

HONNE SENSE

LEADERSHIP AND INNOVATION THAT INSPIRES,
TECHNOLOGY THAT CONNECTS



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EDITORIAL

Today, technology is no longer the starting point, but the consequence of a clear vision. The organizations that truly move forward are not those that accumulate the most tools, but those that know how to turn ideas into capabilities that work every day.

Artificial Intelligence holds a central place in this conversation—not as a promise, but as a responsibility. Adopting it requires structure, sound judgment, and a deep understanding of the business. But AI does not operate on its own. It needs reliable data, architectures capable of scaling, people willing to change, and an operation prepared to anticipate rather than merely react.

In this volume of Honne Sense, we explore that complete journey: how to transform resistance to change into momentum, how to design systems that process information at scale, and how to evolve operations so that technology truly supports the business.

Real transformation does not happen in a single project or a single decision. It is built when vision is translated into action, when technology is integrated with purpose, and when operations allow everything to function consistently.

At Honne, we believe that this balance is what turns innovation into results that endure.



Claudia Cantú
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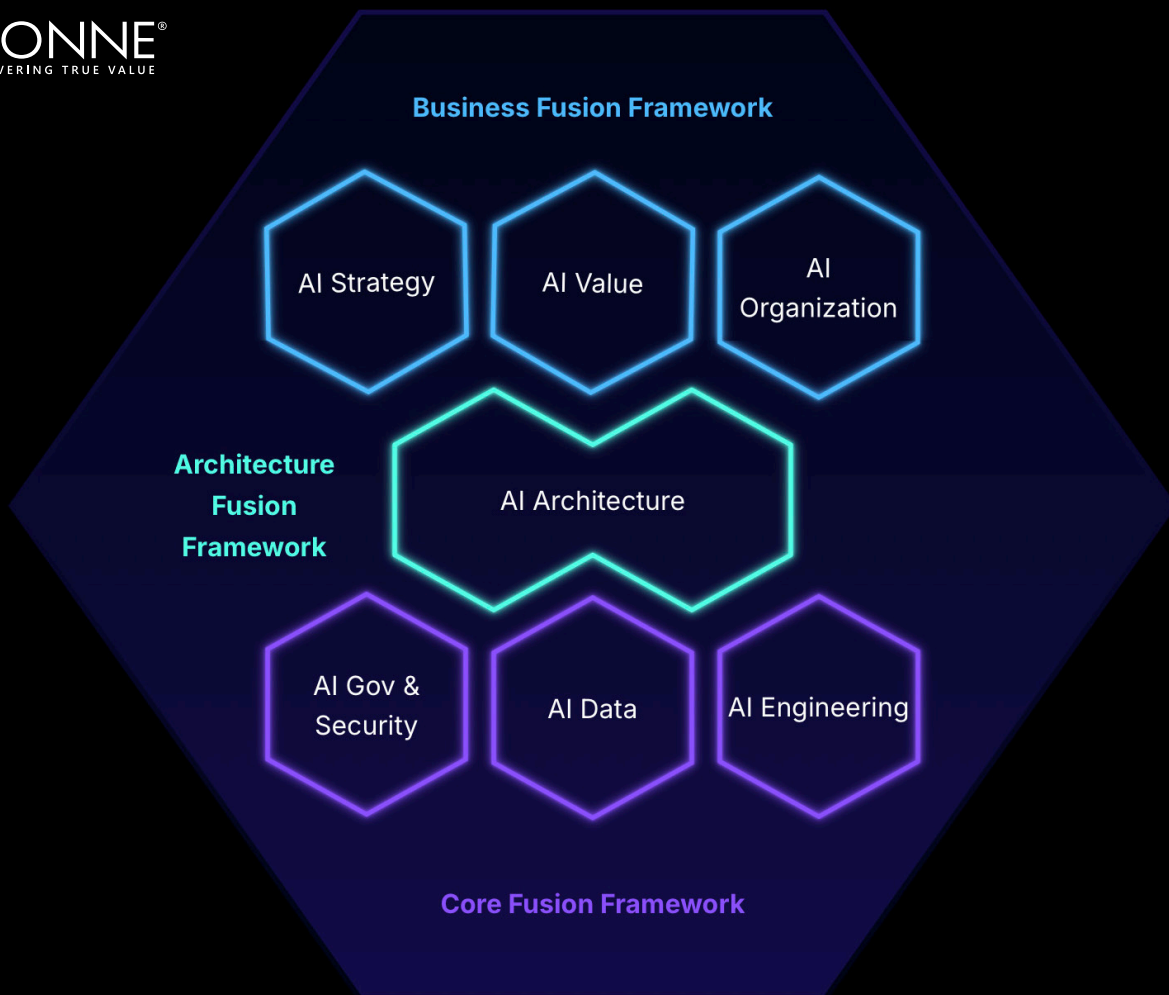
AI FUSION: THE MEETING POINT BETWEEN BUSINESS VISION AND ARTIFICIAL INTELLIGENCE

