure) + culture of innovation | Produce and test ideas internally at scale |

INSIGNIA VENTURES PARTNERS

# Thinking about AI adoption from an organizational POV

## Finding the sweet spot

| | |
|---|---|
| **Operating Efficiencies** | Is it reducing costs? (Speeding up processes)<br>Is it upskilling / improving productivity? (Co-pilot) |
| **Business Opportunity** | Does it improve the customer experience?<br>Does it unlock revenue? |
| **Unit Economics** | Does it justify operating expenses per customer at scale? |

Do you need Automation, ML algorithm, or a tailored Gen AI model specifically? What should be prioritized?

## Line up the right resources for success

| | |
|---|---|
| **Data Fit** | Do you have enough data and infrastructure to process and store data? |
| **Team Fit** | Do you have talent to develop and manage these capabilities? |
| **Business Fit** | How would these capabilities fit into your existing operations, and tech stack, liquidity? |

What does success look to justify its continued implementation? What are the North Star business metrics it would be tied to?

## Align the organization

| | |
|---|---|
| **Management** | Do you have management / executive buy-in?<br>How is implementation being communicated? |
| **End-User in Organization** | Where are you getting context / input? |
| **Engineers, Data Science, Legal** | Who is QC'ing the implementation and iterating? |
| **Finance** | How are metrics, resource spend being monitored? |

Does AI actually help improve work efficiencies or add more work and expound existing issues?

Part 2

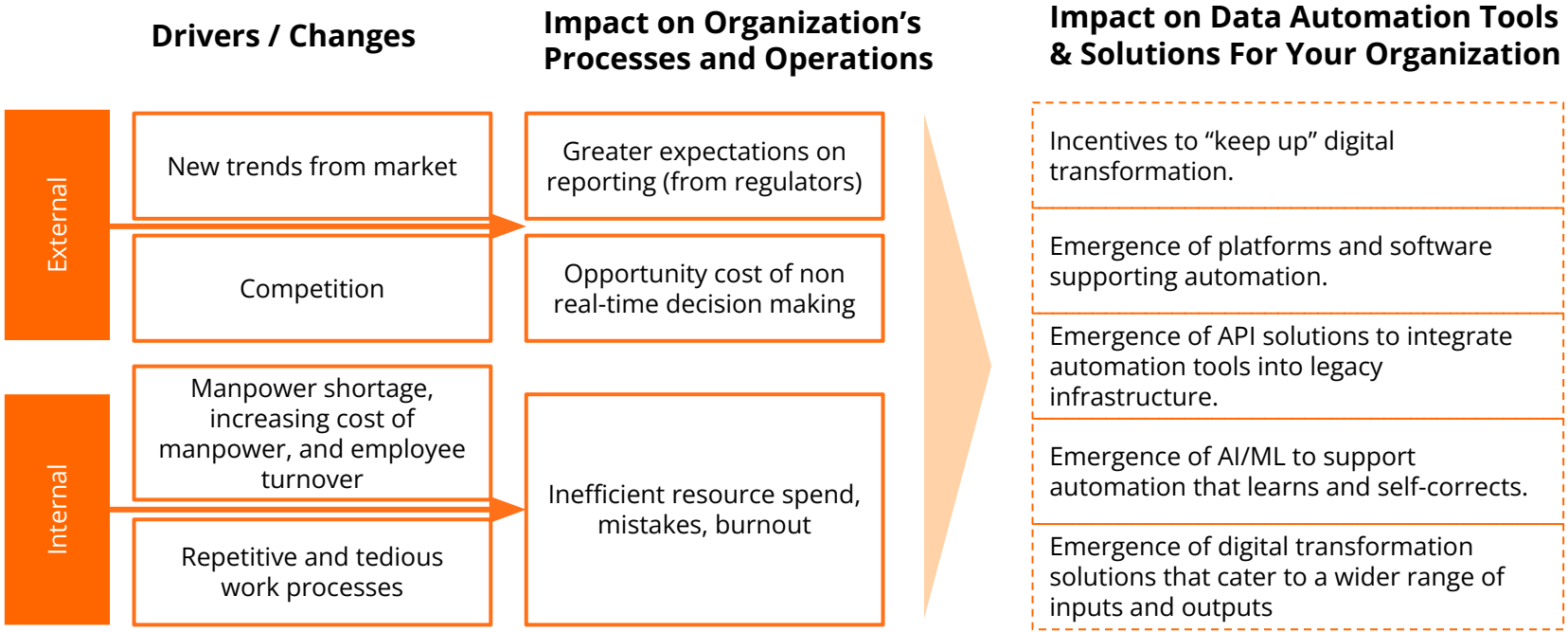
# Building the Data Automation of Your Organization

***with AI, to unlock Generative AI Capabilities**

In partnership with fileAI

**Having gone through an overview of the generative AI opportunity, we now go back to the basics. This chapter is primarily for leaders looking to kickstart digital transformation (or improve workflow inefficiencies) in their organization. It tackles the important stage of developing data automation in order to unlock more digital transformation opportunities like generative AI.**

# Drivers for Building Data Automation Capabilities



Section Summary:

# Building the Data Automation Capabilities of Your Organization

| Best practices on building data automation | Tips to apply these to your organization |
|---|---|
| 1 Define scope and define desired outcomes for any digital transformation project. | Measure ROI and adjust strategies in real-time. |
| 2 As important as the efficacy of an automation tool or software is its ability to be onboarded. | Allow your teams to focus on value generation rather than troubleshooting. |
| 3 Data automation can't work without system interoperability. | Easier to implement advanced AI functions that rely on a unified data layer. |
| 4 Data automation needs to have a learning capability as well to reduce monitoring and correction workload. | Ensure automation evolves in tandem with business needs, continuously improving efficiency and accuracy. |
| 5 Data automation can only improve existing workflows, standards and practices. | Optimize processes before introducing automation and establish clear standards for data handling and reporting. |

# Best Practice 1: Define scope and define desired outcomes for any digital transformation project.

**Pitfall to avoid**

The first step in implementing a successful digital transformation project is to have a clear definition of its scope and the desired outcomes.

Without a well-defined objective, digital transformation can quickly become directionless, resulting in cost overruns and underwhelming results.

**How to Solve It**

Start by narrowing down the processes and data points that you want to transform through automation. It's essential to focus on high-impact areas where manual tasks consume a significant amount of resources or where human error leads to critical issues. Setting up clear goals and KPIs early on will also help in measuring ROI and adjusting strategies in real-time.

Define not just the desired automation outcomes but also how these changes align with broader business objectives, such as improving customer experience, enhancing employee productivity, or increasing regulatory compliance.

# Best Practice 2: As important as the efficacy of an automation tool or software is its ability to be onboarded.

## Pitfall to avoid

Optimizing for an automation solution's capabilities may seem the most obvious choice, but ease of onboarding is just as important as the tool's feature set.

Implementation can stall if the platform is too complex for your teams to use, requires lengthy integration timelines, or demands significant changes to existing workflows.

## How to Solve It

When evaluating automation solutions, look for tools that offer user-friendly interfaces for non-technical users, integration support for legacy systems, modular capabilities that allow for gradual adoption.

A smooth onboarding process will reduce disruptions and allow your teams to focus on value generation rather than troubleshooting. This is crucial, especially when you plan to scale automation across different functions within the organization. Remember, the goal is to make technology work for people, not the other way around.

Consider conducting a pilot project or Proof of Concept (POC) to evaluate ease of use and integration capabilities before rolling out a solution company-wide.

# Best Practice 3: Data automation can’t work without system interoperability.

**Pitfall to avoid**

For data automation to work effectively, system interoperability is critical.

Without interoperability, your automation initiatives will likely create data silos, leading to inconsistent data flows, manual reconciliation efforts, and inaccurate insights.

**How to Solve It**

Your automation tools should be able to seamlessly communicate and exchange data with your existing IT infrastructure, including ERPs, CRMs, and other business applications.

Leverage platforms that support open APIs for smooth data transfer between systems, compatibility with different file formats and data models, centralized data management to reduce redundancy.

# Best Practice 4: Data automation needs to have a learning capability as well to reduce monitoring and correction workload.

## Pitfall to avoid

Data automation doesn't just stop at replicating routine tasks; it should also have a learning capability to optimize over time.

Even if there is an automation solution in place, without an effective learning mechanism, monitoring and correction workload will still remain high for teams using these solutions.

In some cases, automating might even add more work than before.

## How to Solve It

This is where machine learning (ML) algorithms come into play. Systems with built-in learning can analyze patterns, recognize anomalies, and even self-correct common errors, reducing the need for human intervention.

For example, in financial operations, automation tools can learn from past transactions to better predict cash flow anomalies or automate reconciliation processes with greater accuracy.

Similarly, in customer support, automation systems can analyze previous interactions to refine their responses and escalate complex cases more effectively.

# The "Machine Learning" Difference in Data Automation: A Look at the OCR Case

| | Standard / Traditional Optical Character Recognition (OCR) | The "AI" Leap | Next Generation Intelligent Data Processing |
|---|---|---|---|
| **Ease of Onboarding** | Not supportive of different kinds of data<br><br>Typically complex and time-consuming set up | Input agnosticism (source of data) | AI should be able to interpret and adapt to different kinds of data, reducing time spent on set up |
| **Learning Capability** | Low accuracy:<br><90% accuracy with digital text<br><75% accuracy with handwriting<br><50% accuracy with cursive handwriting<br><br>No learning and limited adjustments | Learning capability (accuracy) | Higher accuracy depending on the platform, but accuracy can be driven by learning from AI |
| **System interoperability** | Still requires human intervention for corrections and quality control both in the OCR process then in the accounting / ERP system | Learning capability (granularity)<br>Output agnosticism (decision-making / management system) | Should not require human intervention as the system self-corrects, learns, and can integrate into various systems |

# Best Practice 5: Data automation can only improve existing workflows, standards and practices.

## Pitfall to avoid

Implementing data automation without first standardizing and refining your existing workflows can lead to automation of inefficient processes.

This can result in faster execution of poor practices, reinforcing silos, and compounding existing issues rather than solving them.

Data automation is not a cure-all for process problems and works best for organizations ready to embrace such changes.

## How to Solve It

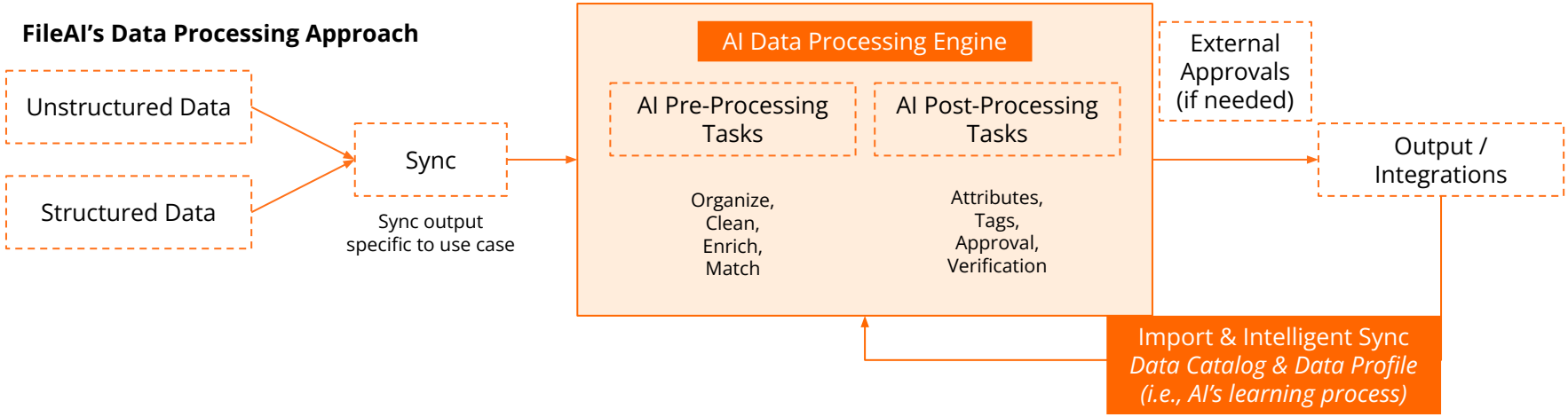
Start by conducting a comprehensive audit of your current workflows and processes to identify bottlenecks, redundancies, and inefficiencies.

Optimize these processes before introducing automation. Establish clear standards for data handling and reporting so that automation enhances, rather than disrupts, the flow of information.

This approach ensures that your automated workflows are built on a solid foundation, maximizing the benefits of automation and reducing the risk of replicating errors at scale. Regularly revisit these workflows post-implementation to adapt and refine as the system evolves.

# Unpacking an AI-powered workflow: FileAI's Data Processing Approach

**FileAI is building AI agents to enhance back-office productivity. The company specializes in the processing and understanding of unstructured data (files) and is using a combination of NLP & Machine Learning as well as LLM tech to automate workflows end-to-end.*



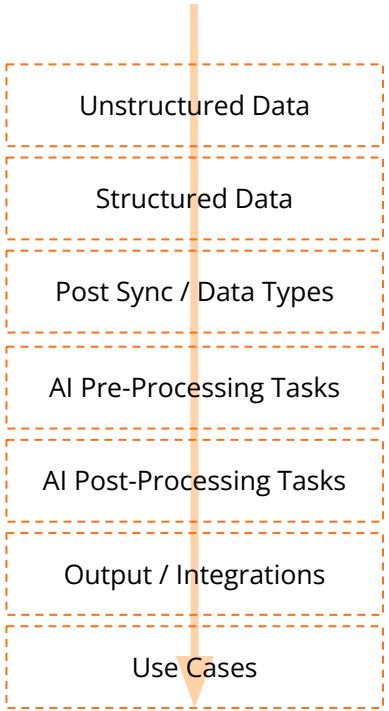
# FileAI Data Processing Approach Applied to Various Workflows

| | 1 Autonomous Accounting (AR/AP) | 2 Expense Claims Processing |
|---|---|---|
| Unstructured Data | Emails between finance teams & vendors, snapped photos/uploads of receipts and invoices | Time Sheets; Snapped photos / uploads of receipts and invoices |
| Structured Data | POS data, purchase orders, delivery orders, vendor information, bank statements | |
| Post Sync | Split and categorize in AR (sales invoices, POS data, online sales data, payment gateway) and AP (invoices, purchase orders, delivery orders, receipts) | |
| AI Pre-Processing Tasks | Data extraction & Digitization; Item Detail Categorization; Tax code and entity matching; 2/3 way Matching | Vendor name; Total amount; Date of receipt; Currency type; Expense type |
| AI Post-Processing Tasks | Attributes, Tags, Approval, Verification | Reimbursable amount; Comments; Line item options |
| Output / Integrations | ERP and Bookkeeping software | After going through finance approvals, generate Expense Reports (by Employee / Department / Date (e.g monthly) / Expense type) for Accounting tools & ERP Systems |
| Use Cases | AP/AR Automation<br>Purchase Order Matching | Expense Claims Processing |

# FileAI Data Processing Approach Applied to Various Workflows

| | 3 Autonomous Loan Underwriting (Banking) | 4 Insurance Claims Processing |
|---|---|---|
| Unstructured Data | Unstructured Loan & Application Data from digital documents, hard copies, or email | Email correspondence between policyholders and agents |
| Structured Data | Applicant information, loan details, credit bureau data and financial data | Claimant information, claim details, incident reports, policy information |
| AI Pre-Processing Tasks | Matching, Initial Completeness Check, Clean, Fraud Check | Organize, Clean, Enrich, Match |
| AI Post-Processing Tasks | Attributes, Tags, Notifications & Approval, Validation & Verification | Attributes, Tags, Approval, Verification |
| Output / Integrations | Legacy system export destinations | |
| Use Cases | AP/AR Automation<br>Mail Correspondence<br>Loan applications and KYC | Autonomous Claims Processing<br>Claims <> Policy matching and assessment<br>Mailroom automation workflows with AI |

# FileAI Data Processing Approach Applied to Various Workflows




## 5 Procurement Automation

Supplier proposals/quotations, email correspondence between procurement teams and suppliers, handwritten invoices

Vendor information, purchase orders, delivery orders, contract data, transaction records

Invoices, Purchase Orders, Delivery Orders, Vendor information, Quotation

## 6 Shipping and Logistics Automation

Email correspondence between logistics teams and clients, bills of lading, handwritten invoices

Vendor information, order details, inventory records, shipment tracking information

Bill of Lading, Insurance Cert, Health Cert, Invoice, Halal Cert, Warehouse Reports, Packing List

Data extraction & Digitization, Item Detail Categorization, Tax code and entity matching, 2/3/4/5 way Matching, Automatically finds common identifiers, such as PO Number, INV Number, etc.

