Taking a Human Centered Approach to Automation

(h[s]) HYPERSCIENCE®

Human centered automation is the philosophy that guides the way we innovate for our customers. We consider the human's role in every step of the automation process, and we believe the most important part of AI and ML isn't the machines, but the people.

Organizations around the world see automation as the key to unlocking better business outcomes, but are challenged with expanding current initiatives at the pace the market demands. That's why we believe a human approach is needed.

Our mission is to connect human and artificial intelligence to solve tomorrow's automation challenges today, creating better outcomes for companies, customers, and the world.

The Challenge Hindering Organizational Growth

Manual processes are slow, expensive, and error-prone, leading to data inaccuracies and poor decisions that have a fundamental human impact—such as mistakenly denying a disability claim or rejecting a mortgage loan application.

The Time Is Now

Increased competition, labor shortages, and changing customer expectations have forced organizations to rethink their business processes. Additionally, recent market changes spurred by the COVID-19 pandemic have only increased the sense of urgency. In their efforts to become more resilient and adaptable, organizations are exploring ways to accelerate digital transformation, seeking a competitive advantage that will protect against future unexpected changes.

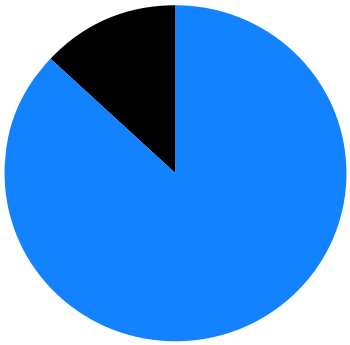
The Limitations of Current Approaches

Current automation approaches fail to accelerate digital transformation and unlock human potential when it's needed most. Early rules-based automation technologies struggle to cope with unexpected surges in volume, complex use cases, or changing market conditions.

A Story Behind Every Form 1/2

Nearly 5.2 million veterans file claims with the Department of Veterans Affairs in the U.S. These large files come in a variety of formats—often handwritten. Historically, the agency manually processed the incoming documents, resulting in a backlog of more than 200,000 claims.

For John, a disabled Vietnam War Veteran, this meant waiting several months to receive benefits—leading to serious financial instability. Anna, a department employee who joined the agency to help Veterans, spends most of her day re-entering data from handwritten forms into a case management system. Because she struggles to keep up with the volume of incoming claims, she feels like she's failing to make a difference in the lives of Veterans.



Unfortunately, automation initiatives frequently fall short of customer expectations, and software makers share much of this responsibility.

According to HFS's recent research, 87% respondents say that more value is needed from current automation investments. Furthermore, respondents noted that only 60% of their automation initiatives actually meet their expectations.

A more sustainable, human centered approach is needed to unlock the process improvements and operation agility needed to keep pace in today's business landscape.

Human Centered Automation

Human centered automation represents an evolutionary shift in how automation is approached. This next step examines how work flows through an organization, and how workforces are changing as the world becomes more digital. At Hyperscience, we emphasize the human perspective of every problem and solution we encounter. Our approach is informed by three key insights that have guided—and will continue to guide—the development of our platform.

01 Humans and Machines Work Better Together than Apart

Our ML gives humans higher-quality data and more time to use it.

Accuracy is our number one goal. While other vendors lead with a "full automation" approach that fails to account for human involvement and overlooks the importance of data quality, our platform automates against a required accuracy level—set by you. When one incorrect digit can be the difference between an application being approved or rejected (and a loved one facing financial instability), putting accuracy first ensures customer needs are met.

We believe that most automation will remain partial—at some point it will fail, and will require human intervention. This is called human-in-the-loop (HITL) interaction, and is critical to verifying that the work done by machines complements and enhances the skills and abilities of humans, and vice versa.

The Hyperscience platform is exceptionally good at recognizing its own uncertainty, and, based on the defined accuracy target, knowing when to involve a human. It collects this input through an intuitive, user-friendly interface that facilitates seamless collaboration between humans and machines. This human input, in turn, is used to fine-tune the underlying machine learning models.

02 Business Processes Run on Content

Extracting accurate data from this content is the critical first step of process automation

Most business processes start with some sort of document or data input (such as a purchase order, invoice, or contract, for example) that comes in a wide variety of formats. PDFs, emails, images, and other unstructured document formats connect customers with companies and citizens with government agencies, but this extremely valuable knowledge is locked in formats machines can'tunderstand—it must be accurately (and efficiently) processed to extract the data for downstream usage.

Machine learning bridges this gap, turning unstructured data into structured, machine-readable data without significant human intervention. Having accurate, complete data is the critical first step of process automation; it helps reduce costs and errors and improves your time to decision-making. The Hyperscience platform delivers the most accurate data extraction in the industry, period. Legacy products and niche players can't come close.

03 Our Customers' Processes are Complex and Dynamic

Our solutions evolve with your organization

Our customers are unique with diverse tech stacks and dynamic business processes. Modularization and ease of integration are critical to helping your organization maximize the return on your existing automation investments and make your operations more agile and responsive to future market factors.

With Hyperscience, your employees help customize and train ML models according to your specific processes. For organizations facing a skilled labor shortage, it unlocks the ability to complete higher-value work with the same (or-fewer) resources. It also shapes your business into a digital, agile workforce that evolves to meet future market needs. Most importantly, for your customers, the result is fewer clerical errors, faster decision making, and a better customer experience overall.

Changing Lives for the Better

Through a human centered approach, the Hyperscience Platform has the ability to help you transform how you approach and prioritize work, resulting in fewer mistakes and faster decisions, better access to services, happier customers, and increased employee satisfaction. Today, Hyperscience helps organizations and government agencies around the world automate core processes, positively impacting the lives of millions. Our customers can approve insurance claims faster, pay vendor invoices on time, and provide citizens with improved, timely services, all while reducing manual labor.

A Story Behind Every Form 2/2

Anna received an automated notification that a claim had been filed by John, a Veteran facing financial hardship. John was relieved when he received a phone call from Anna reassuring him that his claim would be approved in a matter of days, restoring his financial stability and peace of mind. Anna feels fulfilled at work because she made a difference for someone in need.

In 2020, the Department of Veterans Affairs implemented Hyperscience to get rid of the backlogs. Now they are currently:

- ✓ **Automating ~1.5 million hours** of manual document processing labor each year
- ✓ **Saving over $45 Million** that can be reallocated to other programs
- ✓ **Giving 800 employees** more meaningful work experiences

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