EXECUTIVE SUMMARY

Artificial Intelligence has ceased to be an experiment and has become a strategic enabler. Without a clear structure, most initiatives fail. AI Fusion by Honne is a comprehensive model that connects strategy, architecture, and technology to adopt AI with order, value, and scalability. Its three pillars and seven dimensions guide organizations from vision to operation, turning AI into a sustainable business capability.

With AI Fusion, companies can move forward with clarity and discipline, ensuring that every step generates real impact and that AI is integrated responsibly, governed, and aligned with the business. It is a structured path to transform innovation into measurable and lasting results.

- Business vision and AI
- The AI Fusion model
 - o Business Fusion Framework
 - o Architecture Fusion Framework
 - o Core Fusion Framework: the technological backbone
- The three pillars as an integrated system



Artificial Intelligence has become the new frontier of business competitiveness. What were once isolated experiments are now strategic conversations among CEOs, business leaders, and technology executives seeking tangible results. In this new landscape, organizations no longer ask whether they should adopt AI, but how to do so responsibly, at scale, and with real impact. Although the technology is available, much of its value is lost due to lack of strategy, insufficient data, improvised architectures, absence of internal capabilities, and incomplete governance models. The reality is clear: AI does not fail because of a lack of technical talent, but because of a lack of structure.

In response to this context, we created AI Fusion by Honne, a comprehensive model that helps companies adopt AI with a holistic vision that connects strategy, technology, data, organization, and value. AI Fusion is not a set of tools or a standalone methodology; it is an enterprise architecture designed to integrate Artificial Intelligence into operations, scale it in an orderly way, and turn it into a sustained growth lever. Its purpose is to accompany the organization from the moment an idea emerges until that idea becomes a solution operating with quality, governance, and measurable results.

The essence of AI Fusion lies in its ability to integrate all the capabilities required to adopt Artificial Intelligence in a real, disciplined, and sustainable way. The model is organized around **three main pillars**—**Business Fusion Framework, Architecture Fusion Framework, and Core Fusion Framework**—which represent the alignment between **strategy, architecture, and technology**.

Within these three pillars, the seven dimensions that make up the complete model are articulated: **Strategy, Value, Organization, Architecture, Data, Engineering, and Governance & Security**. Each dimension fulfills a specific role, but all operate as a living system that evolves with the organization.

1. BUSINESS FUSION FRAMEWORK: THE STRATEGIC PILLAR

This pillar addresses the fundamental questions: *Why use AI? What value will it generate? How should the organization be structured to adopt it?*

It brings together the **Strategy, Value, and Organization** dimensions, which collectively define the direction, priorities, and human structure that enable AI to move from intention to results.

Strategy: the vision that sets the direction

Every AI adoption must begin with a clear, shared vision. Without a strategy, efforts become fragmented, duplicated, or disconnected from the business.

AI Strategy establishes a realistic assessment of current capabilities, opportunities, risks, maturity, and prioritization. It connects ambition with feasibility and creates a narrative that aligns all areas around a common purpose.

Value: turning vision into impact

Strategy only becomes meaningful when it translates into results.

AI Value evaluates use cases, prioritizes initiatives, balances quick wins with strategic bets, and validates assumptions through controlled pilots. This dimension ensures that AI is a smart investment, not an experimental exercise.

Organization: the structure that sustains adoption

Organizations do not fail due to a lack of technology; they fail due to a lack of preparedness.

AI Organization designs roles, collaboration models, skills, culture, and co-creation mechanisms between business and technology. It is the dimension that makes transformation sustainable.

2. ARCHITECTURE FUSION FRAMEWORK: THE ARCHITECTURAL PILLAR

This pillar defines how AI becomes a reality under real operating conditions.

It integrates the Architecture dimension, responsible for designing the technological foundation that enables scalability, resilience, and evolution of the AI ecosystem.

Architecture: the platform that enables solid scaling

This is where cloud infrastructures, integration patterns, interoperable platforms, DevOps/MLOps practices, deployment pipelines, resilience schemes, and technical governance mechanisms are designed.

Without this foundation, any AI solution will be fragile or costly to maintain. With it, the organization can accelerate, experiment, and operate without friction.