Attributes, Tags, Approval, Verification

ERP, Order Management Platform, Legacy System, etc

Inventory Management
SKU Reconciliation
Import / Export Operations

# Tale of Two Companies' Data Automation Journey

| Company | Before Automation | Use Cases Applied | Results |
|---|---|---|---|
| F&B Multinational Guzman y Gomez | Financial information coming in from multiple different channels (Gmail, WhatsApp, POS systems, etc.)<br>4 hours a day per outlet allocated for information logging | AP & AR Automation<br>Purchase Order Matching<br>Schedule Monitoring<br>Performance Reporting | Reduced data processing time by over 120 hours<br>Reduce outsourced staffing, and repurpose existing team members to higher value tasks<br>100% back-office accounting traceability |
| Global Insurance Group Mitsui Sumitomo Insurance Group (MSIG) | Searching for a software solution to introduce Intelligent Process Automation (IPA) to insurance claims processing | Centralized document management process ("Smart Inbox")<br>Automated paperless claims processing in multiple languages<br>Simultaneous automation | Reduced processing time from 5 to 2 hours<br>Reduced claims operating expenses by 18%<br>Improvements in employee morale and skills |

# How can these best practices prepare you for generative AI adoption?

| Best practices on building data automation | Tips to apply these to your organization | How this prepares your organization for Gen AI adoption |
|---|---|---|
| 1 Define scope and define desired outcomes for any digital transformation project. | Measure ROI and adjust strategies in real-time. | Allows management to define more effective scopes for gen AI experiments. |
| 2 As important as the efficacy of an automation tool or software is its ability to be onboarded. | Allow your teams to focus on value generation rather than troubleshooting. | This value generation can extend to gen AI exploration. |
| 3 Data automation can't work without system interoperability. | Easier to implement advanced AI functions that rely on a unified data layer. | Allows proprietary gen AI solutions or language models to be developed more easily |
| 4 Data automation needs to have a learning capability as well to reduce monitoring and correction workload. | Ensure automation evolves in tandem with business needs, continuously improving efficiency and accuracy. | Creates a richer data set for gen AI solutions to be built on |
| 5 Data automation can only improve existing workflows, standards and practices. | Optimize processes before introducing automation and establish clear standards for data handling and reporting. | Reduces friction across teams when adopting gen AI solutions |

Part 3

# Leveraging AI to Level Up Your ERP and Financial Management

**This chapter is primarily for CFOs, finance decision-makers, and finance teams. It tackles a finance perspective on AI transformation, tackling processes, use cases, and skill sets needed to make the leap and improve resource and financial management. Insights here were taken from the Oracle NetSuite "Artificial Intelligence in Netsuite" Resources Section.**

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## (1) Keep the advantages of process automation as you move into data-driven analysis.

The first question finance leaders need to ask is: How deep is our AI transformation? Many organizations begin by automating repetitive tasks, but the real value comes when AI moves beyond simple automation and into data-driven decision-making. It's crucial to assess whether your AI strategy is merely addressing surface-level pain points or if it's driving a deeper, more meaningful change.

To unlock the potential of AI, ERP and financial management systems need to transition from traditional process automation to advanced analytics and predictive insights. This means leveraging AI to forecast cash flow, identify financial risks, optimize budgeting, and even simulate various business scenarios. Keeping process automation intact while expanding into strategic, data-driven analysis is the key.

**Pro Tip:** Perform a maturity assessment of your AI adoption. Are you using AI just to reduce manual work, or are you enabling your organization to derive new insights and optimize resource allocation? Aim for the latter to fully harness the power of AI in financial management.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Building Your Organizations' Data Automation Capabilities with AI

## Process Automation vs Analysis

| Assisting / Process Automation | Key Benefits | Value |
|---|---|---|
| Use algorithms and AI to handle repetitive tasks based on business rules and best practices. Automate data entry, transaction matching, intercompany reconciliations, and more. | Time savings, policy and process adherence. | Increase accuracy, speed, and employee productivity. Reduce errors and ensure compliance. |

| Advising / Analysis | | |
|---|---|---|
| Use AI-driven data analysis to identify trends, make predictions, answer a broad range of questions, and offer recommendations. Improve forecasting and planning. Get advice on how to resolve supply chain issues, manage inventory, and more. | Unique insights, decision-making support. | Draw in data from across the business to uncover trends and spark ideas that pay off in agility and profitability. |

**Unified Platform**

INSIGNIA VENTURES PARTNERS

# 5 Insights on Building Your Organizations' Data Automation Capabilities with AI

## Making the Shift from Automation to AI for Finance Teams

### 1 Impact of Repetitive Tasks

Finance teams often spend significant time on repetitive processes like managing accounts receivable/payable, three-way matching expenses, running payroll, and monthly functions such as closing the books.

### 2 Automation as a Solution

Automation can save resources and enforce business processes efficiently. It is essential to **prepare data for AI systems**, which require digital inputs.

### 3 Starting Point for AI Integration

Automating routine finance tasks **frees up team resources for more strategic activities** like scenario and demand planning, financial Planning and Analysis (FP&A), and advanced data analysis.

### 4 Laying the Foundation for AI

After digitizing data and defining processes, automation can apply business rules. Create a foundation for adopting AI/ML to automate and optimize decision-making.

### 5 Centralized Data Collection

Effective data-driven intelligence often requires consolidating various data streams into a **single data warehouse**. Support complex data analysis, **"what-if" scenarios,** and advanced techniques like data visualization and machine learning.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Building Your Organizations' Data Automation Capabilities with AI

## Making the Shift from Automation to AI for Finance Teams

### 6 Integrating Diverse Data Sources

Combine finance data with:

- Operational data.
- Web analytics.
- Lead-generation information.
- Store/warehouse traffic data.
- Customer satisfaction metrics.

Enable analysts to uncover **unique trends** and insights specific to the business.

### 7 Maintaining Automation Advantages

As businesses adopt data-driven approaches, they should **preserve the efficiency gains** achieved through process automation.

### 8 Seamless Data Compatibility

Specialty systems should integrate with the central data store **without needing extensive custom coding or ETL (Extract, Transform, Load) work.**

Choosing compatible tools simplifies implementation.

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## (2) Monitor AI outputs as part of successful adoption.

Implementing AI in ERP and financial management systems requires a shift in mindset—from merely executing tasks to actively monitoring AI performance and outputs. Because AI models learn and adapt over time, monitoring becomes crucial to ensure that they continue to provide accurate and relevant insights.

To facilitate adoption, finance teams should focus on:

- **Setting Up Clear Metrics:** Establish KPIs to measure the effectiveness of AI across different processes, such as transaction matching, fraud detection, or compliance reporting.
- **Understanding Anomalies and Model Behavior:** Equip teams with the skills to detect when AI outputs deviate from expected norms, and understand the root causes of these deviations.

Effective monitoring ensures that AI doesn't just produce results but produces the right results. It also builds trust in the system, which is vital for driving adoption across the organization.

**Pro Tip:** Create a dashboard specifically for tracking AI performance metrics and anomalies, so finance teams can easily spot irregularities and take corrective action when needed.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Building Your Organizations' Data Automation Capabilities with AI

## Potential for AI Adoption in Compliance and Finance: The ChatGPT Case

### Potential for Compliance and Finance

AI like ChatGPT could be applied to compliance and accounting through **AI-driven tools**.

These systems could automate complex tasks, such as aligning with international accounting standards.

### Tech Companies' Response

Companies are developing products that integrate ChatGPT via **APIs**.

AI tools may interpret financial data and automate accounting, though these might not always use generative AI.

### Trust and Adoption Concerns

Future AI tools (e.g., **AI accountants**) will require strong governance and **trust in AI outputs**.

CFOs and controllers will need to **monitor and review AI-generated work** to ensure adherence to business rules.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## (3) AI in financial management is measure of risk management ability.

AI's role in financial management isn't just about streamlining operations—it's fundamentally about mitigating risk. Whether it's detecting fraudulent transactions, predicting cash flow shortfalls, or identifying compliance gaps, AI enables finance teams to proactively manage risks rather than reactively addressing them.

Key AI-driven risk management capabilities include:

- **Anomaly Detection:** Automatically identifying unusual patterns in financial transactions or operational data that may indicate fraud or errors.
- **Predictive Analytics:** Using historical data to forecast potential risk scenarios, such as credit risk or liquidity shortages, and enabling preemptive actions.
- **Regulatory Compliance:** Ensuring adherence to complex regulatory requirements by automatically monitoring changes and adapting reporting processes accordingly.

**Pro Tip:** Develop a specific AI risk management strategy that integrates seamlessly with your overall financial risk framework. This ensures that AI-driven insights are aligned with broader risk management objectives.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## Types of Financial Automation and Links to Risk Management

| | | |
|---|---|---|
| Intelligent Routing | **Automatically directs invoices** through the correct approval workflow without manual inputs.<br>Uses invoice information to identify the correct recipient and **route it for processing and coding.** | Can be used to develop **more robust internal controls** on spending |
| Automated Matching | AP automation matches invoices with **purchase orders, receipts, contracts,** and other documentation.<br>Uses **ML-based recognition** if information is incomplete to ensure accurate matching at the line or header level. | Can be used to **tackle potential fraud** cases and verify transactions |
| Coding Templates | **Templates** can be set up based on vendor, supplier, item, or user.<br>Leverages invoice data to **automate coding**, minimizing manual entry. | Can be used to ensure **more robust accounting**, minimize tampering |
| Smart Coding | Applies to invoices **not linked to purchase orders.**<br>Uses **historical data and new invoice information** to automatically generate coding. | Can be used to speed up onboarding and **minimize risk of new use cases** |
| Payment Plans | Handles **recurring payments** like utility bills, rent, software subscriptions, and mobile plans.<br>**True touchless AP systems** automatically identify, process, and code these payments without human intervention. | Can be used to **ensure better collection** and vendor payments |

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## (4) Automation is a gradual transformation that requires rethinking technology, people, and processes.

AI automation isn't an overnight switch—it's a gradual, phased transformation that touches every layer of your organization. Success requires more than just implementing technology; it involves a holistic change in processes and people management.

Here's what to consider:

- **Technology:** Adopt an AI-ready ERP platform that supports modular automation, allowing gradual scaling rather than a one-time overhaul.
- **People:** Train finance teams to work alongside AI systems. They should know how to manage AI outputs, interpret insights, and leverage automation to drive higher-value tasks.
- **Processes:** Redesign workflows to integrate AI at critical decision points, such as automated financial closing, expense management, and compliance checks.

**Pro Tip:** Start small by automating low-risk, repetitive tasks, and then progressively expand AI into more strategic areas, ensuring that teams have time to adapt to new processes.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## 8 Key Components of Automation Implementation

| | | |
|---|---|---|
| 1 | Communication | Effective communication is crucial for successful implementation.<br>Ensures team alignment, reduces resistance, and highlights the benefits of automation.<br>Use communication to guide the team through changes and maintain morale. |
| 2 | Operational Backbone | Automation should enhance speed, efficiency, and accuracy<br>Focus on integrating systems and processes as the foundation of your automated back-office platform. |
| 3 | Documented and Shared Process Knowledge | Clearly document and share processes across teams to improve transparency and cooperation.<br>Emphasize that you are providing **tools to improve performance**, not dictating how to do their jobs. |
| 4 | Platforms and Data | Consolidate sales, operational, and finance data into a single platform.<br>Gain buy-in from all departments by highlighting how shared data simplifies their work.<br>A unified data source is key to successful automation. |
| 5 | Accountability | Establish clear ownership of data and processes for each department.<br>Communicate that this is about democratizing data—making it accessible across teams.<br>Sharing data removes silos and empowers teams to act on insights. |

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## 8 Key Components of Automation Implementation

### 6 Combined Platform

Aim to create a single data repository for real-time information.
Use customizable dashboards, reporting systems, and KPIs to align all departments.
This shared platform fosters collaboration and data-driven decision-making.

### 7 Transformation Strategy

Automation is a gradual transformation that requires rethinking technology, people, and processes.
Take small steps to achieve incremental gains but frame them within a "moonshot project" vision to inspire.

### 8 Adapting to Change

There is no universal pathway to automation; success depends on current capabilities, systems, and people.
Upskill employees and bring in new talent as needed to support the shift.
Stay agile and avoid settling for "good enough"—always aim for transformative outcomes.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## (5) Finance leaders must combine industry knowledge, technical skills, and data-driven strategies.

For finance leaders steering AI transformations, staying ahead means embracing a unique combination of financial acumen, technical expertise, and data-driven strategy. This trifecta enables leaders to not just oversee AI adoption but to drive meaningful business transformation through AI.

Key competencies include:

- **Industry Knowledge:** Deep understanding of industry-specific financial practices helps in designing AI models that are relevant and aligned with regulatory frameworks.
- **Technical Skills:** While finance leaders don't need to be data scientists, having foundational knowledge of AI and machine learning principles helps in making informed decisions and communicating with technical teams.
- **Data-Driven Strategy:** Leveraging data as a strategic asset involves designing AI use cases that align with long-term business goals, such as improving financial planning, boosting profitability, or enhancing customer experiences.

**Pro Tip:** Regularly engage with AI and data science communities, attend industry conferences, and invest in ongoing education to keep up with the rapid advancements in AI technology and applications in finance.

INSIGNIA VENTURES PARTNERS

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## Essential Skills for Finance Professionals in the Age of AI

### 1 Deep Industry Expertise

AI tools are trained on general finance theories but lack nuanced industry-specific expertise.

Specialized knowledge resides with seasoned finance professionals in specific domains (e.g., manufacturing vs. retail finance). Industry experts can:

- Ask the right questions and guide AI model development.
- Interpret AI-driven insights with contextual understanding.
- Anticipate industry trends and identify subtle patterns.

This expertise enhances AI's value and supports informed decision-making.

### 2 Mastery of Core Finance Processes

AI can accelerate financial processes, but a strong grasp of foundational principles is essential.

Professionals must understand core processes like closing books, revenue recognition, and regulatory standards. Example: While AI might predict a revenue spike, professionals need to validate it against internal variables unknown to AI.

Ensures that AI-generated outputs are grounded in sound financial practices and real-world scenarios.

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## Essential Skills for Finance Professionals in the Age of AI

### 3 Basic Coding Skills

Coding is no longer just for engineers; it's a valuable skill for finance professionals. Proficiency in languages like Python and R can enhance financial modeling and process automation.

Coding enables:

- Automation of mundane processes (e.g., spreadsheet updates).
- Running advanced simulations (e.g., Monte Carlo for risk evaluation).
- Creating dashboards for real-time KPIs.

Foundational coding knowledge allows for more informed conversations with technical experts.

### 4 Data Visualization

Finance professionals need to transform complex data into clear, compelling visuals. Traditional spreadsheets can overwhelm executives; concise and actionable insights are required for decision-making.

Effective data visualization involves:

- Storytelling grounded in data.
- Technical expertise and a sense of design and aesthetics.

Tools can help convert intricate datasets into visually engaging stories, aiding better communication of financial insights.

# 5 Insights on Leveraging AI to Level Up Your ERP and Financial Management

## Essential Skills for Finance Professionals in the Age of AI

### 5 Data Science Acumen

Companies rely on vast data sets for decision-making (e.g., customer trends, global indicators, competitor analysis).

Understanding data science basics allows finance professionals to:

- Generate predictions for outcomes like revenue growth.
- Identify anomalies in payment and invoice data.
- Choose appropriate models for forecasting (e.g., time series, regression, neural networks).

A finance professional's knowledge is critical for trusting and optimizing AI outcomes.

Tools can provide finance teams with real-time data, statistical models, and "what-if" scenario analysis.

