# **₩ BlueCallom**

 Managing Corporate Al Prompt Development and Distribution with GPTBlue.

## Use Cases

Managed Gen-AI deployment to thousands of employees without unwanted prompt proliferation



## Introduction

- In this case study, we delve into a groundbreaking shift where Generative-AI is applied to a vast sales network, linking 75 vendors, 50+ distributors, and 40,000+ resellers, and impacting 400,000 salespeople serving over 100 million customers.
  - The focus will be on Al's role in enhancing efficiency across sales organizations, optimizing processes, and driving significant productivity gains. We'll cover the challenges, strategies for effective implementation, and the expected \$2 billion annual efficiency boost.
  - At the time this case study was written, Generative-AI, as we know it mostly through ChatGPT, was only 15 months old.

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## **Clients** Overview

- This use case project has been developed for and with three different clients from three different industries:
- × Financial Services industry, integrating a global network of external investment managers and servicing millions of customers.
- Real Estate industry, where large general contractors, real estate investors and real estate agents work together and are servicing millions of real estate investors and homeowners.
- Tech industry, where vendors, distributors and system integrators, VARs, and resellers service over 100 million customers.
- >> While very different in nature, all three organizations have a common structure:

Offering products or services through massive partner networks into very large markets. In addition, all three organizations were longing for more efficiency and team productivity, reducing bureaucracy and making substantial improvements on both the top and the bottom line.

All three projects are not completed yet but are in the making. The impressions we are making are from the here and now, Q1 2024.

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Overall challenges & objectives



## >> Challenges

The companies we work with are early adopters and allowed their teams to experiment with AI to better understand how AI could help the enterprises increase their bottom line but also grow and be early leaders in this new world of Artificial Intelligence. How can you...

Challenge #1 ... measure productivity gains from AI prompts?
Challenge #2 ... coordinate the rapid proliferation of prompt development?
Challenge #3 ... use corporate data without risking running into compliance issues?
Challenge #4 How can business partners be integrated into such an engagement?

## >> Objectives

The objective was to find ways that take a substantial workload off of employees by leveraging Generative-AI. The idea was to delegate a significant part of their daily tasks to an AI system and use the freed-up time to acquire and onboard new customers and be ready to service and support them.

The AI system would need to serve tens of thousands of employees and even more in connected business partner organizations. The still-young BlueCallom company was an option in particular because the seasoned executive team has done similar indirect sales projects in the past.

### Summary:

- #1 Develop prompts that help people get rid of complicated repeat work
- #2 Allow employees to delegate as much work as possible to an Al
- #3 Empower employees to use the freed-up time for important goal-related tasks
- #4 Coordinate prompt development as a new part of new operation excellence

## Product of choice

The product that is used in these projects is BlueCallom's GPTBlue Platform. It was selected for four reasons:

#### X Comprehensive Prompt Development System

Developing advanced prompts, leveraging the Al-Native platform features, and allowing a well-managed but automated digital deployment to every desk.

#### X Measurable Prompt Productivity

The ability to measure prompt productivity on the fly with no unnecessary scientific research on aggregating perfect data.

#### X Corporate Data Integration

The ability to leverage corporate data without making prompt engineers API and programming experts. At the same time, creating significant risk alleviation on the prompt development side.

#### X AI-Net Builder capability

A well-structured and easy-to-manage network of company-wide prompt libraries spread over countries, business units, and departments and even crossing company boundaries for business partner integration.

GPTBlue is from the ground up designed as the "Generative-Al Prompt Development, Testing, and Deployment platform". It is an Al-Native (Al First) software design. Prompt design was not a converted software design, but leveraging the LLM is as far as possible today. Custom Function Calls, Data upload to the mode, and model finetuning, or so-called "LangChain functionality", are part of the capabilities. The company also developed their own prompt design mechanisms that go beyond today's capabilities.

# GPTBlue for B2B

 Classic Industry Supply Chain Not so classic Multi Tenant Network



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The massive AI-Prompt Distribution and Multi-Library Network are probably the two most powerful designs for larger organizations. The unique deployment structure was a result of past experiences with global multi-tier sales channels. The initially considered SaaS model did not hold for a network like BlueCallom. Therefore, a new Business Model, "Zero Subscription", was developed. This new model allowed companies to deploy as many clients as needed at no cost and only pay for the prompt consumption. Pay For Gain - was born.