3. CORE FUSION FRAMEWORK: THE TECHNOLOGICAL PILLAR

For AI to work day to day, a solid operational core is required. This pillar combines the Data, Engineering, and Governance & Security dimensions, which represent the technical and operational discipline of the model.

Data: the quality that determines performance

AI Data turns enterprise information into a strategic asset by establishing standards for quality, traceability, security, privacy, and availability.

This is where data lakes, vector databases, pipelines, metadata, and processes are structured to ensure AI operates with reliable, up-to-date, and continuously monitored information.





Engineering: turning ideas into real solutions

AI Engineering takes initiatives from concept to production. It integrates agile practices, MLOps, testing, validation, versioning, and model monitoring. This discipline enables rapid experimentation, controlled scaling, and the long-term maintenance of robust solutions.

Governance & Security: the trust that enables scale

AI can only grow if trust exists.

This dimension establishes ethical, regulatory, security, monitoring, and traceability principles that protect the organization and ensure responsible decision-making.

It does not slow down innovation; it enables it by reducing risk, providing clarity, and ensuring models operate within defined criteria.

The three pillars as an integrated system

The three components —**Business Fusion Framework**, **Architecture Fusion Framework**, and **Core Fusion Framework**— function as an interconnected model:

- **Business Fusion Framework** ensures strategic alignment and value.

- **Architecture Fusion Framework** defines the structure that makes AI viable.

- **Core Fusion Framework** enables continuous, secure, and scalable operations.

Together, these pillars act as the nervous system of the model: they coordinate, sustain, and connect every dimension so that AI ceases to be an isolated effort and becomes a permanent business capability.

Adopting AI is not a technological exercise; it is a profound business transformation. AI Fusion is the architecture that enables organizations to walk this path with order, vision, and discipline. Its seven elements and two transversal axes create a comprehensive model that accompanies organizations from strategy to operations, ensuring that every step delivers real and sustainable value.

The companies that will lead the next decade will be those that adopt AI in an intentional, structured, and business-connected way. AI Fusion is the model that will take them there.

THE TRUE VILLAIN OF COMPANIES... AND HOW TO TURN IT INTO AN ALLY

By Carmen Alvarado, Change Management and Customer Experience Lead at Honne.

In the business world, we often blame processes, legacy technology, or even the infamous Excel file that decides not to save right when you need it most. But rarely do we point to the true villain that slows organizational progress.

That villain is called: **"We've always done it this way."**

It's a silent but powerful character. It doesn't wear a cape, yet it has the ability to shut down any initiative with a single phrase: "Why change if it works this way?"

At Honne, we believe the time has come to face this villain. Not through confrontation, but through a strategy that inspires evolution. Because Change Management is not about imposing new rules—it's about unlocking

potential, updating beliefs, and proving that moving forward is not a risk... it's an opportunity!

THIS IS WHERE THE STORY BEGINS

In every organization, this discreet villain coexists, clinging to what is familiar. It has the power to stop ideas before they are born and to neutralize innovation with nothing more than a raised eyebrow. Its magic lies in keeping everything the same, even when "the same" is no longer enough.

The good news is that this villain is completely transformable—and the most powerful weapon is not processes or tools... it's people.





THREE FORCES CAPABLE OF TRANSFORMING THE VILLAIN

To conquer “We’ve always done it this way,” teams don’t need extraordinary skills. They simply need to activate three essential capabilities:

- Curiosity, to dare to ask: “What if we did it differently?”
- Openness to learning, without fear of mistakes and with a willingness to experiment.
- A positive attitude, because teams that allow themselves lightness move faster.

At Honne, we are convinced that change is not imposed; it is inspired. That’s why we apply our **WOW Change Experience** approach, where change is experienced in a light, close, and non-rigid way.

HOW DO WE DO IT?

- Through storytelling that connects, explaining the why before the how.
- With practical and clear training, without endless courses or technical jargon that disconnects.

- With continuous recognition, because small advances generate big movements.

And this is where the story takes an interesting turn, the villain doesn’t disappear... it transforms. It goes from “We’ve always done it this way,” to “We’re always improving,” and finally to a powerful mindset: “What if we try something new?”

WHEN AN ORGANIZATION EMBRACES CHANGE:

- Technology is truly used
- Processes flow
- People engage
- And ideas take off

Because Change Management is not a battle between the past and the future—it’s an invitation to evolve together.

If your company is about to implement new platforms, processes, or ways of working, we are ready to support you. At Honne, we don’t just design change—we make it livable, adoptable, and memorable!



Carmen Alvarado, is an expert consultant in methodologies, change management, and innovation. With more than 25 years of experience, she has led service management and organizational culture improvement strategies, increasing satisfaction among both internal and external customers.