Part 4

# 7 Roadblocks in Your Gen AI Application Development, and How to Solve Them

In partnership with aws

**This chapter dives into the practical exploration of Gen AI applications for your organization. In particular, seven roadblocks and solutions to these roadblocks are identified. We include case studies as well from Amazon Web Services (AWS), including a deep dive into how Southeast Asia fintech Fazz and AWS collaborated to unlock new generative AI use cases to increase productivity in Fazz's organization.**

| Roadblocks | How to Solve It |
| --- | --- |
| 1 It is the organization's first venture into generative AI and not everyone is aware of the opportunity and potential solutions. | Bridge knowledge gaps with a guided, internal hackathon. |
| 2 The impact of generative AI (i.e., why we are doing this) has not been communicated to the rest of the team. | Bring clarity into the ROI of Gen AI use cases with management-driven criteria. |
| 3 Generative AI experimentation is being limited only to engineering or product teams. | Develop processes for the right people to optimize the specific demands of generative AI development and deployment workflows. |
| 4 Generative AI use cases prove too cumbersome to be actually used in real life operations. | Develop alignment between the operating model and user interface. |
| 5 The company wants to be able to use a more recently released foundation model. | Leverage a system able to adapt to different foundation models over time. |
| 6 Generative AI costs are too high for the organization to sustain operation. | Spend management and partnering with flexible payment plans. |
| 7 The organization needs to meet data privacy and cybersecurity standards and regulation. | Ensure solutions being used to implement Generative AI use cases make compliance easier. |

# (1) Bridge knowledge gaps with a guided, internal hackathon.

## The Roadblock

Building Gen AI capabilities requires a broad understanding that goes beyond just engineering.

Teams across product management, data science, and even business functions like sales and operations need to be aligned on how these technologies work, what the potential use cases are, and how they can be effectively integrated into the organization's products and processes.

This lack of holistic understanding can hinder progress and limit innovation. Moreover, **the knowledge gap can create silos within the organization, where only a few experts understand how Gen AI solutions are developed and deployed.**

## How to Solve It

One effective way to bridge these knowledge gaps is by organizing **a guided internal hackathon.** A hackathon provides a collaborative environment where learning happens across functions, not just within isolated teams.

A hackathon is an opportunity to experiment with the basic building blocks of Gen AI technology — from data preparation to model training and deployment — while also fostering cross-functional collaboration.

**This approach should ensure that everyone, from product managers to data analysts, is familiar with how to develop and integrate Gen AI use cases. Follow this up with a post-hackathon review to share learnings and identify areas for deeper exploration.**

# (2) Bring clarity into the ROI of Gen AI use cases with management-driven criteria.

## The Roadblock

One of the biggest challenges companies face is determining where Gen AI can truly add value.

**Without a clear return on investment (ROI), it's difficult for management to justify further investment or dedicate resources to Gen AI projects.** This uncertainty often stems from not having a clear framework for identifying high-impact use cases.

Gen AI can automate workflows, enhance customer service, or even generate new business models — but only if its potential is systematically mapped against existing business processes.

## How to Solve It

Management should start by defining specific criteria for evaluating Gen AI use cases. This involves pinpointing areas where the company's data flywheel intersects with workflow inefficiencies or opportunities for automation.

For example, consider which customer touchpoints generate a lot of repetitive work or where data can be better leveraged to make real-time decisions.

By setting these parameters early on, you **create a structured approach to explore and pilot Gen AI initiatives, reducing uncertainty around potential ROI.**

# (3) Develop processes for the right people to optimize the specific demands of generative AI development and deployment workflows.

## The Roadblock

Building Gen AI solutions often involves trial and error, especially when dealing with large language models (LLMs) prone to hallucinations or unpredictable outputs.

**Traditional development frameworks may not fully address the unique requirements of Gen AI, such as model training, validation, and the need for constant fine-tuning.**

This can lead to delays and inefficiencies in deploying AI applications that are production-ready and reliable. Additionally, the process of incorporating user feedback and retraining models can be cumbersome without a well-defined workflow.

## How to Solve It

Revisit your development and deployment workflow to accommodate the complexities of Gen AI projects. This means establishing a process that includes not only engineering but also product and business teams from the outset.

A successful Gen AI project requires close collaboration between data scientists, developers, and business stakeholders to ensure the model is contextually relevant and aligned with business goals.

Consider introducing practices such as **continuous integration and deployment (CI/CD)** for model updates, as well as setting up **automated guardrails** to detect and mitigate potential issues (e.g., hallucinations) early in the pipeline.

# (4) Develop alignment between the operating model and user interface.

## The Roadblock

Gen AI use cases are often consumed through various interfaces, including web applications, chat platforms, and third-party integrations. This means that the operating model — the way your AI solution is deployed and accessed — needs to be closely aligned with the user interface (UI).

**A mismatch between the two can result in a poor user experience, such as slow response times or limited access, which diminishes the perceived value of your Gen AI capabilities.**

For instance, if the UI relies on real-time responses, the model's deployment environment must support fast and reliable execution.

## How to Solve It

This often involves selecting a deployment environment that can accommodate external accessibility and ensuring that the AI model can process queries asynchronously. For example, consider using **serverless architectures or microservices** that can scale up and down based on demand.

Additionally, ensure that your infrastructure **supports multiple interaction modes**, such as synchronous and asynchronous processing, depending on the complexity of the task and the UI requirements.

A **flexible deployment setup** will ensure that users get a seamless experience regardless of how they interact with your Gen AI solution.

# (5) Leverage a system able to adapt to different foundation models over time.

## The Roadblock

The Gen AI landscape is rapidly evolving, with new foundational models being released regularly. Some models may offer better accuracy, lower latency, or unique features that make them a better fit for specific use cases.

**However, companies often find it challenging to switch between models due to rigid data pipelines or deeply integrated APIs, which can lock them into a single vendor or technology stack.**

This limits the ability to continuously improve the Gen AI solution and keep up with advancements in the field.

## How to Solve It

The solution lies in building a flexible data platform that can easily integrate different language models over time. Consider setting up your Gen AI infrastructure in a way that **abstracts model integration through a common interface, such as a standardized API layer.**

This approach enables you to swap in new models as needed, without having to overhaul your entire system. Additionally, **plan for the ongoing monitoring and evaluation** of various models to ensure you're always using the best option available for your specific business needs.

The ability to quickly integrate new models will allow your business to stay competitive and leverage cutting-edge capabilities as they emerge.

# Case Study of collaboration between Fazz and Amazon Web Services (AWS)

*Excerpts taken from the community blog post on community.aws*

*About Fazz: Fazz is a regional fintech group offering an ecosystem of financial services for businesses, especially the underserved. The group consists of Fazz Agen, which offers financial services to over 80 million end-users across rural Indonesia through more than 700,000 agents, and StraitsX, a digital asset infrastructure company with more than US$5B in transactions processed.*

## The Pain Points

*"While our Engineers, Product Managers and Data Analysts have some interest in GenAI, they are not familiar with the underlying technology or basic building blocks they can use to build GenAI use-cases."*

*"While ideas were being thrown around and our builders have been researching popular GenAI reference projects, it remains unclear which use-case would actually carry tangible ROI for our unique business."*

*"While our builders are strong in shipping technical services - it's not apparent if we can stick to the same processes with GenAI features...The path to take GenAI projects to production remains unclear."*

## Best Practice 1: Bridge knowledge gaps with a guided, internal hackathon.


*"Partnering with relevant teams at AWS, we sat down and co-developed a custom GenAI Training & Enablement curriculum tailored for our very own needs.*

*We designed 4 technical workshops focused on equipping our builders with core GenAI knowledge and hands-on expertise to build GenAI use-cases on AWS.*

*We then mobilised over 140+ Engineers, Product Managers and Data Engineers across our product tribes to attend these workshops..."*

*Excerpts taken from the community blog post on community.aws*

# Case Study of collaboration between Fazz and AWS

## Best Practice 1: Bridge knowledge gaps with a guided, internal hackathon.

***Internal, 24 hour hackathon***
*"Focusing on developing GenAI use-cases to influence our roadmap, we got our Engineers, Product Managers and Data Engineers in one room - and have them ideate and build prototypes to solve day-to-day challenges using GenAI."*

**Connected Teams**
*"The event also gave us an opportunity to connect our regionally-dispersed teams across Singapore, Jakarta and Taiwan through a fun and interactive technical collaboration."*

**Prototypes Built**
*"10 prototypes built using AWS GenAI services from SageMaker Jumpstart, Bedrock and Amazon Q."*

## Best Practice 2: Bring clarity into the ROI of Gen AI use cases with management-driven criteria.

**Management-Driven Initiative**
In spite of not being an AI company, the presence of leaders like Seong Per Lee (for Data and AI) and David Park (Engineering) in Fazz have made it a lot easier for the organization to build the foundations for integrating more generative AI into operational workflows.

**Management Green Light**
Customer CxOs were impressed by the proposed GenAI use-cases and quality of prototypes built, leading to the commitment of Engineering resources to ship the top 3 projects into production in the next 3-6 months, supported by AWS.

*Excerpts taken from the community blog post on community.aws*

# Case Study for a Financial Services Platform

**Best Practice 3: Develop processes for the right people to optimize the specific demands of generative AI development and deployment workflows.**

Model development is not just an engineering task — there needs to be collaboration with product and business teams as well. This not only informs the context on which the model is built, but also how it will be monitored and productized into business operations (at which points is an API necessary to call the model?).

1

**Consistent alignment with customer CxOs** helped to calibrate expectations, prevent requirements drift and drove towards an accelerated path to production.

2

**Including Product Managers & Data Engineers together with its Developers** ensured that use-cases built were well-researched and holistic.

This improved the quality of the use-cases, which accelerated the process of bringing them into production.

3

**Support across Sales, SA, Specialists & PACE** tapped into cross-functional capabilities.

*Excerpts taken from the community blog post on community.aws*

# Case Study for a Financial Services Platform

**Best Practice 4: Develop alignment between the operating model and user interface.**

## Platform for User Interface

**Plugging into platforms the team is already using**
*"A Slack bot was the perfect interface because we were already using Slack extensively, especially during incidents.*

*Our team utilised Slack's API to download past messages from incident channels so we could analyse them and ingest the data into Bedrock. We also retrieved the most recent messages to grasp the context of the current incident, and relayed the context to the foundational model for further analysis.*

*Once we receive a response, the bot directly replies with suggested resolution steps in the incident channel."*

## Ensuring alignment with operating model

**Flexibility of asynchronous invocation**
*"Since Slack operates outside the AWS ecosystem, we required a deployment environment that could be accessed externally to run our operations. We chose AWS API Gateway and AWS Lambda for this task...*

*...We encountered an issue during implementation - Slack expects a response within 300 milliseconds, and this parameter is not adjustable. To circumvent this, we leveraged the asynchronous invocation mode of AWS Lambda to be able to return a response immediately to Slack, while allowing our language model to complete processing asynchronously."*

*Excerpts taken from the community blog post on community.aws*

# Case Study for a Financial Services Platform

## Best Practice 5: Leverage a system able to adapt to different foundation models over time.

*"Building on Amazon Bedrock allows us to tap on on different first-party (E.g. Amazon Titan) and third-party language models (E.g. Anthropic Claude) using the same data platform. This allows us to build a single GenAI platform, yet constantly adapt the best model for our use-case at different points in time. Given the rapid pace of development in GenAI and foundation models, this helps us build longevity into our GenAI stack going forward."*

## Impact

**Developed several Gen AI projects in implementation, including an internal Gen AI-powered Slackbot to help their on-call Engineers reduce their Mean Time To Resolve (MTTR) for production failures.**

*"For certain businesses dealing with highly localized data (MSME data for example), the generative AI pivot needs to come from within and cannot simply be solved by tapping into APIs for more generalist LLMs. This not only means having a significant enough data pool and infrastructure (as we've discussed plenty in the past), but also the right talent and workflow to implement this transformation. Such was the discovery for Fazz, with the potential applications of generative AI in their credit model for micro-SME lending."*

# (6) High costs of generative AI can be overcome with spend management and partnering with flexible payment plans.

## The Roadblock

Generative AI use cases can be costly to experiment, train, and implement. Companies are not just paying for the launch of the product, but the ability to keep calling foundational models for example or the environment being used to develop in-house models. GPUs in particular can be expensive to maintain (so much so that VCs also look at the ability of a startup to recoup GPU costs.)

Jumping right into a project without having a plan on spend can easily come back to bite the company and result in disrupted user experiences. And having a high quality initial onboarding and trial of Gen AI use cases is key to ensuring long-term usage.

## How to Solve It

It will depend from provider to provider but there are solutions where they allow users to **“pay-as-you-go.”**

Such was the case for Amazon Bedrock, where one ANZ startup in the healthcare space used the platform to improve personalized responses from their digital therapist chatbot.

This shifted their payments from potentially thousands of dollars to hundreds of dollars instead to maintain the underlying hardware.

Apart from mapping out use cases, it’s also important for businesses to work with their finance functions to factor in the ability of the company to spend on these projects.

# (7) Ensure solutions being used to implement Generative AI use cases make compliance easier, and not another burden.

## The Roadblock

A key challenge for generative AI implementation is ensuring cybersecurity and data privacy, especially considering how AI models need data to scale and become more effective.

Without having digital infrastructure and processes in place aligned with existing compliance and regulations around data privacy, the company will not only be exposed to increased risk around security threats but also losing the trust of regulators and customers.

This is especially important for financial services platforms and other heavily regulated use cases like payments or lending.

## How to Solve It

It is important to ensure that the tools being used to implement a generative AI use cases are **able to comply with governing standards and regulation around cybersecurity and data privacy**.

It is also important that people managing this use case are also aware of risks (oftentimes these risks originate from people rather than the technology itself) that remain even with compliant infrastructure and processes in place.

In the case of a neobank in Europe, they used AWS CloudHSM (for managing single-tenant hardware security modules on AWS) to control keys for card payments. They can quickly verify Payment Card Industry Data Security Standard (PCI DSS) compliance using AWS Security Hub for automated security checks and centralized alerts. They also used AWS Key Management Service (AWS KMS)—which supports creation and control of cryptographic keys—to encrypt user data in one click.

Part 5

# Leveraging AI for More Effective Customer Journeys and Growth

In partnership with WIZ.AI

**This chapter dives into the application of AI agents for more effective customer experiences and business growth, specifically "talkbots" using voice AI. It explores how AI agents can solve critical pain points in scaling customer engagement and ensuring customer interactions generate positive returns for the business.**

# Addressing Key Pain Points in Customer Engagement

Short-term

| Pain Point | Best Practice | Solution Stack | Area Impacted |
|---|---|---|---|
| High cost to meet high volume customer engagement | Deploy AI tools (AI agents, Talkbots, etc.) to increase efficiency and scale | AI agents for personalized, high volume customer engagement | Customer Engagement Tool / Resource |
| Churn from negative customer experiences | Leverage customer service to drive revenue growth. | Natural / human-like AI interactions | Customer Engagement Experience |
| Customer reach limited by channel availability | Unlock omnichannel interaction to better fulfill customer service expectations. | Omnichannel integration of AI tools across channels like WhatsApp | Customer Engagement Breadth |
| Lack of documentation on customer interactions | Translate customer service into deeper market understanding. | In-house proprietary data analytics | Customer Engagement Depth |
| Compliance risks due to lack of quality control | Mature retention with quality management on customer engagement. | Quality inspection, Data-driven performance reviews, Agent training | Customer Engagement Quality and Sustainability |

Long-term

# 5 Best Practices for Leveraging AI with Customer Engagement

| | Pain Point / Motivation | Where AI comes in | Impact |
|---|---|---|---|
| 1 Deploy AI tools (AI agents, Talkbots, etc.) to increase efficiency and scale. | When used to facilitate customer service, **AI agents can work alongside human agents** to deliver an enhanced customer experience. | **AI Agents** such as Talkbots deliver high-volume, yet personalized customer engagement. | AI Agents can s**treamline customer support** and **swiftly adjust engagement volumes** depending on the workload. With Talkbots, allow human agents to address more complex customer inquiries. This not only **cuts down wait times but also boosts overall customer satisfaction**. |
| 2 Leverage customer service to drive revenue growth. | **One in 3 customers abandon brands or services they love after a bad experience (PwC).** Therefore, the quality and seamlessness of interaction between the customer and the brand should be prioritized. | The “uncanny valley” of introducing AI into customer engagement can be overcome by providing a **natural-sounding conversational AI**. | Gauge customers' interest in **upselling and cross-selling opportunities.** This can not only improve communication with customers but also **increase customer conversion.** |

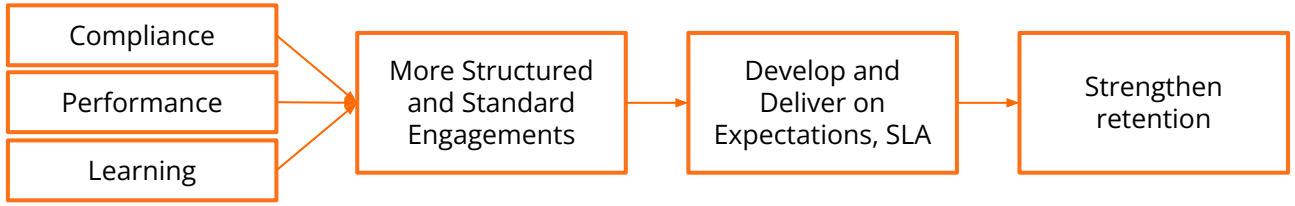
# 5 Best Practices for Leveraging AI with Customer Engagement

| | Pain Point / Motivation | Where AI comes in | Impact |
|---|---|---|---|
| 3 Unlock omnichannel interaction to better fulfill customer service expectations. | **80% of value creation is achieved by unlocking new revenue streams from existing customers (McKinsey).** This experience-led growth can be attained by improving the experience of customers whenever they interact with their subscribed brands. | **Incorporating AI tools like Talkbots** facilitate omnichannel communication (voice call, SMS, WhatsApp, etc.), which makes possible a unified customer experience. | This approach ensures c**onsistency and cohesiveness across different interaction channels**, enhancing the overall quality of customer service. |
| 4 Translate customer service into deeper market understanding. | **Customer interaction, when documented, is a rich source of customer knowledge.** Furthermore, having a thorough understanding of your customers is key to delivering them good service. | **Data analytics from interactions with AI tools** can be utilized to better understand customers' expectations, preferences, and satisfaction. | Based on the data obtained, businesses can improve their products and services and use this data while **conducting training and coaching sessions for agents**. Through this, businesses can improve processes associated with customer service, paving the way for better quality management. |

# 5 Best Practices for Leveraging AI with Customer Engagement

5

Mature retention with quality management on customer engagement.




