fathom™

Process

Manufacturing Productivity— AI Driven

Reduce OPEX
Increase Margins
Maximize Asset Utilization

THE CHALLENGE: MANUFACTURING 4.0

Manufacturing leaders face critical new market & environmental challenges. Rising material costs. A shortage of skilled labor. Rapidly changing consumer preferences and expectations. And new competitors & production processes disrupting the market.

At the same time, manufacturing systems are more challenging to manage than ever. They are increasing in complexity, integrating a wide range of emerging technologies, and going truly digital— all while facing hidden process inefficiencies, changes to legacy business models, and an exploding volume of data.

Manufacturing leaders must complete a successful digital transformation to overcome these challenges and uncover this moment of hidden opportunities.

THE SOLUTION: fathom PROCESS

fathom Process is the key to successful digital transformation for manufacturing leaders.
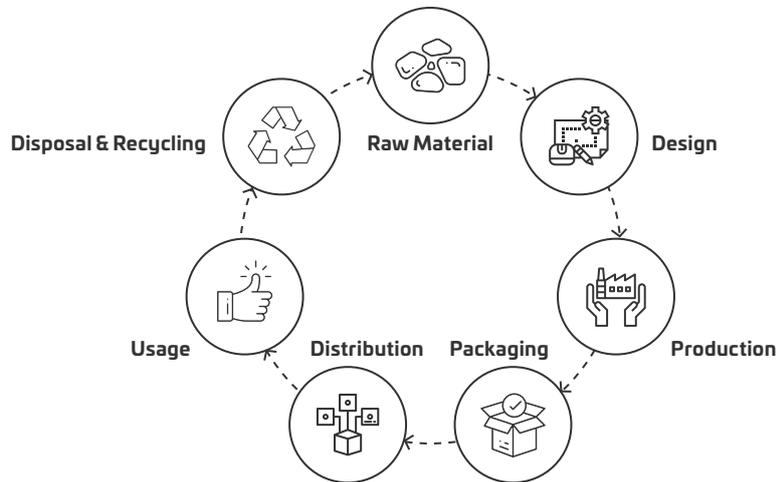
fathom Process unifies each core element of manufacturing 4.0 in a single platform. It simplifies the inherent complexity of creating and managing a smart manufacturing value chain, and gives manufacturing leaders the tools to move through a faster, easier, and more complete digital transformation.

With fathom Process, manufacturing leaders will:

- Automate core production & governance processes.
- Adapt fundamental business models to new market realities.
- Deploy a diverse range of connected devices.
- Connect all machines, systems, and products.
- Monitor & manage an escalating volume of data.
- Derive actionable insight from operational metrics.
- Simplify and streamline day-to-day work.

fathom Process

WHAT fathom PROCESS GIVES YOU

fathom Process gives you an industrial IoT software platform that meets the end-to-end needs of the manufacturing industry. Our platform acts as a single, central hub for your digital transformation strategy and execution.

Disposal & Recycling · Raw Material · Design · Production · Packaging · Distribution · Usage

fathom PROCESS: YOUR OUTCOMES

Using our platform, you will gain complete visibility into—and control over—every machine, process, and product at play on your factory floor.

fathom Process will give you:

GREATER EFFICIENCY

Our platform will give you tools to find and fix inefficiencies hiding in your operations. You will remove bottlenecks in your current production processes, reduce your energy consumption, and eliminate sources of unplanned downtime.

INCREASED QUALITY

Our platform will give you the tools to continuously improve the products you ship. You will predict and prevent product defects, respond faster to customer feedback, and collect real-time data that allows you to iteratively improve production quality.

RESPONSIVE PRODUCTION

Our platform will give you nimble, flexible, and adaptive production processes. You will develop the ability to rapidly "change course" to remain aligned with evolving environmental realities, consumer demands, and factory conditions.