DESIGNING SYSTEMS CAPABLE OF PROCESSING MILLIONS OF EVENTS WITH BIG DATA ARCHITECTURES

By Jorge Bonilla, Cloud Solutions Engineer at Honne.

Organizations today generate massive amounts of information: internal operational data, environmental signals, regulations, transactions, sensors, applications, and more. To extract value from this diversity and speed, architectures are required that can process events in real time and store information in a distributed and scalable way.

The concept of Big Data, popularized in the 1990s by John Mashey and formalized by Doug Laney with the “3 Vs” (Volume, Variety, and Velocity), describes precisely these needs. Today, other key Vs are added, such as **Veracity** (data quality and relevance) and **Variability** (unpredictable spikes). In general, any project that requires handling large volumes, non-conventional data, or near real-time processing is a Big Data project.

TRENDS AND PROJECTIONS FOR EVENT ARCHITECTURES (2025–2030)

The ecosystem of event-oriented and streaming technologies continues to grow rapidly:

- **Event-Driven Architectures (EDA):** CAGR close to 18% between 2025 and 2033, driven by IoT and the need for

real-time decision-making.

- **Event Stream Processing (ESP):** Expected to grow between 16% and 18% annually, reaching between USD 3–3.3B by 2030.

- **Streaming Analytics:** Market projected to reach USD 7.7B by 2030; broader estimates place it at over USD 150B by 2035.

- **Data Engineering Services:** Could reach USD 187B by 2030, with growth above 15%.

These trends highlight the importance of designing architectures capable of processing millions of events in an elastic and reliable manner.

FUNDAMENTAL CHARACTERISTICS OF A BIG DATA ARCHITECTURE

Horizontal scalability: Volume is addressed by adding nodes, not by buying larger machines. Technologies such as **Kafka, Cassandra, Hadoop, Elasticsearch, and Spark** were designed with this principle in mind. The key lies in partitioning, load distribution, and balanced growth.

Real-time processing: Traditional batch processing is not sufficient for millions of events. Engines such as **Flink, Kafka Streams, Spark Streaming, or AWS Kinesis** are required, offering low latency and flow control (backpressure).

Distributed storage: Data must tolerate failures and remain available. Technologies such as **HDFS, S3, BigTable, Cassandra, ClickHouse, and data lakes** are commonly used.

High availability and resilience: Includes replication, fault tolerance, and the elimination of *single points of failure*.

Consistency vs. availability (CAP): In ingestion systems, **AP** is often prioritized, while transactional systems tend to favor **CP**.

GENERAL ARCHITECTURE FOR PROCESSING MILLIONS OF EVENTS

A modern Big Data architecture typically consists of four layers:

1. Ingestion layer

Captures and distributes millions of events per second. Key technologies: **Kafka, Kinesis, Pub/Sub, NATS**. Characteristics: partitioning, replication, durability, and backpressure. Kafka stands out for its efficiency and ability to handle millions of messages per second.

2. Processing layer

Transforms, enriches, or correlates events.

Models:

- **Batch** (Spark)
- **Streaming** (Flink, Kafka Streams, Spark Structured Streaming)

Typical tasks: data cleansing, window-based aggregation, correlation, and alert generation.

3. Storage layer

Designed based on analytical, latency, or long-term needs.

- **High-performance analytics:** Druid, ClickHouse, BigQuery, Snowflake, Redshift
- **Long-term storage:** Data lakes (S3, GCS, HDFS) using Parquet/Avro/ORC formats
- **Low latency:** Cassandra, ScyllaDB, Redis

4. Exposure layer

Delivers information through APIs, connectors, dashboards, or real-time ML systems.

KEY ARCHITECTURAL PATTERNS

Lambda Architecture: Combines batch and streaming to balance speed and accuracy.

Kappa Architecture: Eliminates batch processing; everything is handled as streaming. Simpler and better suited for millions of events.

Event-Driven Architecture (EDA): Applications react to events in real time rather than direct calls.





CHALLENGES IN DESIGNING SYSTEMS FOR MILLIONS OF EVENTS

Backpressure: Slow components can create bottlenecks. Modern technologies handle this natively.

Proper partitioning: A poor partition key leads to hot partitions and limits scalability, especially in Kafka or Cassandra.

Latency vs. consistency: More replicas increase durability but can also increase latency. Balance is required.

Cost control: Processing millions of events can scale rapidly in public clouds; FinOps is essential.

Observability: Requires metrics, distributed tracing, logs, and queue lag monitoring to detect issues before they impact operations.