**Quality Management Features**

**Standardize compliance**

Risk of compliance issues → Quality inspection (compliance risks)

Customer service teams performing 100% quality inspection helps in identifying risk points related to compliance in agent-customer conversations. If any risks are identified, the compliance team will be alerted, and they can take the required remedial actions.

**Standardize performance**

Risk of divergent performance → Data-driven agent performance reviews

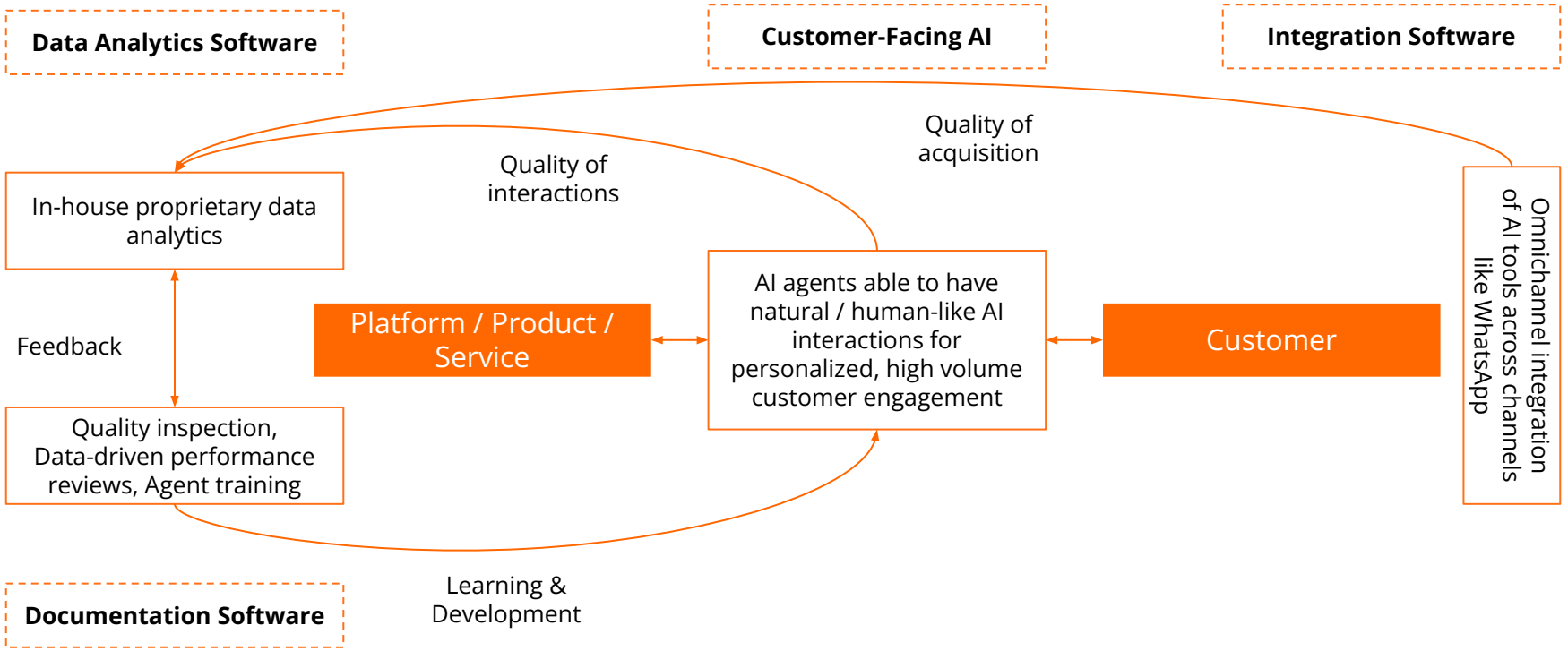
Customer service teams can analyze and evaluate agents with performance management scorecards. This helps to standardize performance across all agents.

**Standardize learnings**

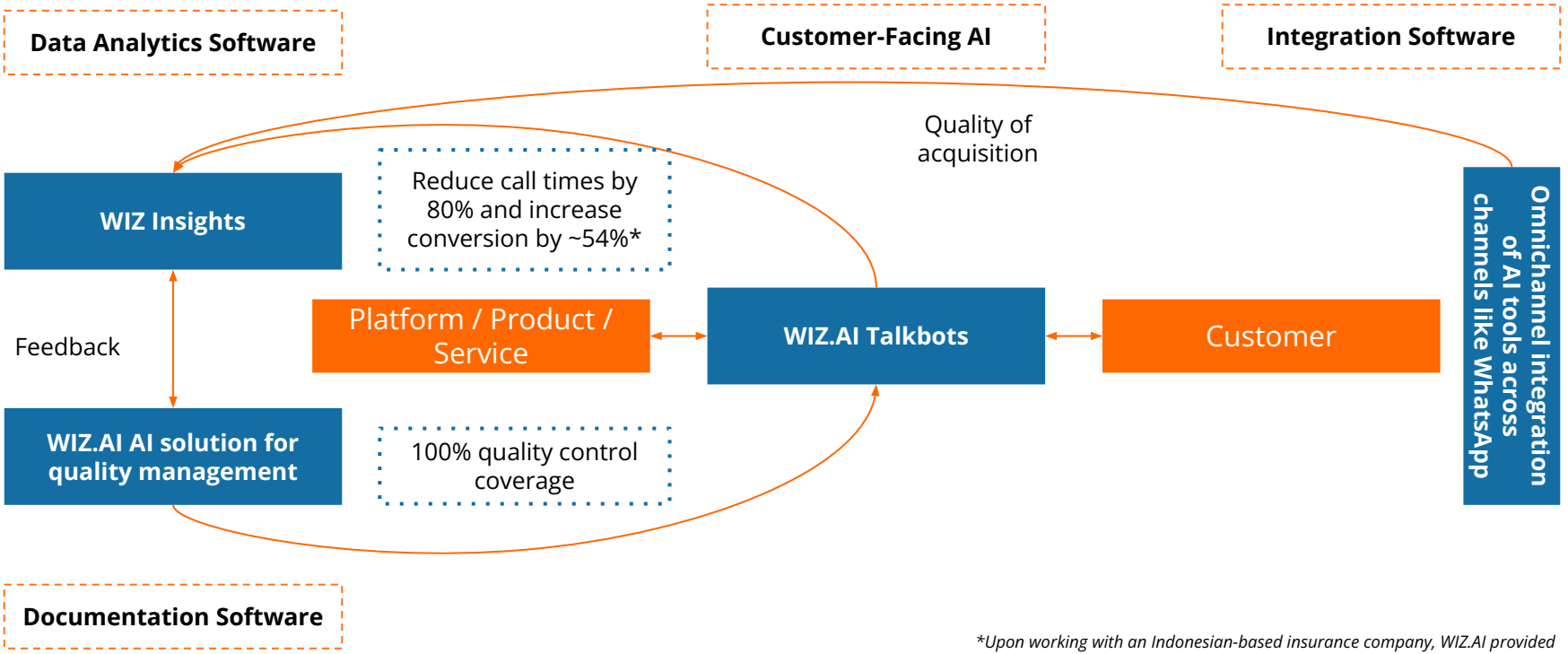
Risk of "wrong" learnings → Agent training aid

Data analytics can identify the root causes of issues and finds best practices in agent-customer interactions. These insights gained can then be used for training and coaching agents.

# Impact of AI Customer Engagement Solution Stack



# Full Stack AI Solution for Customer Engagement




**Upon working with an Indonesian-based insurance company, WIZ.AI provided a talkbot solution that increased customer conversion rate to 54%.*

# Case Study for a Financial Services Platform

## The Pain Points

Despite leveraging various communication channels like SMS and WhatsApp, the company's conversion rate for users to adopt and activate their solutions remained low.

Complex Know Your Customer (KYC) process, which led to a high drop-off rate during the application process. This not only hindered user engagement but also impacted the overall efficiency of their service.

## Best Practice 1: Deploy AI tools (AI agents such as Talkbots, etc.) to enhance customer experience.

**WIZ.AI AI Talkbot**

programmed to proactively call customers

- introduce the benefits and competitive advantages of the company's cash loan solution **(low conversion)**
- inquire if users had previously attempted to apply for the loan and to identify specific issues they encountered during the KYC process **(drop off from KYC issues)**

Elevating the customer experience by offering personalized assistance and preemptively tackling potential complaints.

# Case Study for a Financial Services Platform

WIZ.AI AI Agents

## Best Practice 2: Leverage customer service to drive revenue growth.

**Hyper-personalization across markets:** At the core of the hyper-personalized approach is WIZ.AI Talkbot's advanced conversation tagging across different languages and dialects. This opens up opportunities to unlock markets across Southeast Asia, including Philippines, Vietnam, Singapore, Indonesia, Malaysia, and Thailand.

**Hyper-personalization across behavior:** By categorizing customer interactions based on their content, tone, and intent, the financial institution could tailor communications to the individual needs and preferences of its users, fostering a sense of understanding and care that went beyond traditional customer service.

## Best Practice 3: Unlock omnichannel interaction to better fulfill customer service expectations.

The implementation of two of the company's products signified a pivotal shift from basic free app notifications to omnichannel customer engagement tools, **significantly lowering outreach costs and enhancing ROI.**

## Best Practice 4: Translate customer service into deeper market understanding.

With the behavior insights derived from actual customer engagements, WIZ.AI's Talkbots also **constantly update key conversation scripts** to interact with the customers more intelligently and efficiently.

WIZ Insights

# Case Study for a Financial Services Platform

Best Practice 5: Mature retention with quality management on customer engagement.

**New company standards on marketing spend:** This innovative approach has enabled them to achieve, and in some cases exceed, the conversion rates of traditional marketing strategies without incurring their costs.

**New industry standards on effective customer acquisition and engagement:** This strategic use of AI-driven communication not only addressed key customer pain points but also established new benchmarks in the fintech industry to drive effective customer acquisition and engagement.

Impact

1 million users (2021) → 15+ million users (2023)

Increased the product activation rate by 40%-50%

**"The moment a customer realizes you're not just responding but understanding them, that's where real engagement begins."**
**- Customer Service Manager**

Part 6

# Challenges and Opportunities for Gen AI Transformation in Southeast Asia

**A tech investor view into the generative AI opportunity and challenges in Southeast Asia. We go from looking at generative AI through a resource and infrastructure perspective to regulation and then specific industries like retail, finance, software, and healthcare. Insights are taken from Insignia Business Review's ongoing AI Notes series.**

**The AI Transformation Playbook**

INSIGNIA VENTURES PARTNERS

# The pieces of the puzzle are still coming together in ASEAN...

Southeast Asia's Gen AI flywheel needs more catalysis.

**Global Competition**

Favoring markets with more developed infrastructure and engineering pools

Talent to unlock automation from quality data sets

Southeast Asia talent pool is **lacking opportunities for experience.**

**Regulation (for liabilities and protection)**

Still at **"guardrails" and "guidelines" stage in ASEAN**; globally lacking link between data privacy and gen AI

Quality Data Sets

In Southeast Asia, data capture can still be quite challenging especially in traditional market segments and industries where data is **offline and unstructured**

Usage and Commercialization

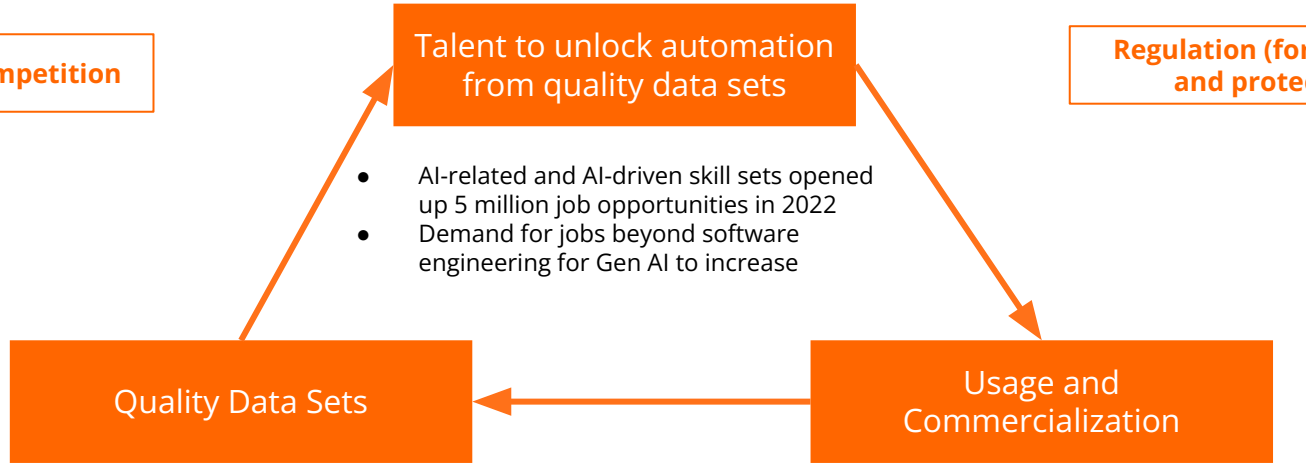
Southeast Asia demand is still nascent, but **use cases can provide strong localization moat** (e.g., languages)

# But the potential is there waiting to be unlocked

Southeast Asia will have its own share of the potential impact of Gen AI (currently a $150B industry and ~20% of the global software industry), not just on productivity but on **necessary infrastructure and resources adjacent to Gen AI** (i.e., data value chain).