SAFER CONDITIONS

Our platform will help prevent workplace accidents and keep your team safe. You will leverage wearable technology, environmental sensors, and continuous monitoring of infrastructure and assets to eliminate workplace hazards before they cause harm.
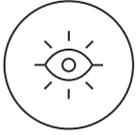
LARGE-SCALE AUTOMATION

Our platform will give you a platform to automate operations of any size and complexity. You will eliminate manual processes, streamline core tasks, and deploy & manage autonomous machines to give you true "lights out" manufacturing.

DATA-DRIVEN DECISIONS

Our platform will give you a central hub to collect data from every element of your factory floor. You will leverage our proprietary AI and ML algorithms to make sense of your data, and generate informed answers to your biggest operational questions.

fathom™ Process

HOW IT WORKS: OUR CORE FRAMEWORK

We simplify, accelerate, and complete digital transformation by following a simple—but powerful—three step framework.

INSIGHT

We collect all of your data into a single central hub. We give you accurate, end-to-end, real-time visibility into every scrap of information generated by your operational and supply chains. We then package everything into a highly-personalized portal that gives you the insights you need at-a-glance.

- Monitor factory floors.
- Deploy connected devices.
- Identify operational inefficiency.
- Predict failure events.

ANSWERS

We give you data-driven decisions. We apply advanced algorithms, machine learning applications, and cutting-edge A.I. to pull value from your complex operational metrics— all in real-time. We then give you simple answers that will diagnose issues, predict outcomes, and prescribe the right path forward.
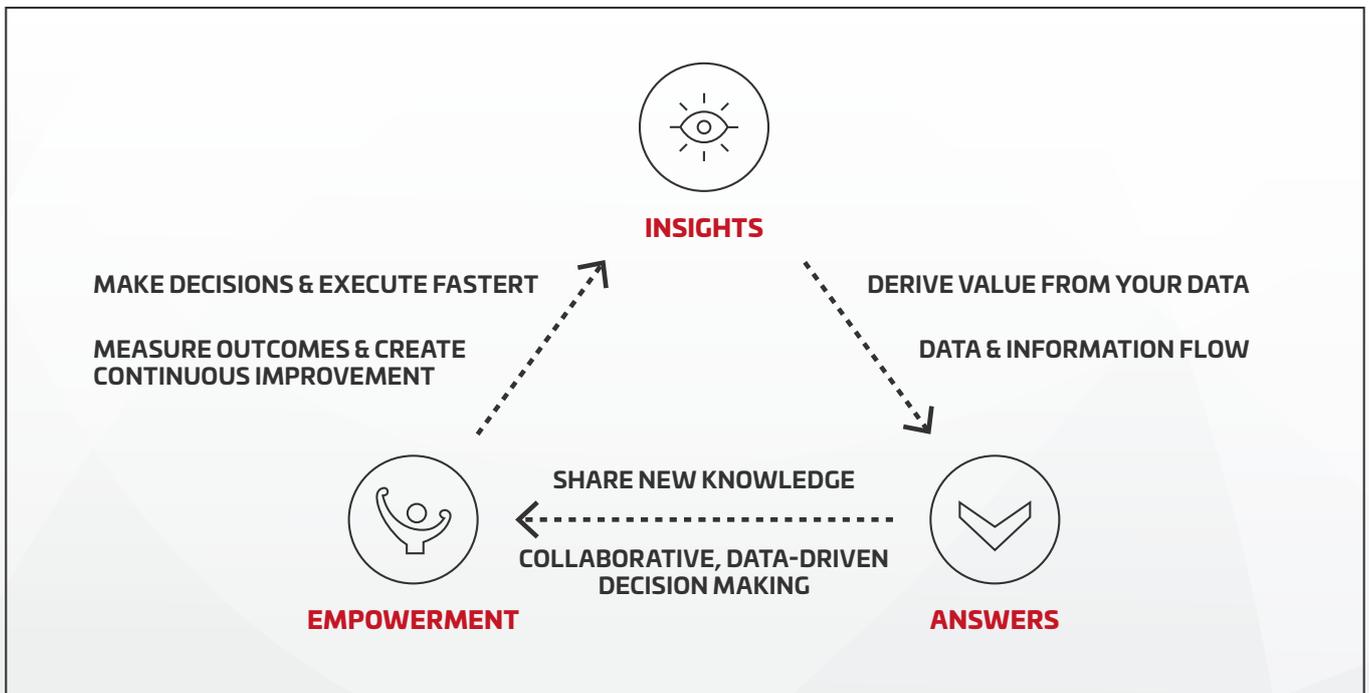
- Prevent losses.
- Adjust operations in real-time.
- Reduce downtime.
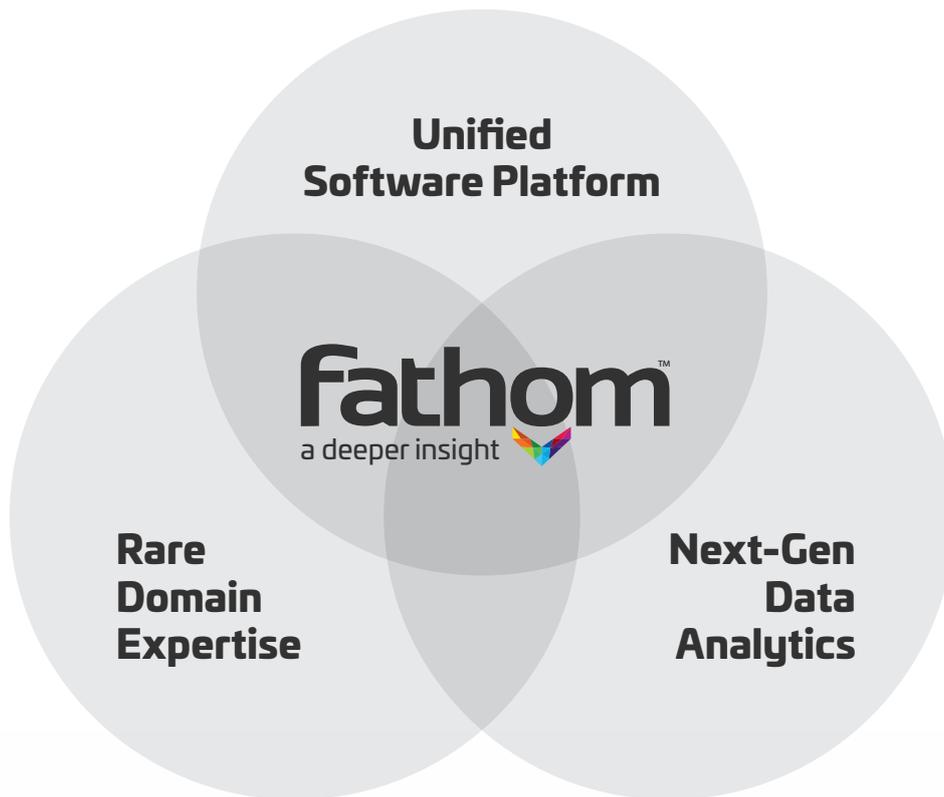- Create optimal throughput.

EMPOWERMENT

We accelerate your execution. We automate, streamline, and govern every critical action you must take to improve your KPIs. Every morning, when you open your portal, you will have everything you need to drive your performance— every insight, every answer, and every application, all from a single screen.

- Streamline operations.
- Automate processes.
- Improve production KPIs.
- Accelerate execution.