MOST WIDELY USED TECHNOLOGIES IN THE INDUSTRY

Ingestion: Kafka, Kinesis, Pub/Sub

Processing: Flink, Spark Streaming, Kafka Streams

Storage: S3/Parquet, BigQuery, Cassandra, ClickHouse

Indexing: Elasticsearch, OpenSearch

Real-time ML: TensorFlow Serving, MLflow, SageMaker

Designing Big Data architectures capable of processing millions of events requires more than good tools; it demands disciplined engineering, a deep understanding of distributed patterns, and informed decisions around consistency, resilience, and cost.

Organizations that adopt elastic, event-centric architectures can scale from thousands to millions of events per second, enabling advanced capabilities such as real-time analytics, intelligent automation, and immediate responses to demand spikes.

These architectures do more than solve volume challenges—they become a strategic enabler for competing in a world where data is generated—and must be processed—at high speed.



Jorge Bonilla, is an engineer with more than 35 years of experience in infrastructure, data management, custom development, and high-performance analytics. He has led projects where technology becomes a key enabler for improving efficiency and results. In recent years, he has specialized in advanced analytics and observability, working with large-scale data architectures to strengthen operations and decision-making within organizations.

OPERATING SO NOTHING STOPS: HOW WE EVOLVED FROM RESOLVING INCIDENTS TO PREVENTING THEM

By Martin Ramos, Cloud Operations Manager at Honne.

Today's technology operations demand more than availability; they require adaptability. As a result, more and more organizations have moved toward multicloud and/or hybrid architectures that combine resilience, flexibility, and efficiency within a single operating model. However, this same model has increased operational complexity to the point where relying solely on incident response is no longer sustainable. The challenge is clear: evolve from a "firefighting" approach to a preventive one that allows us to anticipate failures and operate with greater stability. Operating so that "nothing stops" is more than a goal—it is a strategic responsibility.

FROM REACTION TO PREVENTION

Traditionally, IT teams have been measured by how quickly they resolve incidents. But in today's operations, where multiple services, regions, and providers interact, the priority shifts from resolving issues to preventing them

from happening in the first place. Proactivity reduces outages, costs, and operational load, allowing teams to focus on strategic improvements.

OBSERVABILITY AS AN ESSENTIAL CAPABILITY

To be proactive, we must first understand why incidents occur and how to prevent them from happening again. This transforms Operations teams into strategic partners for their customers' business areas.

Observability combines metrics, logs, traces, and events to provide a clear view of distributed systems.

This turns operations into a proactive, data-driven activity focused on continuous stability.





AUTOMATION: THE ENGINE OF MODERN OPERATIONS

In mission-critical environments, human speed is no longer enough. Automation enables:

- Fast and consistent remediation.
- Standardization of deployments and configurations.
- Reduction of operational errors.

The next step is **self-healing**, where systems correct or isolate failures without human intervention. This frees up operational capacity and reduces the risk associated with manual processes.

PROACTIVE ANALYSIS: FROM INCIDENT TO LEARNING

Every incident is an opportunity to learn. Through practices such as post-mortem analysis and the application of best practices to architecture, deployment, and security, organizations can get ahead of recurring patterns.

Leadership plays a key role in consolidating a preventive operating model. This involves:

- Promoting a culture oriented toward observability, automation, processes, and standards.
- Integrating development, operations, and security teams under a DevSecOps model.
- Investing in training and modern resilience practices.
- Defining indicators that value prevention as much as resolution.

It is essential to stop measuring only how many incidents are resolved and start measuring how many are prevented thanks to proactive decisions.

Operating so that nothing stops means anticipating. Stability depends less on reacting quickly and more on preventing failures from occurring. We have the responsibility to guide this transition toward more automated, observable, and proactive operating models. By doing so, we not only reduce incidents, but also strengthen our ability to innovate and compete in a constantly evolving digital environment.



He holds a Bachelor's degree in Computer Science from UANL and has more than 27 years of experience in IT. A specialist in operations, customer service, and team management, he holds certifications in public cloud platforms, process frameworks, and UNIX. His combination of technical expertise and leadership drives operational efficiency and the development of high-performance teams.



ABOUT HONNE

Honne is a leading company that, through its consulting services, implements advanced technological solutions that automate processes, optimize operations, and reduce costs. It provides world-class support and operations through its Cloud Centers of Excellence (CCoE), which operate 24/7/365. Its comprehensive and personalized approach ensures that each client receives solutions tailored to their specific needs, thus boosting their efficiency and competitiveness in the market. With a constant commitment to innovation, Honne is dedicated to transforming the way organizations operate and grow in the digital era.

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