## Implementation Process

## Initial Coordination

In all cases, we had some connection to the top management, sometimes over one or two other connections. Our experience with building a business prompt development infrastructure came from a previous project, where we built a large corporate innovation management system almost purely on prompts. 128 highly sophisticated and connected prompts created a unique network and exceptional results. Interestingly enough, corporations have been more interested in the technology to build such powerful prompts than diving into the complexity of breakthrough innovation.

We organized presentations and had a few discussions. Unlike classic enterprise sales cycles, we started while still finishing the extraction of our GPTBlue Technology. Our GPTBlue was used internally to develop, test, and connect prompts.

Week 1	Week 1	Week 1	Week 1	Week 1
Initial Coordination	Launch × Team Meeting With Solution Demo × Motivation & × Inspiration	Team Engagement × Setup × Prompt × Development × Library Setup	Daily operation review Challenges Prompt Development Library Setup and Management Prompt Usage	Results and Impact review × Productivity × Prompt Distributior × Corporate Data × Partner Integration

## \_ Starting Point

The start was rather fluent. All three companies had already started very early with trying and testing GPT-3.5. Prompts already made the news internally that GPT-3.5 is an amazing tool to get things done much faster. Hundreds or even thousands of prompts have been written, but nobody knows how many, who did it, and what the outcome was. People purchased prompts by the thousands for a few dollars and adjusted them either to their liking or in a way that their colleagues could benefit from them.



In all three cases, two things were very clear: Just starting with no questions asked was without a doubt the best thing that could happen. Early adopters made way for something that could become the greatest advancement the company had in the past 100 years if they even were that old. And quickly, the time of "crossing the chasm" came, as Geoffrey Moor's Book, published in 1991, wonderfully described. It's the story of transmitting an early and very promising solution to a large and less adventurous group of people. The art of crossing the chasm is to work with the early thought leaders and bring them and their experience together with the early followers, all the way to late adopters (laggards).



People who want newest things

People who want complete solutions an convenience

## Leadership Considerations

In all three projects, the leadership teams were profoundly different. In one organization, their C-Level was both the main driver as well as the financier of the project. Another saw the opportunity and almost instantly set up a micro team of AI-savvy experts to explore and run the venture. In the third project, it was actually the investors who took the initiative and made the first steps.

Once the base concept was laid out, leadership was given into the hands of experts to drive it home. In all cases, the project lead's involvement ranged from 50% to 100% in the respective projects. Gradually, more and more of the project handling was taken over by either IT, alliance management, or an existing or new dedicated AI department. Based on the experience we have so far, down the road organizations will have dedicated AI centers. We may share more about that future in a different document.

### Team Assembly or Sourcing

One question, that has been continuously discussed, is about the necessary skills and abilities of those who shall write those prompts that can deliver substantial productivity gains. At BlueCallom, these questions arose already over a year ago and we still have no definitive answer but we have come a long way.

Top prompts are the ones that are written with empathy for the Al's "brain". Understanding how communication between mind and machine works and flows. A hybrid brain of a language scientist and a machine learning expert may be a good starting point to think about the quality. Now, when you think about the core reason for prompts we write and why it is not as easy as we hoped, we need to conclude that one of the core challenges of humanity is and was "communication". Misunderstandings have caused more conflicts than any other situation. Misunderstanding between humans is enormous. The good thing is that we know pretty well how a Large Language Model (LLM), driven by a Generative Pretrained Transformer, works. So we understand that the PROMPT is not needed for the AI, it is needed for us humans, as 50 people would express the same need in 50 different ways. The PROMPT is the equivalent of a diplomat moderating the negotiation between humans and machines.

Language-knowledgeable people, historians, software designers, and moderators are all good backgrounds for Prompt Designers.

The make or buy question obviously pops up every once in a while.

Ours and the recommendation to our customers is: If the operation and the management of your company are part of your brand, your uniqueness and your business competency, build the prompts yourself like almost all leading companies build the tools they need for their business also themselves. It's part of the competitive advantage.

