BroodStack

AI PRODUCT STRATEGY FIELD GUIDE

PRACTICAL HANDBOOK FOR BUILDING YOUR AI BUSINESS SOLUTION

Summary:

As a business owner or technology executive, building a practical AI strategy is no longer optional. Without it, you'll have a hard time competing or growing in today's competitive market. But more importantly, a smart plan for using AI in your business can help you drive efficiency and profitability to your bottom line

But before you begin building you need to turn AI concepts into specific differentiation for your product and operations. This field guide provides a clear framework to get AI from concept to reality.

1. Define the Problem

If you want to create an AI product, the first step is to really understand what problem you're trying to solve and how AI can help. Take some time to learn about the latest AI tools and research, because things are changing super fast, like every week!

Start by thinking about your users or clients and what's causing them trouble. How can AI make their experience better by fixing those specific issues? Don't just use AI because it's cool - focus on using it to actually solve real problems people have.

Finally, figure out what value AI will bring. Will it help things run more smoothly, cut down on costs, bring in more money, or make using your product better? Put some numbers to it so you know AI is really worth it.

> **CUSTOMER'S DON'T CARE ABOUT YOUR SOLUTION. THEY CARE ABOUT THEIR PROBLEMS." - DAVE MCCLURE - 500 STARTUPS FOUNDING PARTNER**

2. Determine AI Level

AI Copilots

AI copilots are digital assistants that work alongside humans in real time. They offer helpful suggestions and can automate simple tasks, making users more productive. AI copilots integrate with applications and can enhance existing features. For example, they may provide writing suggestions, schedule meetings, or summarize long documents. These AI assistants learn from the user's behavior and adapt over time.

AI Agents

AI agents are computer programs that can think and act on their own. They will change our lives in many ways. At work, they will help us by doing tasks that are boring, dangerous, or hard for humans. This will let people focus on more creative and important jobs. At home, AI agents can help with chores, answer questions, and even be companions. They will make our lives easier and give us more free time

AI Mesh

An AI Mesh is like a team of smart people working together. Imagine a group of AI Agents, each with its own special skills, connected to each other. They can talk to each other, share what they know, and help one another to solve problems. This web of AI Agents is called an AI Mesh, and each robot is an AI agent. By working as a team, they can tackle big challenges and learn from each other.
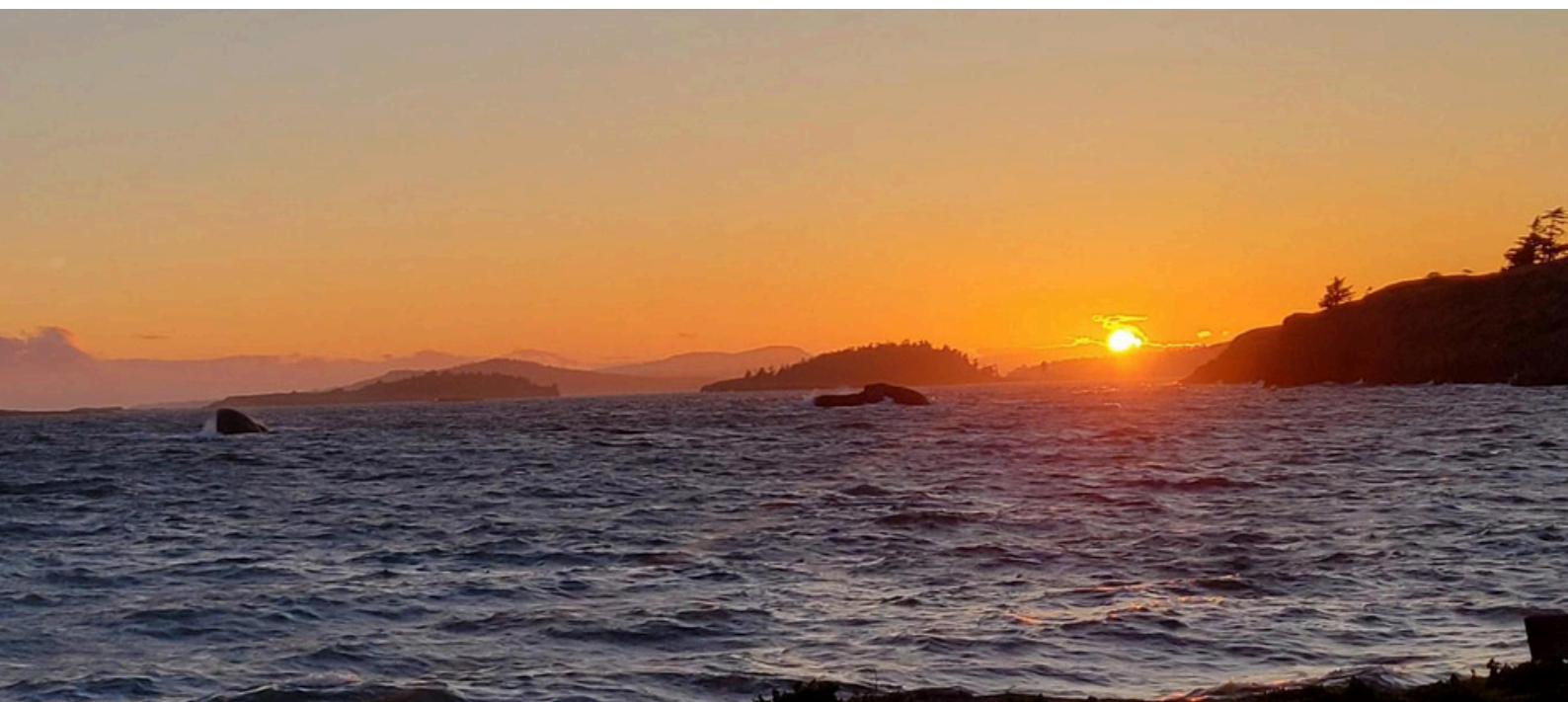
AI Copilot Example: Grammarly