**Global Competition**

**Regulation (for liabilities and protection)**




- AI-related and AI-driven skill sets opened up 5 million job opportunities in 2022
- Demand for jobs beyond software engineering for Gen AI to increase

- >75% internet penetration in greater ASEAN but does not mean digital transformation
- 40% pop'n in rural areas where data tends to still be largely offline, unstructured

- AI (not just Gen AI) potential to add US$1T to Southeast Asia GDP by 2030
- Gen AI potential to add US$2.6 to 4.4 trillion to the global economy
- 300 million full-time jobs to be automated
- 35-70% incremental economic impact

Source: Access Partnership, McKinsey, Computerworld, Goldman Sachs

INSIGNIA VENTURES PARTNERS

# What will determine the market leaders?

**Flywheel provides clues into what will determine market makers and leaders.**

| Gen AI Flywheel and Startup Fits | | Gen AI Question | Market Trends |
|---|---|---|---|
| **Usage and Commercial-ization** | **Product-Market (+Pricing) Fit** | Are there customers who will spend on the Gen AI use case? Is it a big enough market? | Greater preference on B2B models that offer more stable revenues or models that offer higher margins |
| **Talent to unlock automation** | **Founder-Market Fit** | Does the business have the right talent guiding the development of the models or unlocking its value for the use case? | Combination of technical founder and commercial founder |
| **Quality Data Sets** | **Data-Product Fit** | Is the way the product leverages data sets sustainable for its operation? | Preference for proprietary data or data from customers that close the flywheel |

INSIGNIA VENTURES PARTNERS

# Generative AI has not only sped up productivity but also regulation

**Mapping out the launch of select players and some headlines in regulation development already illustrates the speed at which regulation has reacted to shifts in the global digital and internet economy.**

| | Key Player Launch | ASEAN Launch | | Regulatory Activity and Headlines |
|---|---|---|---|---|
| Ride Hailing (~4 to 9 years) | Uber launched **in 2009**<br>Didi launched **in 2012** | Grab (MyTeksi) launched in 2012<br>Uber entered in 2013<br>Gojek launched in 2015 | 2016- | EU examples: **in UK in 2017**, Uber faced administrative ban; **In Germany in 2018**, Uber ruled illegal.<br>US: **In 2016**, 34 U.S. states and more than 69 cities have passed legislation governing ride-hailing companies<br>China: **In 2016**, guidelines released for app-based ride hailing<br>ASEAN examples: Thailand released regulation in 2021,Vietnam in 2020 post-pilot program, Indonesia started regulating **in 2016** |
| Social Media (~7 to 17 years) | Facebook launched **in 2004**<br>TikTok launched **in 2016** | **In 2015**, Facebook opens first office in Thailand<br>**In 2021**, TikTok launches in SEA (Shop in Indonesia) | 2020- | EU: Facebook subject to EU's GDPR **since 2010** and fined US$1.3B **in 2023** for violations; Digital Services Act **in 2022**<br>US: Congress bills and state laws on social media restrictions **2021-2023** (ongoing); Meta CEO at Congress in 2021, TikTok CEO in 2023<br>ASEAN: Indonesia's MR5 **in 2020**, Thailand using CCA, Vietnam cybersecurity law **in 2018** |
| Generative AI (<1 year, or even before launch) | OpenAI launches ChatGPT **in Nov 2022** | | 2023- | EU: AI Act passed **on June 2023**; Lobbying Asian countries to follow lead on new AI rules including disclosures<br>US: OpenAI in Senate hearing **on May 2023**<br>China: New guidelines for Gen AI **on July 2023**<br>ASEAN: Drawing up guardrails for new AI governance code as of **2023** |

Source: Lexology, CNBC, LKYCIC, The Conversation, VIR, NYT, RestofWorld, The Guardian, CNN

INSIGNIA VENTURES PARTNERS

# Gen AI and Data Privacy regulations have their momentums, but there's a gap...

## Global Generative AI Regulation On its First Steps
*some examples*

EU Commission introduced AI Act in 2021 passed by Parliament in 2023

Cyberspace Administration of China unveils updated guidelines for generative AI to take effect August 15

ASEAN Guide to AI governance and ethics being drafted up (June 2023) could be completed by year's end or early next year

## The Regulation Link

**Memorization property** of AI models as these models "learn"

**Causes issues for copyright and confidentiality**
*"Samsung Bans Staff's AI Use After Spotting ChatGPT Data Leak"*

Some regulation has points on anonymous data, **but what if data is de-anonymized?**

## Data Privacy Maturing in ASEAN
*some examples*

Personal Data Protection in Indonesia effective on October 2022

Personal data protection decree promulgated on May 2023 in Vietnam

Data Protection Guidelines in Thailand fully effective in June 2022

Increased administrative fines for PDPA in Singapore that came into effect in 2022

Privacy law reform proposals in Malaysia (Mandatory Breach Notifications)

Updates and Clarifications to Data Privacy Law in Philippines 2022-2023

Breaches in Copyright and Confidentiality as Use Cases Mature

**Disclosures**
**Guardrails / Guidelines**
**New Hard Regulation**
**Existing Laws**

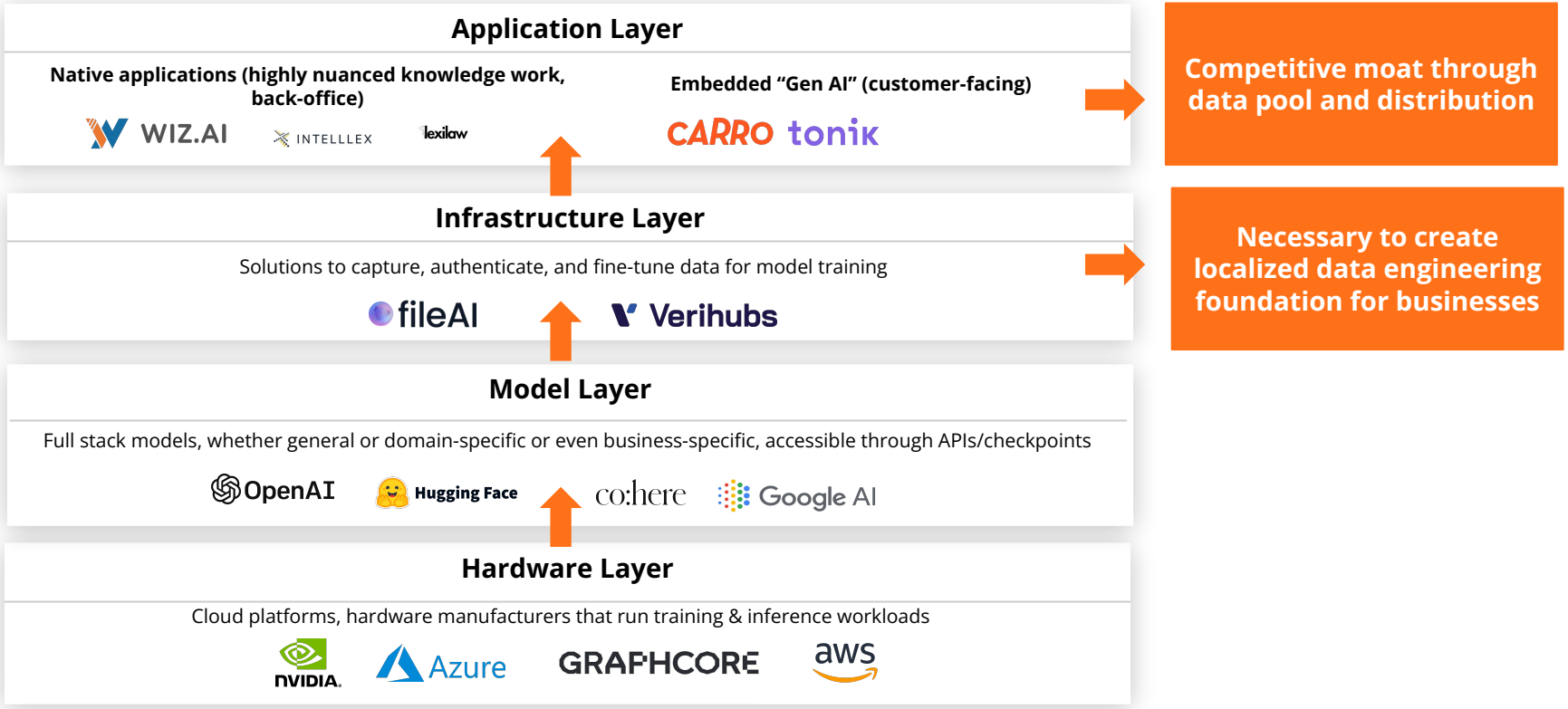
Enabling Flexibility for Developers and Businesses to Mature Use Cases

**But the weight is not all on regulation, models will evolve as well**

Source: On Call with Insignia Podcast, CNN, The Guardian, Future of Privacy Forum, BakerMcKenzie

INSIGNIA VENTURES PARTNERS

# Where the opportunity is in Southeast Asia for Generative AI solutions



INSIGNIA VENTURES PARTNERS

# Implications for Generative AI in Southeast Asia: Opportunities for Localization

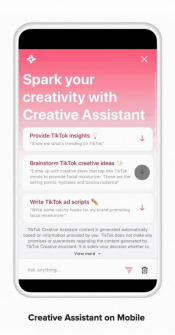
| | Issues Faced by Regulatory Developments | Potential Regulatory Implications | Opportunities for Southeast Asia |
|---|---|---|---|
| 1 | **Constantly evolving models AND sources of training data** | Regulations to **emphasize importance of transparency on type of training data sets** Need to **clarify ambiguity** around requirements for data protection and copyright | **Models trained on data aligned with specific use cases and industries** (legal, healthcare, insurance, etc. -- which may differ across markets) |
| 2 | **Local laws and culture (already issues have arisen on social media pre-dating generative AI usage)** | Governments to see **how existing laws can be used in cases or revised** Regulation is **likely to follow political customs and culture** as it has with previous technology regulation | Models trained on local laws and cultural practices and sensitivities |
| 3 | **Local languages and dialects** | Governments to see **how existing laws can be used in cases or revised** Regulation is **likely to follow political customs and culture** as it has with previous technology regulation | Models trained on local languages, dialects, and English derivatives |

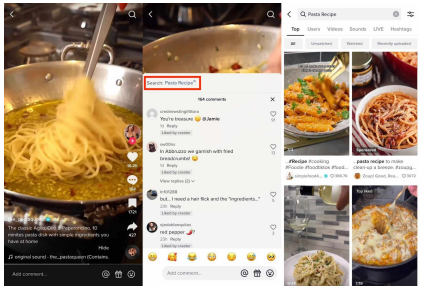
INSIGNIA VENTURES PARTNERS

# Risks and Challenges for New Entry Gen AI Applications

## B2C traffic entry

*E.g., TikTok as go-to search platform*
*AI integrated from creators to consumers experience*



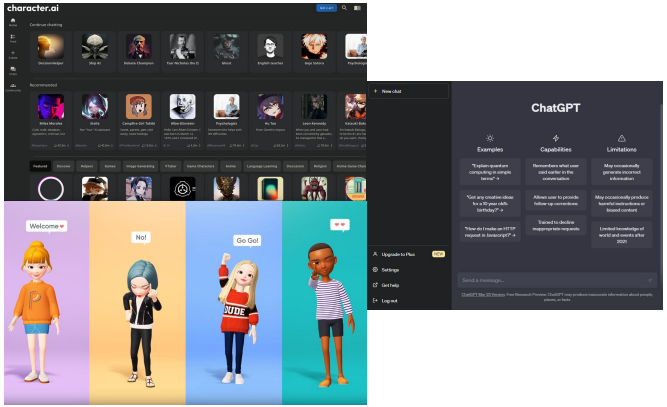



Tech barrier to entry is not high

Incumbents will capture value

## New traffic entry

*E.g., ChatGPT and Character.ai*




Greater opportunity to improve localized user experience

***Tech risk:*** *Can we make this?*

***Market risk:*** *Will people use this?*

## B2B solutions

On premise solutions

*Smaller market and more commoditized*

B2B cloud

*Aim is to expand from SMB to enterprise*

*Key is to navigate long sales cycles of enterprise*

INSIGNIA VENTURES PARTNERS

# Industry Impact 1: Where Fintech 2.0 (Open Finance) Meets AI 2.0 (Generative AI)

| Data Value Chain | Financial Services Use Cases | Fintech 2.0 Link<br>*Open Finance Impact* | AI 2.0 Link<br>*Generative AI Products* |
|---|---|---|---|
| **Processing** | **Better Operational Efficiency esp for Unstructured Data**<br>*(e.g., claims processing, digitizing receipts)* | Operational infrastructure for open finance | More Efficient Learning |
| **Governance** | **Data Security and Fraud Detection** | Guardrails for open finance data sourcing | Risk Management on Agent Task Outputs |
| **Measurement / Monitoring** | **(Past) Access to Wealth**<br>*Credit Bureaus and Lending* | Embedded finance into more holistic data streams | Shift from Smartphone Banking to Agent-Driven Banking<br>*full customer experience, not just customer support*<br>*rebundling through singular banking agent per user* |
| **Democratization / Platformization** | **(Present) Wealth Management**<br>*From Savings to Investing*<br>*For Consumers and Funds* | Embedded finance into customer journeys | |
| **Productization** | **(Future) Financial Planning** | 1:1 financial services at scale | |

Source: Insignia Research, Plug and Play

# Industry Impact 2: AI amidst retail innovation in Southeast Asia

| Area | New Retail Formats | | Customer Lifecycle | Operational productivity and efficiency |
|---|---|---|---|---|
| Tech | Supermarts, delivery only kiosks, flagship stores powered by full suite omnichannel supply chain suites | Learning customer insights, tailoring offerings dynamically or bringing new products to market | Artificial intelligence and IOT-enabled, full suite integrated solution across offline, online, social (omnichannel) | SaaS to improve operational management and ensure adherence to SOPs and customer service standards |
| Impact | New delivery formats | New formats of cross-border supply chain and fulfillment methods | Engage the full customer lifecycle journey | Improve bottomline amidst a high labor cost and labor quota environment for retail stores |

*enabling eCommerce brands to manage end-to-end logistics needs and improve post-purchase operations*

*Humanlike **AI Agents (talkbot)** enables eCommerce companies to analyse data across the entire customer journey through customer service use cases*

***integrating AI** across the entire car buying and selling journey and **customer lifecycle***

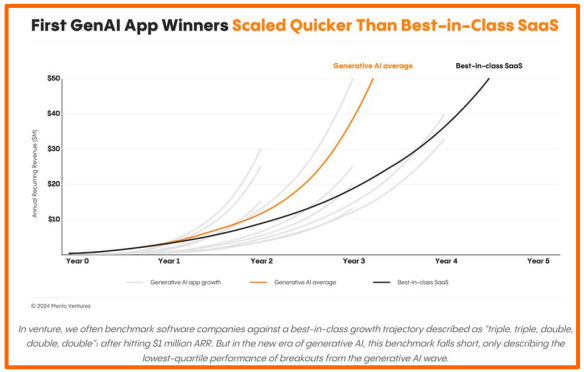
*digitising manual frontline processes to improve ground-level tracking and reporting for large chain businesses*

INSIGNIA VENTURES PARTNERS

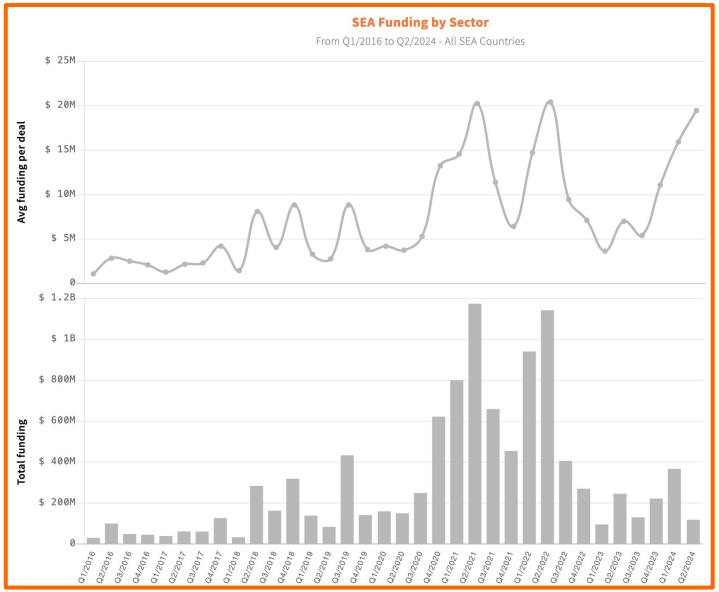
# Industry Impact 3: Vertical AI as the future of SaaS

**Convergence of (1) Generative AI developments, (2) Rise in AI and enterprise funding in SEA, (3) Emergence of global comps and infrastructure to build AI for enterprise solutions**

Gen AI enterprise comps present opportunity to overcome SaaS scaling challenges (Menlo Ventures)




Average enterprise funding back on the rise (Insignia Ventures)




**646M**

Projected AI spending in Southeast Asia 2026 from 2022 (Hyphen Partners)

**27M** **7.5B**

L-R: Indonesian workers use machine learning and generative AI tools in their jobs; AI investments in Indonesia 2022-2023 in USD (The Ken)