## \_ Technological Prerequisites

One thing that has not changed with AI, is "Data Quality". The old saying "garbage in, garbage out" has never been more important. The rich and highly valuable data in each company cannot be paid with gold. Still, all too often the importance and quality of their data is just dismissed. The price companies pay for such a dismissal is now rapidly increasing. We also realized that the sheer fear of data quality and privacy is almost paralyzing many leaders. It may sound absurd but the no.1 Technological Prerequisite is a strong C-Level.

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➤ Data integration: The question that should be discussed early in the process is how deep should an external solution be connected to the internal IT systems. In our projects, we agreed on "not at all". We established an interesting "Blue Proxy" architecture. A data repository in the cloud is owned and managed by the customer, connected to their IT with their terms and accessible to the GPTBlue system through an API that the customer controls. That cloud data repository contains only data that are provided by the customer and completely de-personalized. With that, any compliance rules can easily be structured. Even internally, the teams that have access to customer data can be authorized by IT or other managers when creating prompts that use those data.

➤ Data Privacy: BlueCallom developed a comprehensive and GDPR-compliant privacy and data ruling document for their part of the process. The documentation involves all technologies and their ruling so that the customers can take that as guidance also for the company's internal documentation and ruling.

# Launch

There are two different types of launches: Big Bang and Rolling Thunder. We highly recommended to start with a Rolling Thunder where the thunder can faintly be heard in the distance and comes slowly but steadily closer. This is a sustainable and continuously maturing development. The Big Bang is quickly forgotten and everybody is back to normal. The Rolling Thunder is a viral grassroots launch with organic growth. The better the prompts the faster the growth. Weak prompts with less or no productivity gain will reduce the growth.

When launching, it was a good idea to carefully assess cultural things, fears, uncertainties, and doubts and agree with the small group of early adopters that they live by the old French "noblesse oblige". They have a special responsibility for those who are uncomfortable with any new technology or new things to learn.

Another aspect was training. People are accustomed to getting training for anything new. In this case, it is just not necessary. However, people need to be informed about the fact that there is a new tool that will help them save time. Here are three simple steps that were performed:

- 1) A team meeting about what it means to the members to delegate time-consuming and repetitive tasks to an AI system. What the time savings mean to the company and to the members personally. Give ample time for Q+A.
- 2) Show the team how to select the support tool from a provided page and specify desired help. Each prompt includes "default content" to guide system usage.
- 3) Utilize the provided videos for specific inquiries or create your own and replace the default videos.

**Important**: Let the team know that we are all learning and being at the forefront of new things helps best to slowly grow with it. In that context, they should learn that providing feedback is good for them to get an issue solved, good for the management to learn from those issues and good for the system provider who can improve the system faster.

## Team Engagement

### \_ Setup

When starting the projects and making the project team familiar with the technology, and the way prompts can be created, tested, deployed and managed in the long run, the initial action was to identify those employees who are already prompting meaningful things for the company. We started with a 1-day boot camp to create some meaningful and, most importantly, some helpful prompts.

### \_ First Prompts

The first prompts were jointly created by the initial prompt team and the BlueCallom team. The core function has been a uniquely structured prompt that asked virtually any employee to share their current most time-consuming tasks which they would love to see improved. Take those prompts most valuable for the AI team, the different departments got different prompts to let the AI understand the department objectives and circumstances. Unlike regular prompts, the AI's first task was trying to understand what the person meant and see if it needed to be adjusted. Then a professional assessment is performed by the AI and that was made accessible to the selected prompt designer to understand what problems should be solved with AI.

## Prompt Evolution

With a good understanding of the power of prompts on the development side and the helpfulness on the user side, prompts tend to grow in sophistication. A prompt may take all the public information from an annual report and in conjunction with the knowledge of the team responses on the first prompts, an organization leader may get a prompt that shows large-scale optimization suggestions. It is important to keep in mind that the good prompts can evolve and become highly valuable to the organization.

## Prompt library

We established prompt libraries for every department so that the departments could decide what to put on. In addition, every partner organization will have their own prompt library for their respective organization. In organizations of the size we worked in with 5,000 to 50,000 business partners we had to anticipate having the same number of libraries to support and possibly distributing prompts into that number of libraries. As an organization gets set up via upload or self-registration, the library gets set up automatically in the background.