Grammarly offers helpful grammar, spelling, and style suggestions to improve your writing. Grammarly can also automate simple tasks like checking for plagiarism or counting words. This AI copilot integrates directly with apps and browsers, enhancing your existing writing workflow. For example, Grammarly will highlight potential errors as you type and provide contextual recommendations to make your writing clearer and more effective. While Grammarly doesn't replace your own writing skills, it's a valuable tool that boosts productivity and helps you communicate more clearly.

AI Agent Example: Fraud Mitigation

Imagine you work at a bank. Every day, there are tons of transactions happening - people buying things with their credit cards, transferring money, and paying bills online. With so many transactions, it's hard for humans to catch every single case of fraud.

Your bank might already be using an AI Co-Pilot for detecting patterns that look like fraud. But an AI Agent will take things to the next level. Your bank could use an AI Agent to automatically pause access to an account, ask the user for more documentation on their transactions, and then process their responses using another AI model. Finally, AI Agents will allow for spotting patterns in behavior on fraud mitigation, surfacing those findings, and recommending actions to the fraud team on preventative measures going forward.

AI Mesh Example: Simplifying Travel Changes

Changing travel plans is tricky because it involves many moving parts. You have to cancel reservations, which can cost money. Then you need to make new plans, but flights and hotels might be full or expensive. You also have to tell everyone about the changes and update plans.

When changes occur, the AI Mesh intelligently adapts: rebooking flights, adjusting Uber pickups, and rescheduling dinner reservations. It keeps your friends informed of updates, ensuring everyone stays in sync. The Mesh leverages natural language processing for easy interaction and machine learning to optimize recommendations based on your preferences. By automating the tedious aspects of travel planning including input from your friends and dynamically responding to changes. It also provides a personalized travel experience, allowing you to focus on enjoying your trip.

3. Assess Data Requirements and Infrastructure

Understanding your data is crucial before embarking on building an AI product. A thorough grasp of your data's characteristics, quality, and infrastructure is essential for creating an effective and reliable AI solution. Consider the following key aspects:

Data Availability: Assess whether you have access to the data required for your AI product. Determine if it is structured, unstructured, or a mix of both, as this will influence your data preprocessing and model selection.

Data Quality: Evaluate the accuracy, completeness, and potential biases in your data. Implement measures to ensure high data quality and address any biases that could negatively impact your AI model's performance and fairness.

Data Infrastructure: Ensure you have robust systems in place for efficient data collection, secure storage, processing, and analysis. This infrastructure is the foundation for building and deploying your AI product effectively.

Security and Privacy: Prioritize the secure handling of sensitive data and ensure compliance with relevant regulations such as GDPR and CCPA. Implement strict security measures and privacy policies to protect user data and maintain trust.

4. Evaluate Technical Feasibility & Resources

Before you dive into the build, take a hard look at what you have and any knowledge gaps:

In-House Expertise: Assess whether your organization has the necessary AI/ML talent to build and maintain the solution. Determine if you have experienced data scientists, machine learning engineers, and domain experts who can design, implement, and oversee the AI product throughout its lifecycle. If not, consider hiring or partnering with external experts to fill the skill gaps.

Technology Stack: Evaluate the tools and platforms you will leverage for AI development and deployment. Consider factors such as scalability, compatibility with existing systems, ease of use, and community support. Popular choices include TensorFlow, PyTorch, and cloud platforms like AWS, Google Cloud, and Azure, which offer pre-built AI services and infrastructure.

"DATA IS THE NEW SCIENCE. BIG DATA HOLDS THE ANSWERS." - PAT GELSINGER

Cost Considerations: Factor in the costs associated with data acquisition, infrastructure, development, and ongoing maintenance. Data acquisition may involve purchasing datasets, collecting and labeling data, or integrating with external data sources. Infrastructure costs include computational resources, storage, and networking. Development costs encompass the time and effort required to build and test the AI models. Ongoing maintenance involves monitoring, updates, and refinements to ensure the AI product remains accurate and reliable over time.

If you lack the resources to turn your idea into a reality quickly, consider working with a development team that has AI technical talent available such as BroodStack.

5. Iterate and Improve

AI products will evolve much faster than traditional software, so what you launch won't look anything like the product you offer in 2 or 3 years. To keep growing you will need to iterate rapidly. This means continuously improving the product based on learnings and feedback:

Continuous Learning: Design your AI to keep getting smarter as it processes more data. The more it learns, the better it will perform.

Feedback Mechanisms: Always be collecting user feedback to pinpoint what's working and what needs improvement. Let your users guide development.

Stay Updated: AI technology is advancing at lightning speed. Keep up with the latest breakthroughs to give your product an edge.

IF YOU'RE NOT EMBARRASSED BY THE FIRST VERSION OF YOUR PRODUCT, YOU'VE LAUNCHED TOO LATE." - REID HOFFMAN, CO-FOUNDER OF LINKEDIN

Ready to turn your AI idea into a business solution? Check out BroodStack at www.BroodStack.ai or call us at 605-215-1062