INSIGHTS

MAKE DECISIONS & EXECUTE FASTERT

MEASURE OUTCOMES & CREATE CONTINUOUS IMPROVEMENT

DERIVE VALUE FROM YOUR DATA

DATA & INFORMATION FLOW

SHARE NEW KNOWLEDGE

COLLABORATIVE, DATA-DRIVEN DECISION MAKING

EMPOWERMENT

ANSWERS

fathom Process

fathom PROCESS: A HOLISTIC SOLUTION

fathom Process is a portfolio of software platforms, domain knowledge, and analytics. By drawing from each portfolio element, we are able to evaluate and solve your complex challenges from multiple angles. By following this modular, flexible, and holistic approach, we are able to craft unique solutions that meet your unique needs.

Unified Software Platform

fathom
a deeper insight

Rare Domain Expertise

Next-Gen Data Analytics

SOFTWARE PLATFORM

Our platform—Precocity—provides the technological foundation for fathom Pipelines. Precocity is a scalable, extensible, and collaborative platform that can integrate with your existing infrastructure & applications, and connects all of your devices & data sources into one central hub. Precocity can incorporate all emerging Industry 4.0 technologies, including IoT, AI, and Big Data Analytics. Our platform is flexible, and will grow as you increase the volume of your users and scope of your deployment.

DOMAIN KNOWLEDGE

We provide subject matter experts with deep knowledge of your industry, operations, and challenges. Our experts will study your situation, select the appropriate portfolio elements, and develop a solution that meets your needs perfectly. We provide complete digital transformation advisory services that can prepare your legacy systems, processes, and infrastructure for the demands of digital manufacturing, and our experts can walk you through every step of solution design, implementation, and evolution.

DATA ANALYTICS

We work hand-in-hand with your in-house teams to derive value from the wealth of data generated by your operations. We act as partners with your own technical experts and help them solve very advanced and highly-specific problems that they lack the bandwidth to solve on their own. Our teams of data experts can help your people sort through every stage of analytics, including managing your data assets, preparing your data, funnelling it into your solution, and producing clear data-driven insights & answers.

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fathom PROCESS: A MODULAR, CUSTOMIZED SOLUTION

We are able to customize every aspect of fathom Process to fit hand-in-glove with your unique context. While the following features, workflows, and user roles provide a taste of what fathom Process can offer, we can also create entirely new algorithms, software, and processes that will integrate into your existing frameworks. Ultimately we will create a 100% unique deployment of our solution to meet your highly specialized needs.

fathom PROCESS: CORE FEATURES

DIGITAL TWINS
Create a complete virtual environment for each of your sites, assets, and processes. Reduce costs and experiment faster.

IOT INTEGRATION
Attach sensors and diagnostics tools to your equipment. Visualize your entire production process from a dashboard.

SMART FACTORY FLOORS
Ensure every element of your factory can "talk" with each other. Connect all systems, equipment and team members.

MULTI-SITE CONNECTION
Fold all local, regional, and global sites under a single platform. Unify their systems, monitoring, and performance metrics.