## Prompt management

Anything valuable needs to be manageable. Now, we have a coordinated approach to developing prompts. Some of the prompts may access company internal data and that access is not controlled by prompt authors but by IT. The authors have an embedded function to deploy the prompts to libraries. And the libraries are accessible to users. The biggest steps in a coordinated yet flexible Generative-AI approach are made.



As a next step, we want to integrate partners. Here we jointly developed a customized way to invite partners who can "dock" onto the company like a spaceship. They can simply connect and get access to the company's "Partner Portal". Here they get either an individual authorization by a partner manager or a key to be identified. With that simplified onboarding process, users from the partner organization get access to prompts dedicated to partners. Those prompts can include market research, social media support, product availability, composing custom announcement emails, how to start an Al implementation in specific industries, weekly cash flow analysis, survey prompts, and prompts that analyze survey reports.

>> The largest resource for improvements is currently direct employee surveys with AI. At a later stage, it may make sense to also help partners build their own prompts.



## Daily Operation

## \_ Identifying Challenges

We helped the prompt designer teams to develop several unique prompts that ask employees to share their most stressful, complicated, time-consuming, or even annoying tasks. The result was not so much about solutions but rephrasing and articulating the inputs to get clear and manageable responses. We then collected all the answers, summarized the results and let the AI help coordinate the process and solutions. New challenges arise daily in the beginning, but over time they will slow down.

## \_ Operational Complexity

Turns out that teams deal with up to 100 tasks a few times more. Companies in the range of 10,000 employees perform a million individual tasks that connect with up to 50,000,000 (50 million) options to do things. This helped everybody understand why it became nearly impossible to solve all the old problems in conventional ways.

### Prompt Development

Prompts are written by Prompt Engineers, not for themselves but for hundreds of employees. Given the ability to measure Prompt Productivity, prompts are now written with a single goal: Making the lives of employees more efficient and less time-consuming. This is only possible when we know what thousands of people do and do it less efficiently. Things that are done in a minute or two are usually not worth writing a prompt for. But things that can take an hour, day or week and more are the tasks that are worth addressing and exploring to write prompts to assist the users. In any case, the prompts written will all end up in any kind of library accessible to the respective people.

## Prompt Library Management

The distributed, yet connected character of the 'Library Network Architecture' allows for easy management. Every department can - but doesn't have to manage their own library. In some cases, departments initially preferred using a central library only. That has changed as the volume of prompts increased, leading to a reduction in management activities. It is basically deciding whether prompts from the team should be reviewed before posting. If suppliers are connected to a library, it may make sense to review those prompts. Otherwise, prompt authors can be approved once and trusted that prompts are compliant with an overall prompt quality ruling in the company. This is actually just a one-pager to keep it simple.

## Prompt Usage

Prompt users do not need to understand anything about AI or how prompts are developed. They just ask questions, search for data, request possible solutions, and so forth. The Prompt itself is able to put it in the context of the company's business, the department's objectives, the defined target audience, and so forth. We see a trend that users use prompts about 3 times a day on a grand average. But that may grow in the future as more and more sophisticated prompts are made available. The cost per prompt is approximately 3 to 5 \$/€/CHF cents. The average productivity gain is about 25x, which means what took an hour can now be done in 3 minutes. At an all-in employee cost of \$/€/CHF 20 per hour, the cost of every single well-written prompt is no comparison to the gain employees will make. And the real gain for the company comes not only in savings but in growth. Today, doctors spend far more time with administration than with clients. Salespeople spend less than 50% of their time with customers, and product managers spend at best 60% of their time, often only 30%, with products and the rest with administration. And that is true for almost all office work. This is where companies like Black Rock outperformed almost any other wealth management company.

## Results and Impact

Measuring results relative to the initial challenges

### X How to measure productivity gains on those prompts.

There were no data available to compare the manual work with the AI-supported engagement. The BlueCallom team simply had to find a way to get to those data and if it would take a year or so. A productivity meter was developed that took user data and their own judgment of productivity and put both in relation to the prompt performance, which could then be measured.

The result was that most prompts produced a productivity gain of 10 to 50x almost immediately. The numbers grow over time based on prompt improvements and better average data.