INSIGNIA VENTURES PARTNERS

# Industry Impact 3: Vertical AI as the future of SaaS

Reading and Understanding

SaaS

**10x Market Opportunity** through knowledge buildup around use cases

**10x Monetization Depth** through deeper integrations and proprietary data

**AI replacing services (Vertical Specific)**

Potential for higher margins with greater accuracy

Writing, Creating, Interacting

Targeting high-value, high-volume, labor-shortage workflows

## Vertical AI use cases

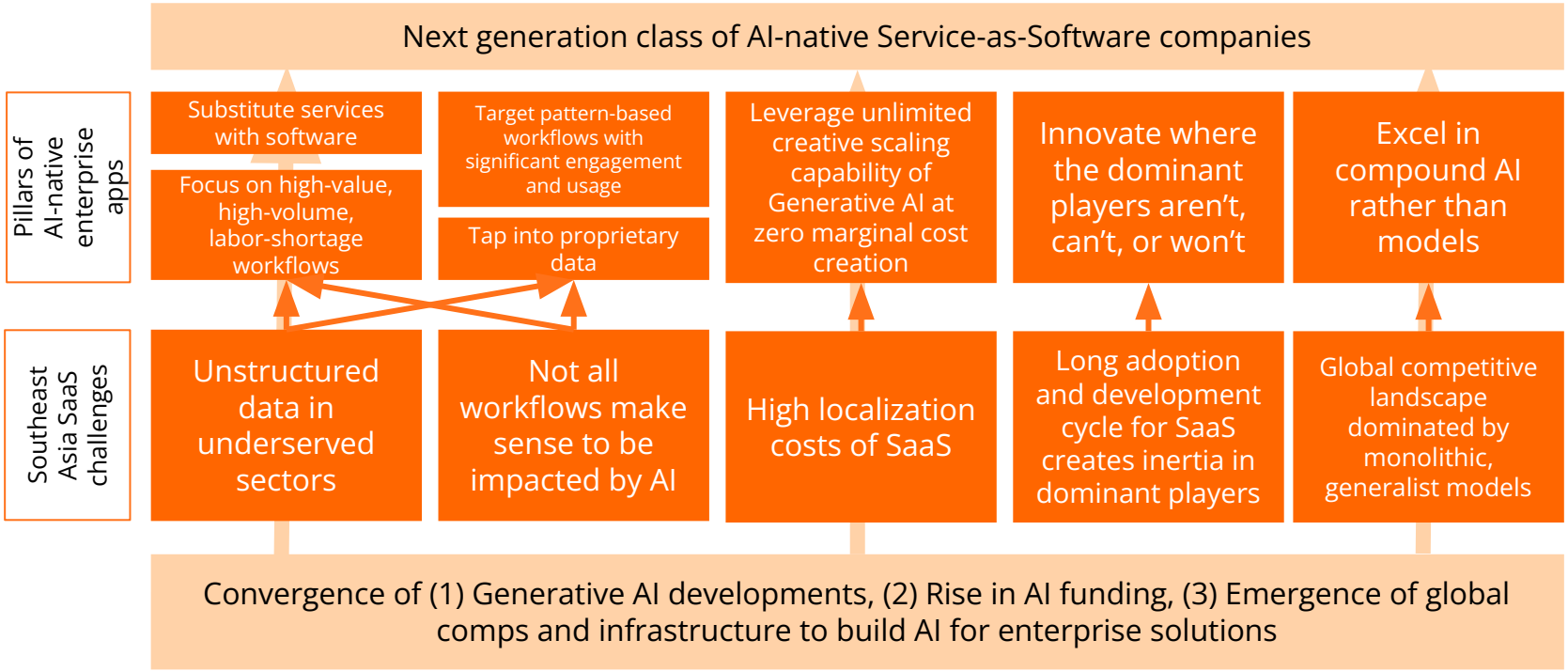
| Use-case | Before AI | After AI |
|---|---|---|
| Customer Engagement, Operations Management | Highly manual, costly to scale | Voice AI talkbots and vertical LLMs customizable to enterprise use cases |
| Accounting & Finance, Insurance Policies & Claims, Banking, Reconciliation, Logistics, ESG | Costly and prone to error when consolidating data from various sources to run core business processes | Consolidate offline & online data from various sources through one platform and plugin to any software needed |

WIZ HOLDINGS

bluesheets

INSIGNIA VENTURES PARTNERS

# Industry Impact 3: How will Vertical AI overcome the challenges of SaaS companies in Southeast Asia?



# Industry Impact 4: Healthcare

**15.1B US$**
Global AI Healthcare Market Size in 2022

**37%**
Market CAGR from 2022 to 2030

**188B US$**
Expected Global AI Healthcare Market Size by 2030

**6.8B US$**
North America AI Healthcare Market in 2022

## Areas in Healthcare where AI and ML can have profound impact (Part 1)

| | Predictive analytics and risk assessment | Medical imaging | Personalized medicine | Remote monitoring and telemedicine |
|---|---|---|---|---|
| **Value** | Facilitate proactive and preventive healthcare measures | Detect abnormalities and conditions (e.g., tumors), assist in diagnosis, and aid radiologists in their decision-making process | Optimize drug selection, dosage, and treatment strategies for better patient outcomes and minimal adverse effects | Enhance remote patient monitoring for healthcare providers and telemedicine platforms |
| **Models** | Assess risk of developing diseases, predict disease progression, and identify early intervention from patient data | Analyze medical images such as X-rays, CT scans, and MRIs | Analyze individual patient data (e.g., genetic information, lifestyle factors, medical history) for personal treatment plans | Continuously analyzing data from wearable devices, such as fitness trackers or smartwatches |
| **Examples** | Komodo (US / 2014) in Data and analytics tools for biopharma | Freenome (US / 2014) in cancer detection<br>Cleerly (US / 2016) in Cardiovascular AI imaging | Tempus (US / 2015) in precision medicine, Ada Health (Germany / 2011) in symptoms assessment | Sword Health (US / 2015) in Digital Physical Health (musculoskeletal) |

Source: Insignia Research, Crunchbase, Tracxn

INSIGNIA VENTURES PARTNERS

# Industry Impact 4: Healthcare

## Areas in Healthcare where AI and ML can have profound impact (Part 2)

| | Drug discovery and development | Virtual assistants and chatbots | Electronic Health Records (EHR) management | Healthcare fraud detection |
|---|---|---|---|---|
| **Value** | Reduce time and cost in bringing new treatments to market | Reduce the burden on healthcare providers and improving access to care | Enable better data analysis and more informed decision-making by healthcare providers | Save significant costs for healthcare payers |
| **Models** | Identify potential drug targets, design new molecules, and predict the efficacy and safety of drugs | Triage patients, assess symptoms, and direct them to appropriate healthcare services | Automate data processing, NLP to extract relevant information from unstructured clinical notes | Identify patterns of fraudulent activities in healthcare claims and flag suspicious activity |
| **Examples** | Tempus (US / 2015), Recursion Pharma (US / 2013), Insitro (US / 2018) in drug discovery | Olive AI (US / 2012) in Revenue cycle automation, claims management | | |

**Clinical trials segment has dominated the global AI in healthcare market with the highest market share in 2022.**

- **603B US$** — Projected 2023 revenue in pharma market in US from 2022
- **100B US$** — Value of pharma market in the US (where most big players are)
- **40B US$** — Projected drug sales increase from faster drug approvals driven by AI in the US
- **40%** — What AI drug discovery platforms could reduce preclinical R&D costs by

Source: Insignia Research, Crunchbase, Tracxn

INSIGNIA VENTURES PARTNERS

# Industry Impact 4: Healthcare

**13%** Global AI healthcare market share of APAC (EU - 19, NA - 59)

**>17B US$** Projected 2028 revenue in pharma market in SEA

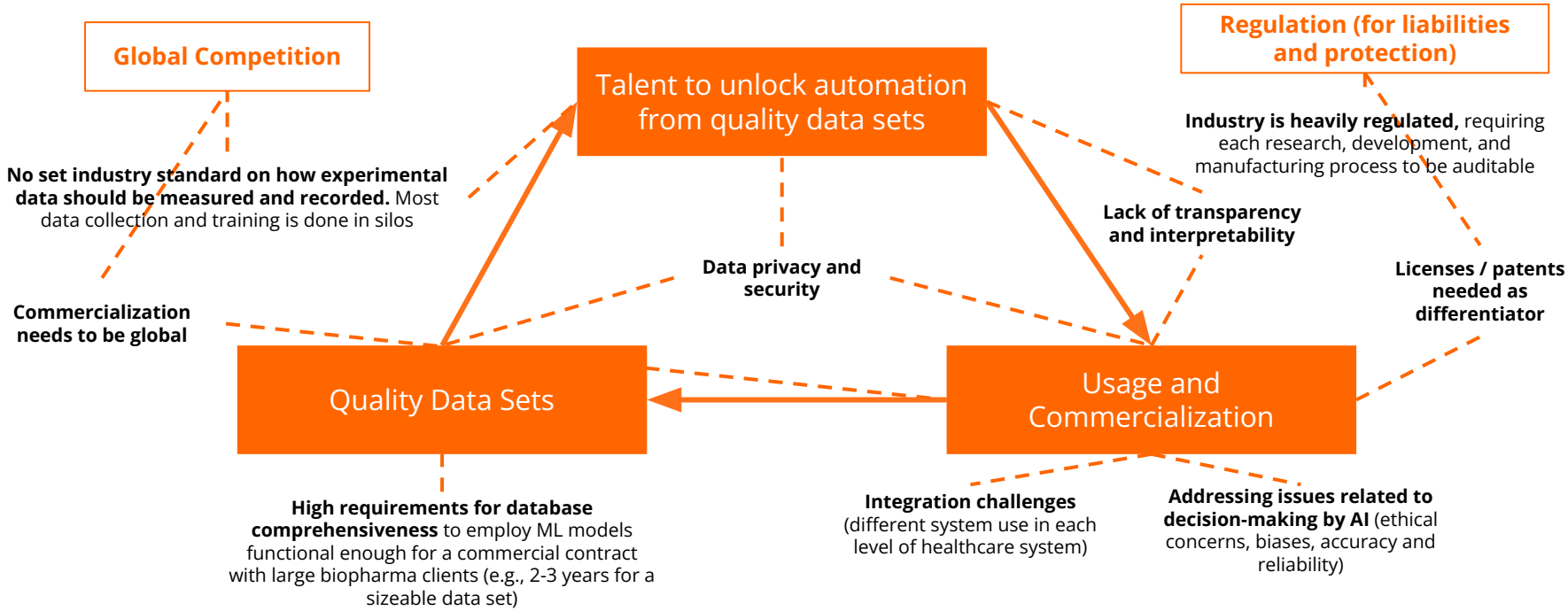
**15B US$** Value of pharma market in SEA

| Using Startup Fits *(from AI Notes #3)* | Approach | Qualities |
|---|---|---|
| 1 **Product-Market Fit** | Target the right segment of drugs, the right segment of enterprise customers<br>Pricing R&D partnerships to incentivize sticky, long-term relationships | Enterprise market and sales ability |
| 2 **Founder-Market Fit** | Publish thought leadership to set favorable industry standards | Strong founding team with exceptional research and discovery in medicine / healthcare field |
| 3 **Data-Product Fit** | Invest heavily in database development for highly lucrative disease areas | Able to differentiate its solution with patents or other distinct license |

Source: Insignia Research, Crunchbase, Tracxn

# Industry Impact 4: Healthcare

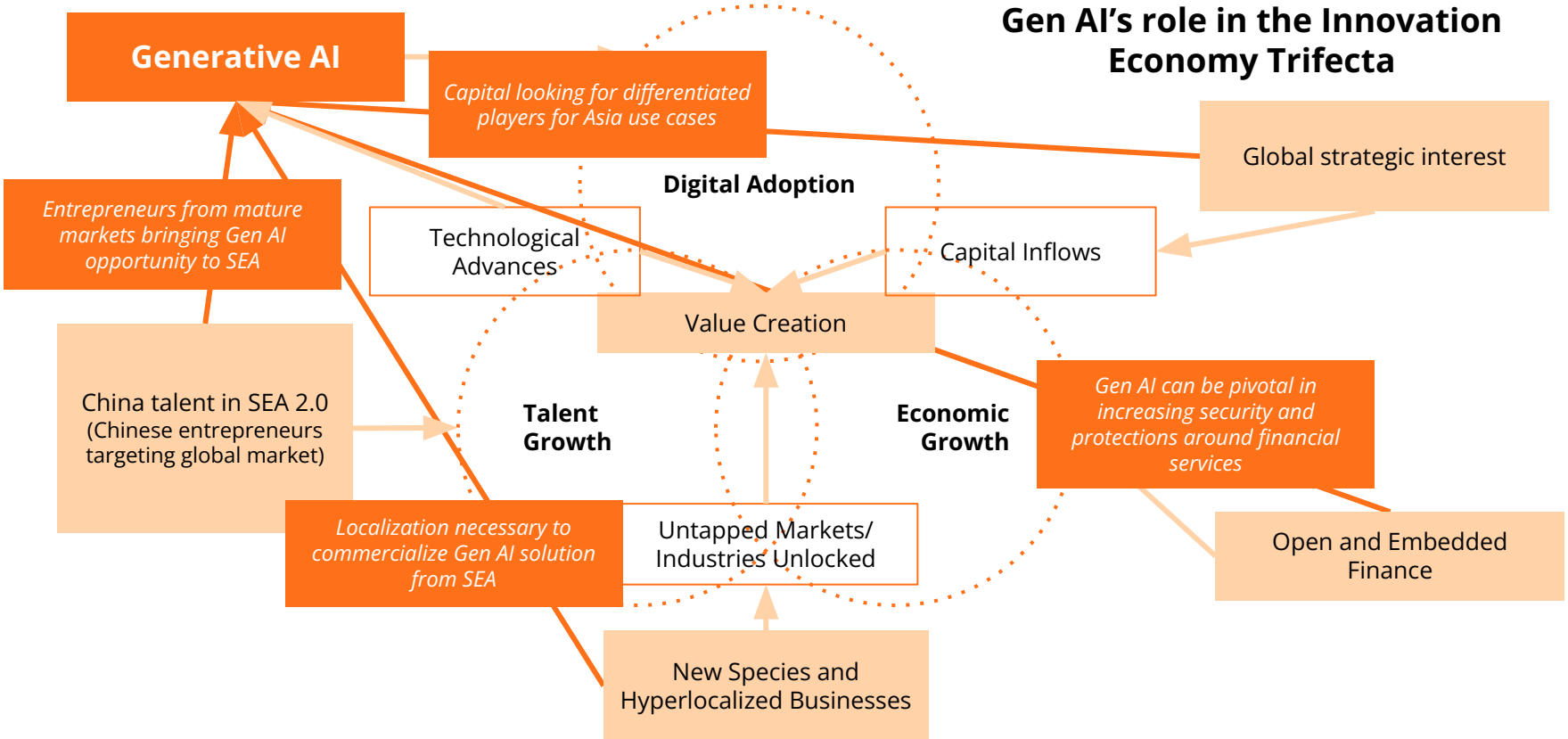
Using the Gen AI flywheel as a framework to illustrate key risks and challenges




Source: Insignia Research, Crunchbase, Tracxn

INSIGNIA VENTURES PARTNERS

# Generative AI is not an isolated frontier trend in Southeast Asia but a fundamental driver of tech maturity



INSIGNIA VENTURES PARTNERS

# Key Shifts in Mindset for Leaders Around Gen AI

| | |
|---|---|
| Generative AI as a frontier trend | → Generative AI as a fundamental shift |
| Generative AI already dominated by global players | → Opportunities to meet AI gaps in specific use cases through infrastructure and apps |
| Generative AI-native players are competitively insulated | → Non-native players may have easier access to data and distribution to scale adoption |
| Generative AI as an isolated industry | → Opportunity in vertical AI to target specific use cases with deep monetization |
| Generative AI as a black box for investing | → Fundamental questions are still the same: what is the value being delivered? |

Part 7

# Autonomous AI Agents: The Holy Grail of Generative AI

**Having covered insights and best practices on driving AI transformation in your organization, this bonus chapter tackles the holy grail for generative AI technology: autonomous AI agents. While co-pilots have emerged in various use cases, how autonomous are these solutions, and how do we ensure that autonomous AI agents truly work for us? Insights are taken from Insignia Business Review's ongoing AI Notes series.**

INSIGNIA VENTURES PARTNERS

# Democratization of LLMs driving autonomous AI agent building

**5B US$**

Market size for AI autonomous agents in **2023**

**29B US$**

Estimated market for AI autonomous agents by **2028 (43% CAGR)**

**100K**

**Developers** building autonomous agents **within 2 weeks** of open-sourced autonomous agent code bases being created

**>140K**

**Stars** reached by AutoGPT repos **on Github since end Mar '23** (growth surpassing PyTorch, Go, Kubernetes, Node.js)

## So what are autonomous AI agents?

Programs powered by LLMs that **complete user-provided objectives** by breaking down objectives into tasks for themselves to complete and **solve iteratively**, acting on a user's behalf

Emergence of LLMs for mass consumption/production and enterprise use cases is a catalyst for more AI agents to become even more autonomous (i.e., iterative) and accurate in doing so.