EDGE COMPUTING
Apply advanced analytics directly at the edges of your network. Reduce latency and build a faster connected factory.
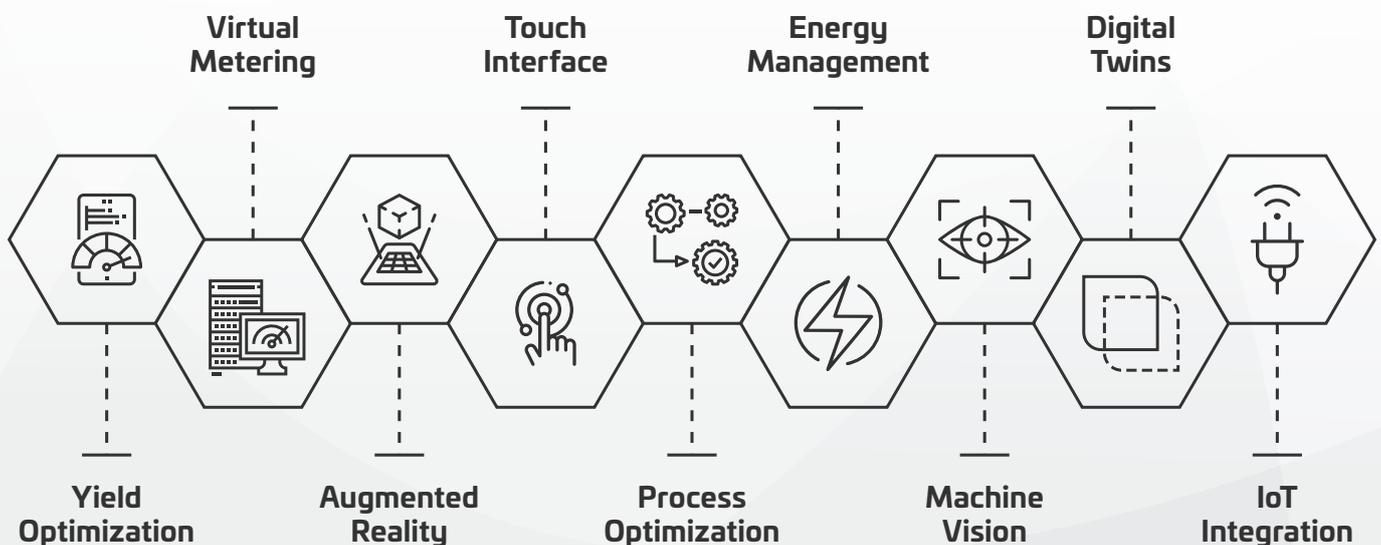
ASSET MONITORING
Collect operational data from every item on your floor. Monitor performance and respond to issues in real-time.

PREDICTIVE ANALYTICS
Proactively improve performance. Anticipate spikes in demand, spot failing equipment, and accurately stock material.

STANDARDIZED OPERATIONS
Perform the same processes the same way—everywhere. Provide uniform workflows, insights, and governance.

Virtual Metering   **Touch Interface**   **Energy Management**   **Digital Twins**

Yield Optimization   **Augmented Reality**   **Process Optimization**   **Machine Vision**   **IoT Integration**
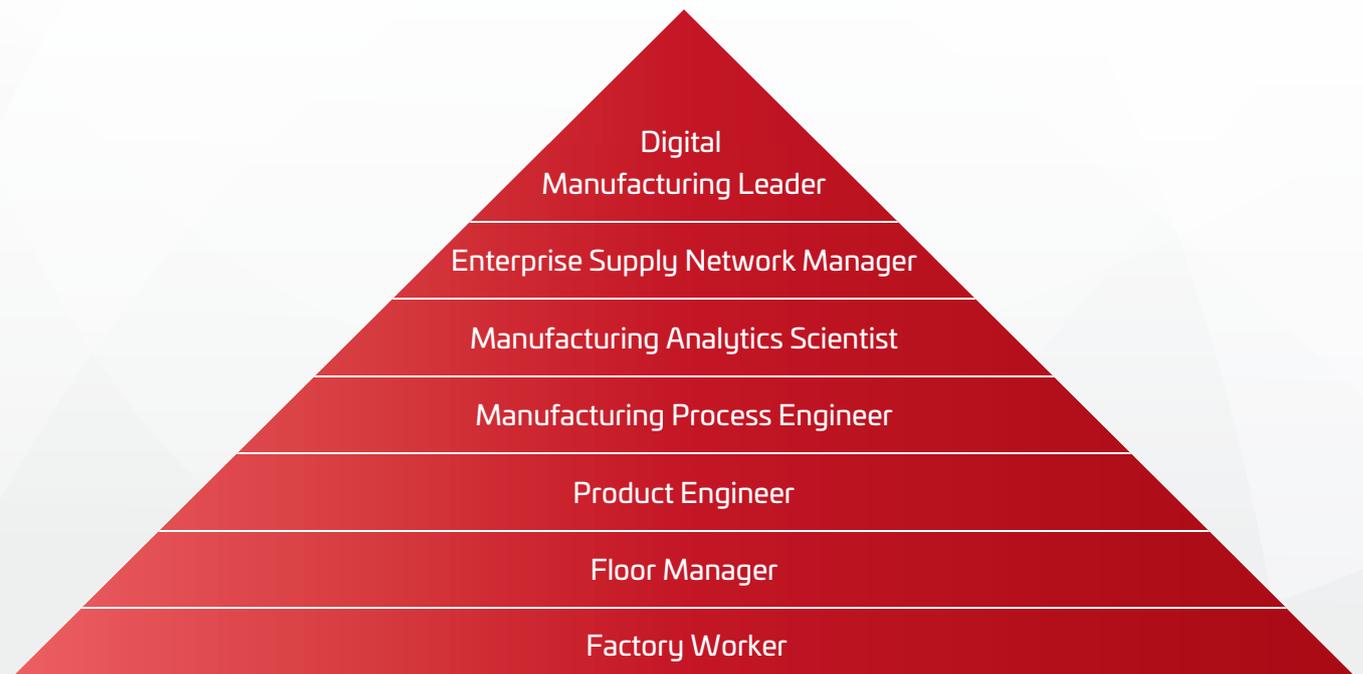
fathom Process