**RESULT: 22x Productivity Gain** average across all employees based on preliminary measurements

### × How to coordinate the rapid proliferation of prompt development.

The Al-Network architecture allowed it to onboard thousands of employees at once. The employee data can be uploaded or employees can self-register with a single click from an internal email. In some companies, it was debated whether automatic registration was ok, so they simply sent our emails with the registration method for those who wanted to participate. The same mechanism is for official or authorized business partners. They were invited and self-registered on the system. They then could internally invite their employees to join too.

**RESULT:** Thousands can be onboarded within days due to the zero subscription model. All prompts that are developed are in centralized prompt libraries. Access can be but doesn't must be ruled.

### × How corporate data can be used without risking compliance issues.

Corporate data integration was one of the most challenging issues in early discussions. We eventually decided to go with "Depersonalized" data where no reference to any person is to be found. That data were pushed by the company to a cloud-based "proxy server", to which the BlueCallom application has access. That proxy only holds relevant data needed by the Al application to perform its job. That way BlueCallom does not need any access to the IT system of the respective company.

**RESULT:** IT is not accessed from the outside. The data can only be accessed by prompt engineers who have the respective authorization. The code for the access and the API remains under the control of the IT Team.

### × How business partners can be integrated into such an engagement.

The enterprise-level design of GPTBlue was already from its initial design prepared for partner and alliance connections. Vendors or distributors can invite others to create business accounts in GPTBlue that get automatically connected to the organization of the invitee. Thanks to the 'zero subscription' business model, it can be done at any time with no budgeting. Prompts that a company is developing for their partners can be deployed to a partner's library and will be reviewed and approved there. The race for more productivity will be expanded not only inside an organization but also to its alliances and partners.

RESULT: Business Partners can be onboarded at no cost and very quickly and easily. Prompt distribution also means productivity distribution - one of the key aspects of GPTBlue.



## Initial and long-term cost

One of the novelties of Generative-AI is the way software gets paid. But in fact, it is an age-old model. The IT centers back in the 60s were unaffordable so most people purchased computer power - similar to AI today. The biggest difference however is not only the barebone compute power, but also the aggregation and continuous development of the Large Language Model (the AI) and BlueCallom just followed that concept and also charges based on consumption.

From today's experience, you can expect that the most active users utilize on average 5 powerful prompts each working day. That's roughly 100 per month. A standard prompt roughly costs 5 cents to execute. Powerful prompts may end up costing 12 cents, sometimes even 20 cents. The average user will use more towards 50 prompts a month and they may cost more like 7 cents. **Budget between \in 5.00 and \in 15.00 per user per month (only when used).** 

Long-term prices will go down but capabilities will go up so that cost may be rather stable. Consumption, however, will go up twice as fast so assume you will need to perhaps calculate costs doubling. However, you will WANT to pay more because **the employee hour is already worth more than the Al cost in an entire month.** Hence our saying: Pay-for-Gain.

## Lessons learned

\_ There are several lessons we learned:

#### ★ Leadership

The earlier the leadership gets involved, the faster the project gets momentum. The old saying "The pace of the leader determines the speed of the rest" is still a key in understanding execution leadership. Learning: The earlier leadership is involved, the faster you will see results.

#### **Expertise**

While the fear of lacking AI expertise is very understandable, at present there are no experts anywhere in the world. We are all learning together. Organizational expertise is different. When large organizations with different leaders and different objectives come together, it usually requires diplomacy. Success is also here the best advisor. We learned that organic growth is more successful than enforced implementation.

**Learning:** Lacking AI Expertise should not be the issue. A lack of organizational understanding may be a challenge.

#### **×** Prompt Quality

The best prompts are written by people with a good sense of communication and economics. Generative-AI prompts are great for assisting in tasks and delegating work. Writing better text is nice, but writing a perfectly personalized text is better. Writing perfectly personalized emails to a hundred thousand customers is more than a productivity gain - it is something that was impossible before. Having AI assess contracts and write better contracts is a good thing. But writing situation-focused individual yet legally unbreakable contracts is something that was never before feasible.

**Learning:** Look for that edge in every prompt - and keep in mind every prompt can be developed over time. Develop it over time.

### X Customer Data

It's clearly a monster at the beginning. But the strategy to compile data and make them available in a "Proxy Server" is far less intimidating. Yet, the existing convolution in company data that exists in 100% of all companies is by far the largest challenge. Manual data preparation at first before it is automated is the best way to go. Running the Al internally turns out to be an option. The overhead cost is relatively speaking even bigger than SaaS versus on-premise.