Access to scaled supply (data)

**LLM**

\+ Specific Objective

**Agent**

\+ Learning, Iteration

**Autonomous Agent**

Ability to meet demand at 1:1 level at scale

Look up top restaurants

Look up the highest-rated restaurant with an available table for a specified date and book the table for 2 pax

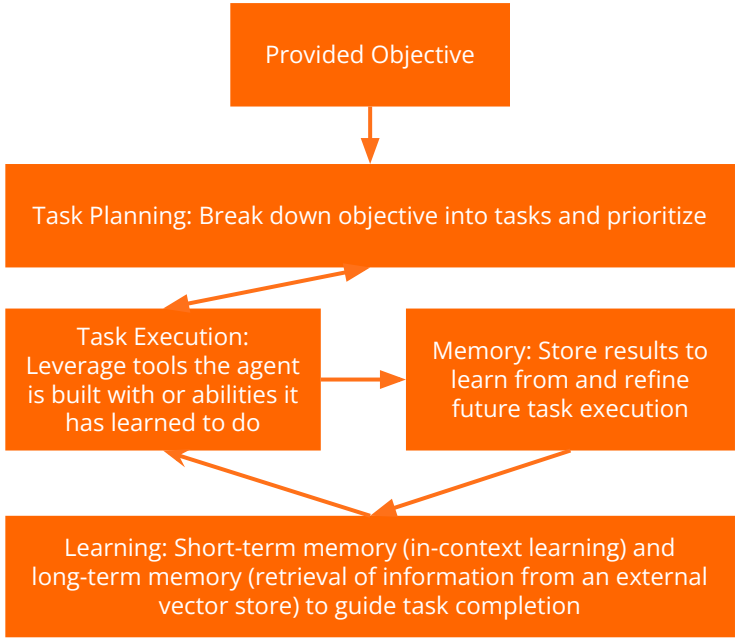
Find the best restaurant that fits with user's schedule and cuisine preferences then book it for 2

Source: Insignia Research, Marketsandmarkets.com,

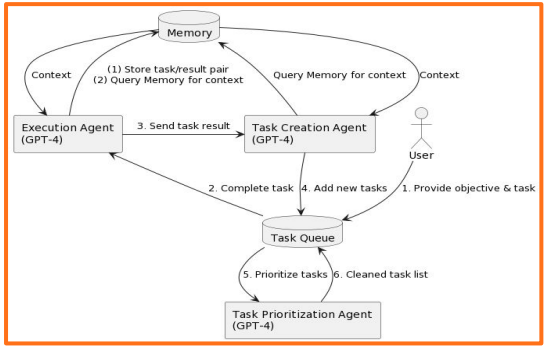
INSIGNIA VENTURES PARTNERS

# How do autonomous AI agents get the job done?

**A Simple Overview**

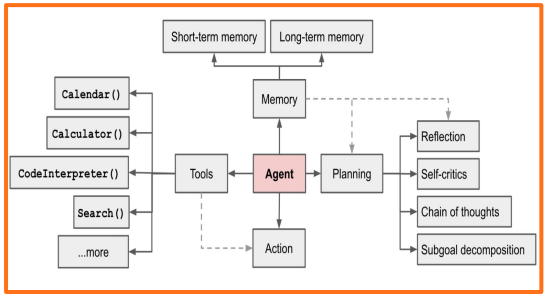



A task-driven autonomous agent's workflow can be built out of multiple agents




*From Yoyei Nakajima's Birth of BabyAGI blog*

Key components are necessary for an autonomous agent, including ability to call on APIs to fill in model gaps (Tools)




*From Lilian Weng's "LLM Powered Autonomous Agents" on Github*

Source: Insignia Research, YoyeiNakajima.com, Lilian Weng Github blog

INSIGNIA VENTURES PARTNERS

# Agents still early to the field but with training, have massive potential

## Opportunities from a User / Product POV

Increasing Maturity

Autonomous AI agents unlock many use cases previously unrealizable by LLMs alone due to memory and learning gaps

Hyperpersonalized agents deployed at scale for mass consumption

Hyperpersonalized agents built for specific customer segments and can learn with users

Users able to buy then customize or build agents that suit specific needs

Signify a paradigm shift towards a future with AGI

## Limitations (and Progression) of Commercialized Use Cases

Room for improvement in terms of quality and reliability on output, especially for use cases where data is not as accessible or mature enough

Programming techniques and AI needed to power autonomous agents are very new

Few products commercialized or massively used

Building around Low-Hanging Fruit Areas of Adoption

Personal assistants (e.g. scheduling, companionship)

Creative endeavors (e.g. copywriting and marketing)

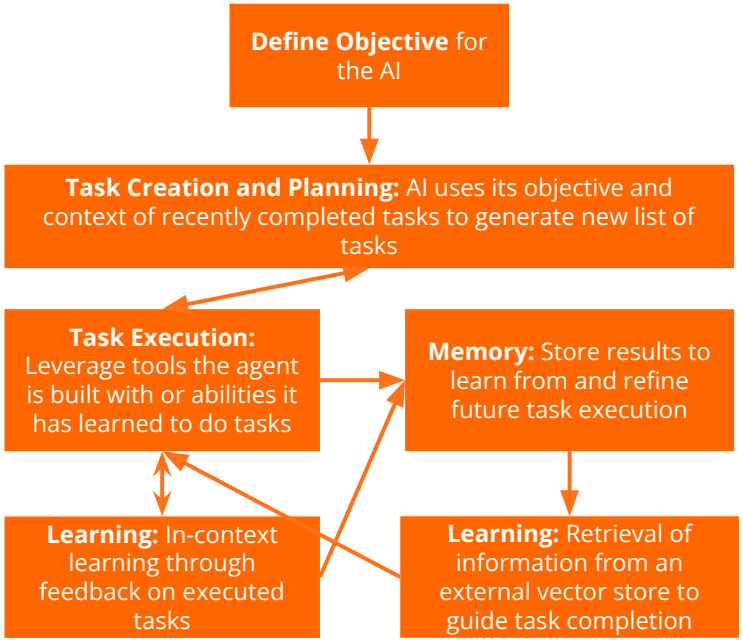
Areas with less emphasis on accuracy and greater margin for error

Source: Insignia Research

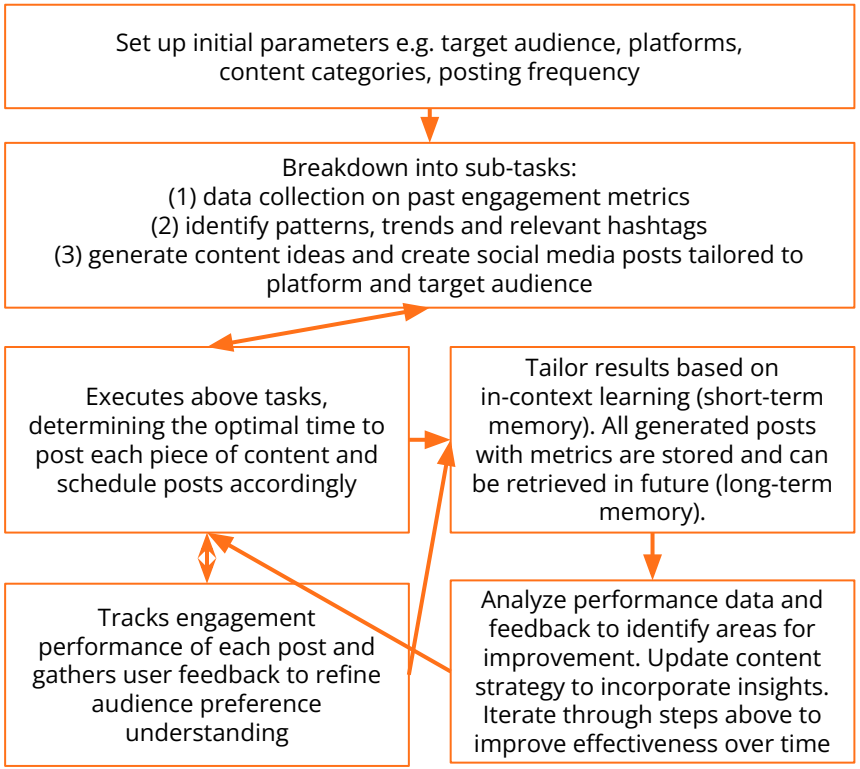
INSIGNIA VENTURES PARTNERS

# Workflow Example for Autonomous Agents

## Generalized Framework (from Part 1)



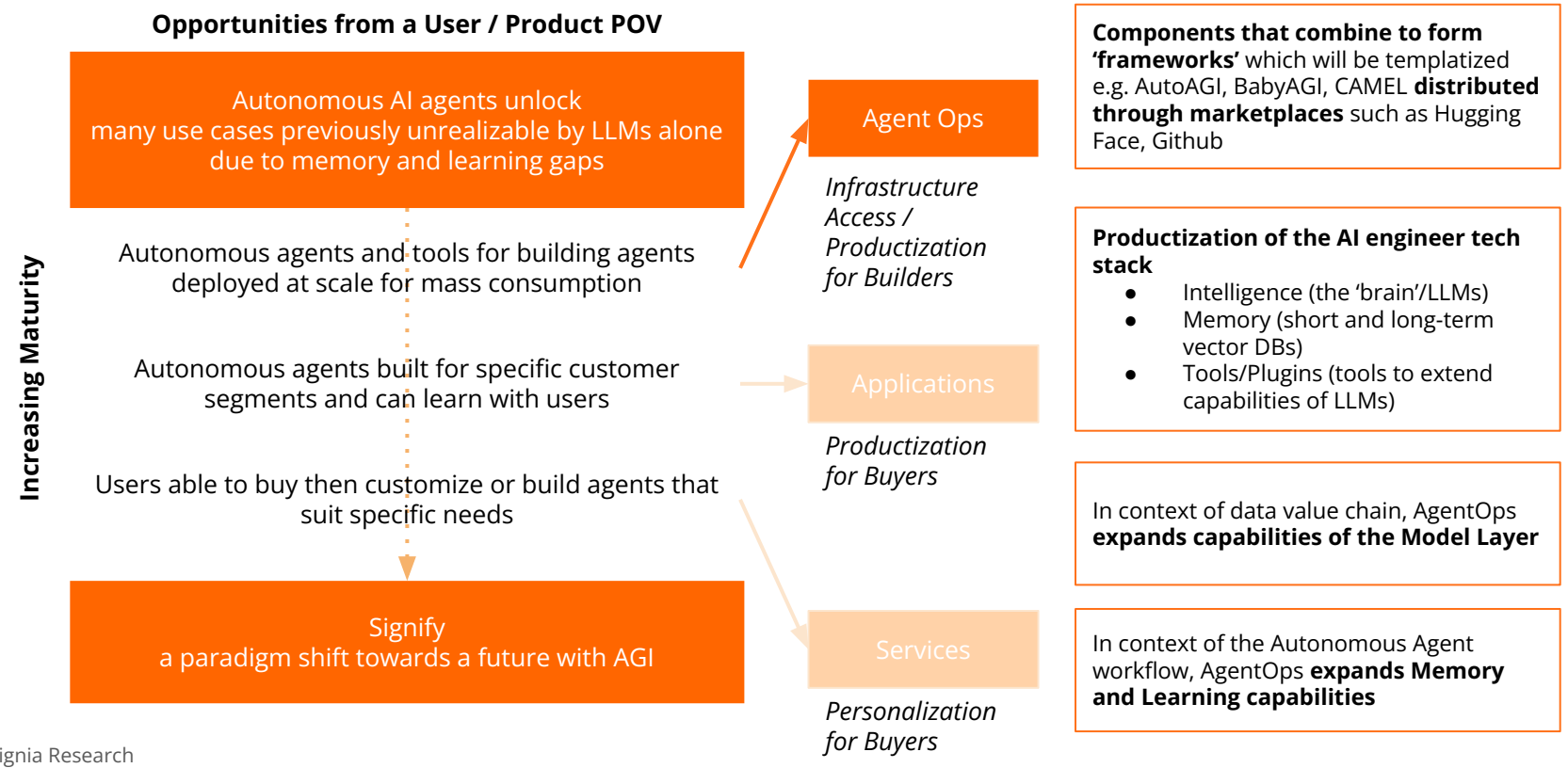

## Social Media Manager Autonomous Agent Use Case




Source: Insignia Research

INSIGNIA VENTURES PARTNERS

# First Stage of Autonomous AI Agent Industry Development: Infrastructure Access




Source: Insignia Research

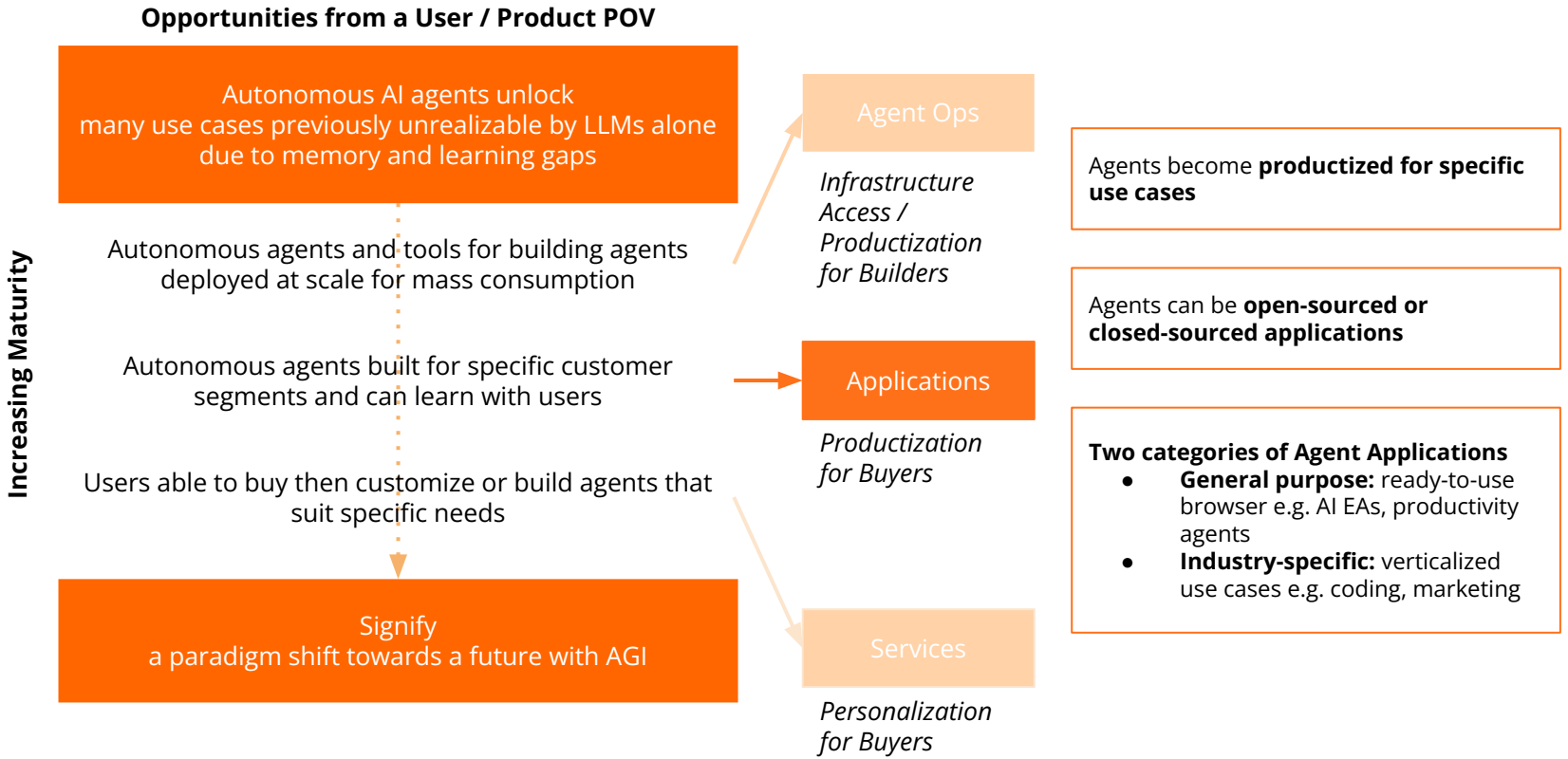
INSIGNIA VENTURES PARTNERS

# An Overview of Agent Ops: Enabling the Autonomous AI Agent Workflow

| | **Intelligence →Execution** *(The Brain / LLMs)* | **Memory → Learning** *(Short & Long-Term Vector Databases)* | **Tools/Plugins → Execution** *(Tools to extend capabilities of LLMs)* |
|---|---|---|---|
| **Product Segmentation** | | | |
| **Winning Profile** *(based on Product Segmentation)* | strong distribution advantage, community moats, model quality | cloud-native product approach, high-scale paid enterprise customers, efficient GTM | platform-agnostic, able to horizontally integrate, intuitive UX (low code) |
| **Examples** *(based on Product Segmentation)* | Hugging Face, OpenAI, WIZ HOLDINGS, ANTHROP\C | Pinecone, weaviate | LangChain, mosaicML |
| | SG (2019) - LLM developed for business verticals and local languages | US (2019) - Vector database (data storage layer for LLMs) | US (2023) - One-liner devtool that allows developers to build apps powered by LLMs |
| **Monetization** | Sell access (through APIs) and services → Licensing fees, subscription fees, service fees | | |
| **Risks** | Inability to **scale** usage | Inability to **procure sufficient** compute power and talent to develop more superior models | Likely a **winner-takes-most / all** space |