**Learning:** Using a proxy server between internal IT and external AI is quick and makes visible which parts of data preparation need to be automated. And that is where also AI can be a significant help.

#### **×** Prompt Proliferation

Being open to letting people explore the new world and prompt away is the best start you can make. Of course, in no time you will have thousands of prompts floating around. Written by 'who knows' and stored 'somewhere' with a 'kind of great' productivity. And who knows? Nobody wants a new bureaucracy just because that is all we know. Also, Prompts can be managed, maintained, and further developed in a more open, more networked environment than what we are used to. A Multi Library AI Prompt Network was a very good decision because nothing is overloaded and the AI system itself can help find a prompt somebody has written, anywhere in the network has written.

**Learning:** Centrally observed, decentrally organized and individually created seems to be the winning formula for long-term prompt management.

### $\times$ A great team adopts AI from within.

Almost everybody heard it: "Al is not replacing jobs. But those who use Al will replace those who don't." Stimulating a culture where the more advanced team members help others adopt Al is extremely helpful. Leadership is often described as the act of empowering teams to achieve what they did not believe they could. Help people understand that the competition is in the market not in the team. People will learn very quickly how much work can be delegated to an Al and how much more time this allows for more important things to be created.

Learning: Don't convince the team to use AI, inspire them to experience it for themselves.

#### X Partner Onboarding

It is more a sales or marketing effort than a technical challenge. Mainly to make sure that there is a value proposition for the partners. Don't make it completely for free. Free makes people quickly suspicious. Also, provide an agreement that the partner's data, in particular the data of their customers, are safe and don't get 'leaked through'. Create powerful prompts before the first partners get onboarded. **Learning:** Allow any partner to connect and benefit from the productivity gain you can provide. The shared economics would suggest that.



## Conclusion

## Productivity

Never has it been easier to boost productivity. And yet - somebody needs to set it in motion, lead the shift and ensure that the productivity can be experienced and measured. It remains to be a human effort to get to that enhanced productivity.

### Prompts

It's good to understand that the PROMPT is the most strategic part of the connection between the human mind and the artificial intelligence. The better the prompt, the more valuable the outcome. Writing prompts is the business creativity of the future.

### Prompt library network

To prevent the unwanted proliferation of prompts, libraries are essential. Larger companies will want entire networks of libraries for very different user groups, yet organized so that prompt search and management is easy for internal and external access.

### Data access

"Time is money, information is wealth". Data are the raw form of information. The real wealth is created when data are turned into information. No other tool is more powerful than AI to turn data into human-understandable information.

### Partner leverage

Inducing productivity into partner organizations is yet another, new and disruptive concept of BlueCallom. While the interests and benefits are on both sides, vendors and distributors often have a better overview of how to generate productivity gains

### \_ Tools

GPTBlue was created with a single purpose in mind: Creating a tool for leveraging Generative-AI that allows the fastest and most effective way to interact with a Large Language Model. The focus is on the positive experience of productivity and success.

### Economics

The new "Zero Subscription" business model is especially helpful when the software clients are free of charge and the cost is only occurring when productivity can be generated. In particular, when it comes to partner and alliance integration.

# How to go from here:

\_\_\_\_ GPTBlue's exceptional design allows you to try it out at the entire magnitude of the project. If you have a similar situation and find this case study inspiring, reach out to our experts and jointly explore what we could do for you.

## Resources

#### × Videos

You will find a growing Video Library on our website.

### $\times$ Try it out

Feel free to explore <u>GPTBlue</u> on your own. You can login at any time and create your account. You will get the idea of how it works pretty quickly.

### × Events

You will find us at conferences and exhibitions We provide monthly <u>Knowledge Transfer Webinars</u> Or just come by our office in Zürich - we always have a good cup of coffee for you.

## Hashtags

#GenerativeAI #GenAI #AI #InducedProductivity #CommercialPrompts #HighProductivityPrompts #HighPerformancePrompts #PromptFraming #PromptManagementSystem #PromptLibraryNetwork #BlueCallom #GPTBlue #BluePrompt #AINetBuilder #AIGIazz #AINativePlatform #AIPromptFraming





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