Source: Insignia Research

# Second Stage of Autonomous AI Agent Industry Development: Productization at Scale




Source: Insignia Research

INSIGNIA VENTURES PARTNERS

# An Overview of Agent Apps: An Agent for Every Activity and Workflow

**Product Segmentation**

*Examples Use Cases and Companies*

| General Purpose *(Ready-to-use environment across specific activities)* | | | Industry Specific *(Verticalized use cases across specific knowledge bases)* | | |
|---|---|---|---|---|---|
| Productivity | Copywriting | Coding | Medical | Law | Education |
| ADEPT | Jasper | replit | Generate:Biomedicines | INTELLLEX | Speak |
| US (2022) - Automates software processes and repetitive tasks | | US (2016) - Browser-based IDE for collaborative coding | | SG (2015) - AI-powered Litigation Research Assistant (SCOTT) | |

**Winning Profile**

- Ability to secure strong distribution advantage and **embedded** into workflows
- Strong product-led growth, **viral** usage
- 'Niche' verticals with a strong industry data moat that is **defensible** from big tech

**Monetization**

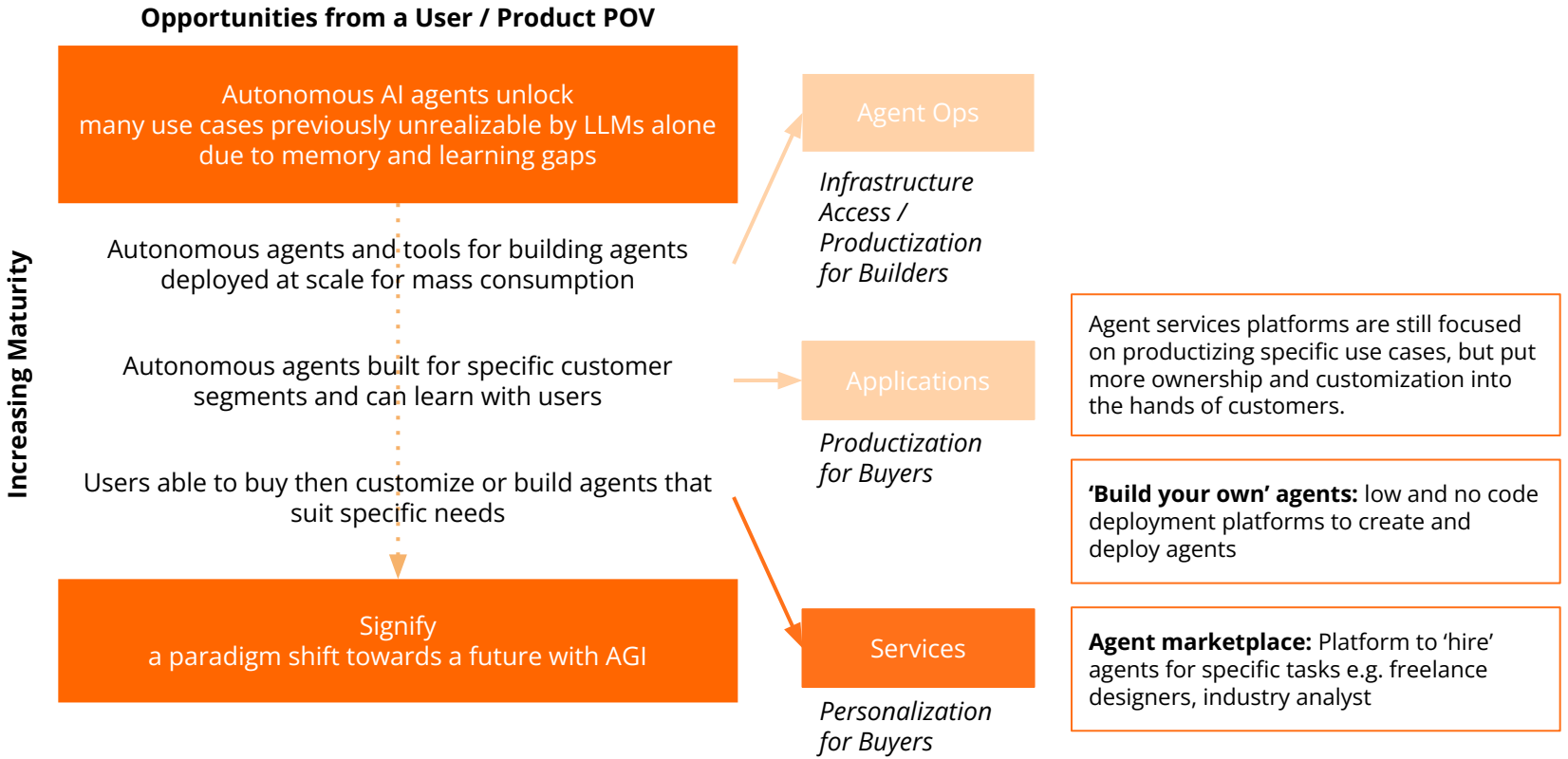
- Subscription fees (usually monthly/yearly and tiered)
- Usage-based fees

**Risks**

- Execution **might not be reliable** (i.e., hallucinations)
- **High compute costs** due to reliance on recursive loops, which means more LLM calls
- **Regulatory hurdles** for specific industries (e.g., legal, pharma)
- **Unclear legal statuses** on copyright and ownership

Source: Insignia Research

# Third Stage of Autonomous AI Agent Industry Development: Personalization at Scale




Source: Insignia Research

INSIGNIA VENTURES PARTNERS

# An Overview of Services: Commoditizing Agents

| | | |
|---|---|---|
| **Product Segmentation** | **Build Your Own Agents**<br>*Low and no code deployment platforms to create and deploy agents* | **Agent Marketplace**<br>*Platform to 'hire' agents for specific tasks* |
| *Examples Use Cases and Companies* | Relevance AI, inworld<br>US (2021) - Character engine for creating AI NPCs in games and interactive experiences | NexusGPT World's 1st AI-freelancer platform, c.ai<br>US (2021) - Platform where users create dialog agents/characters and converse with them |
| **Winning Profile** | Ability to tailor to specific use cases<br>Strong UX: integrations, customer support | Strong user retention and community moat<br>Agent interaction-learning flywheel driving sustainable acquisition |
| **Monetization** | Subscription fees for marketplace access<br>Commission fees | |
| **Risks** | Double cold start problem for creators and users of autonomous agents | Lack of depth required for specific enterprise use-cases |

Source: Insignia Research

# Future Industry Opportunity vis-a-vis Southeast Asia Challenges for AI Agents

**Opportunities from a User / Product POV**

Autonomous AI agents unlock
many use cases previously unrealizable by LLMs
alone due to memory and learning gaps

Increasing Maturity

**Agent Ops**
*Infrastructure Access / Productization for Builders*

**Applications**
*Productization for Buyers*

**Services**
*Personalization for Buyers*

Signify
a paradigm shift towards a future with AGI

## Future Sector Progression

Increasing maturity and productization

Increasing verticalization

Less noisy outputs

Large outcomes possible with mainstream commercialization *(analogous to mobile revolution)*

## Current Southeast Asia Challenges

Higher bar for model superiority (as a function of infrastructure and talent)

Distribution challenges for paying customers and builders (supply)

Enterprise customers largely in the West (needs relocation of ops, HQ)

Needs a data moat as foundation for competition with global players

Source: Insignia Research

INSIGNIA VENTURES PARTNERS

# Agent development across use cases is a function of data flywheel robustness and customized model access

| | **Data Flywheels** needed built on… | + | **Accessible LLM infrastructure & other models** needed that are able to customize to… | = | **Potential Agent Use Cases** cover… |
|---|---|---|---|---|---|
| Retail / Consumer | End-to-end customer journey<br>Owned supply quality data streams | | Specific product/SKU being sld (e.g., property, cars, FMCG goods, etc.)<br>Languages | | Inventory Management<br>Demand Forecasting<br>Price Optimization<br>Customer Service Channels<br>Personalized Recommendations |
| Agriculture | Land digitization<br>Strong farming ecosystem distribution | | Specific inputs and outputs<br>Geographical and Biological factors specific to market (e.g. weather, pest patterns) | | Precision Farming<br>Crop monitoring<br>Pest detection<br>Yield prediction<br>Smart irrigation |
| Finance | Reliable, recurring data streams (e.g., supply chain data, platform activity)<br>Holistic data streams | | Analyze data from multiple sources<br>Specific financing products (stocks, savings, cards, etc.)<br>Languages | | Fraud detection<br>Algorithmic Trading<br>Credit Risk Assessment<br>Financial Advising<br>Portfolio Management |

Source: Insignia Research

INSIGNIA VENTURES PARTNERS

# This leads to a “data arms race” and “model chasm” that needs to be overcome to build the best agents for specific use cases

**Advantage for companies already leveraging data flywheels for improved user experiences** + **Unlocking enterprise adoption key to more mass commercialization** = **Agent Use Cases**

**Data-Driven Product-Led Growth and Distribution**

**Autonomous AI Agents**

| Examples of data flywheel strategies in various industries and stages | | Examples of companies closing the “model chasm” | | |
|---|---|---|---|---|
| CARRO | Data from car supply, marketplace, and customer behavior fuelling improved user experience | WIZ.AI | LLM development for enterprise use cases across industries, languages | AI agents for customer service and business operations |
| Pinhome | Property valuation engine Pinvalue | | | |
| AwanTunai | Proprietary ERP system digitizing data for financing | fileAI | Fine-tuning data for LLM application and model development | AI agents for data processing workflows |
| SURFIN | AI-powered credit engine for consumer financing | | | |
| | | Verihubs | Verifying data for more secure and reliable data workflows | |

**Model Maturity and Customization**

INSIGNIA VENTURES PARTNERS

## Best Practices on Building Data Automation

1. Define scope and define desired outcomes for any digital transformation project.
2. As important as the efficacy of an automation tool or software is its ability to be onboarded.
3. Data automation can't work without system interoperability.
4. Data automation needs to have a learning capability as well to reduce monitoring and correction workload.
5. Data automation can only improve existing workflows, standards and practices.

## Leveraging AI to Level Up Your ERP and Financial Management

1. Keep the advantages of process automation as you move into data-driven analysis.
2. Monitor AI outputs as part of successful adoption.
3. AI in financial management is measure of risk management ability.
4. Automation is a gradual transformation that requires rethinking technology, people, and processes.
5. Finance leaders must combine industry knowledge, technical skills, and data-driven strategies.

INSIGNIA VENTURES PARTNERS

## Solving Roadblocks in Your Gen AI Application Development

1. It is the organization's first venture into generative AI and not everyone is aware of the opportunity and potential solutions.
2. The impact of generative AI (i.e., why we are doing this) has not been communicated to the rest of the team.
3. Generative AI experimentation is being limited only to engineering or product teams.
4. Generative AI use cases prove too cumbersome to be actually used in real life operations.
5. The company wants to be able to use a more recently released foundation model.
6. Generative AI costs are too high for the organization to sustain operation.
7. The organization needs to meet data privacy and cybersecurity standards and regulation.

## Leveraging Gen AI for More Effective Customer Journeys and Growth

1. Deploy AI tools (AI agents such as Talkbots, etc.) to enhance customer experience.
2. Leverage customer service to drive revenue growth.
3. Unlock omnichannel interaction to better fulfill customer service expectations.
4. Translate customer service into deeper market understanding.
5. Mature retention with quality management on customer engagement.

INSIGNIA VENTURES PARTNERS

## Reap Operational Gains from AI / Gen AI applications

1. Speed Up Tech Development with Coding Co-pilots.
2. Dedicated cross-functional task force to uncover and test use cases for Gen AI for potential to integrate into user experience.
3. Enhance internal operational efficiency based on gains from customer adoption of automation.
4. Enhance user experience with GPT-driven tools (from customer support to co-pilot).
5. Host internal hackathons to uncover potential applications of AI (not just Gen AI) in the organization.

## Key Shifts in Mindset for Leaders Around Gen AI

1. Generative AI as a fundamental shift vs Generative AI as a frontier trend
2. Opportunities to meet AI gaps in specific use cases through infrastructure and apps vs Generative AI already dominated by global players
3. Non-native players may have easier access to data and distribution to scale adoption vs Generative AI-native players are competitively insulated
4. Opportunity in vertical AI to target specific use cases with deep monetization vs Generative AI as an isolated industry
5. Fundamental questions are still the same: what is the value being delivered? vs Generative AI as a black box for investing

INSIGNIA VENTURES PARTNERS

## fileAI

fileAI is building AI agents to enhance back-office productivity. The company specializes in the processing and understanding of unstructured data (files) and is using a combination of NLP & Machine Learning as well as LLM tech to automate workflows end-to-end. The company works with enterprises across APAC and has a track record with FSI and Accounting / Finance. The company was founded by serial entrepreneurs and startup operators Christian Schneider (CEO) and Clare Leighton (COO) in 2021 to initially address the long-standing inefficiencies experienced by businesses when it comes to financial data consolidation, reconciliation, and processing.

## WIZ.AI

WIZ.AI provides enterprise-grade conversational AI solutions to enhance customer experience and increase operational efficiency. WIZ.AI's AI Agents provide human-like engagement to facilitate customer interactions at scale, enabling businesses worldwide to connect with their customers and provide exceptional customer service and strong business ROI.

Currently, WIZ.AI caters to over 300 clients across 17 countries. WIZ.AI's solutions span industries including Banking and Finance, Telco, Healthcare, E-Commerce, and FMCG, providing solutions for customer growth, customer support, collection, contact center insights, and order taking.

aws

Launched in 2006, Amazon Web Services (AWS) began exposing key infrastructure services to businesses in the form of web services -- now widely known as cloud computing. The ultimate benefit of cloud computing, and AWS, is the ability to leverage a new business model and turn capital infrastructure expenses into variable costs. Businesses no longer need to plan and procure servers and other IT resources weeks or months in advance. Using AWS, businesses can take advantage of Amazon's expertise and economies of scale to access resources when their business needs them, delivering results faster and at a lower cost.

Today, Amazon Web Services provides a highly reliable, scalable, low-cost infrastructure platform in the cloud that powers hundreds of thousands of businesses in 190 countries around the world. With data center locations in the U.S., Europe, Singapore, and Japan, customers across all industries are taking advantage of our low cost, elastic, open and flexible, secure platform.

Insignia Ventures Partners is a Southeast Asia early-to-growth stage venture capital firm partnering with unstoppable founders to build great companies. Since 2017, we have invested in emerging technology companies across industries and geographies in the region, including Carro, Ajaib, GoTo (IDX: GOTO), Appier (TSE: 4180), Fazz, Shipper, Tonik, Flip, SuperApp, and many other technology market leaders. We partner early with founders and support them from seed through growth stage as their companies create meaningful impact for millions of people in Southeast Asia and beyond. With our team of investment and operating professionals who bring together decades of experience and proprietary networks, we equip our founders with the tools they need for growth. We manage capital from premier institutional investors including sovereign wealth funds, foundations, university endowments and renowned family offices from Asia, Europe and North America.

Learn more on our website, Insignia Business Review, our podcast On Call with Insignia (new episodes weekly on Spotify, Apple Podcasts, and YouTube), and these case studies from HBS and INSEAD.

Check out our public access toolkit for founders and investors looking into region, including term sheet generators, market statistics, cybersecurity scanner, and more. We also provide venture capital education programs for C-levels and senior execs through Insignia Ventures Academy.

Follow us on LinkedIn, Instagram, and Twitter.

# AI Transformation Playbook

## 30+ Best Practices for Your Organization's Automation and AI Journey

INSIGHIA VENTURES PARTNERS

in partnership with

fileAI WIZ.AI aws