AI-DRIVEN WORKFLOWS

fathom Process combines deep domain knowledge, software expertise, and big data analytics into a core set of workflows tailored to large-scale manufacturing. Our platform transforms legacy processes into dynamic, fully-digital workflows that integrate with real-time data sets to drive improved insights, decisions, and actions. fathom Process offers each of these workflows through seamlessly blended desktop and mobile environments that can be accessed anytime, anywhere.

Our proprietary workflows include:

Asset Reliability	Virtual Metering	Yield Optimization
Process Optimization	Energy Management	Predictive Asset Maintenance
Machine Vision & Perception Monitoring	Augmented Reality & Touch Interface Deployment	Production Forecasting & Performance Optimization

WHO fathom PROCESS IS FOR

fathom™ meets the needs of large-scale manufacturing companies operating in any industrial vertical. Our platform cascades capabilities and benefits through multiple roles within the chain:

Digital
Manufacturing Leader

Enterprise Supply Network Manager

Manufacturing Analytics Scientist

Manufacturing Process Engineer

Product Engineer

Floor Manager

Factory Worker

fathom™
Process

TAKE THE NEXT STEP

SCHEDULE A CONSULTATION

Meet with one of our experts for a no-obligation discussion, where we will:

- Review your existing systems and processes.
- Evaluate what's working and what could improve.
- Discuss how fathom™ could drive better outcomes.

BOOK A DEMO

Let us walk you through a live demonstration of our Precocity platform, where we will:

- Show you the platform's look, feel, and usability.
- Preview our most relevant and unique functions.
- Brainstorm ways to customize Precocity to meet your needs.

PARTNER WITH fathom™

Start a conversation to see if there's a good mutual fit between you and fathom™, including:

- Learn more about funding our next round of growth.
- Join our ecosystem of partners, allies, and gurus.
- Apply to work on a part-time, full-time, or contract basis.

CONTACT US AT: contact@fathoms.io
LEARN MORE AT: www.fathoms.io

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ABOUT fathom™

fathom™ is a technology firm that can accelerate, simplify, and enhance your digital transformation. fathom™ specializes in driving digital transformation for the entire industrial value chain, but applies a flexible, highly-customized framework that can adapt to the unique needs of any vertical, enterprise, or use case.

HOW fathom™ OPERATES

fathom™ applies a new approach to solutions delivery—one that drives outcomes across the entire industrial value chain. fathom™:

Is a Boutique Firm, that Delivers Enterprise Impact:
fathom™ can scale their people, processes, and products to handle enterprise-class projects, while keeping their core organizational structure nimble, creative, and responsive.

Develops Highly-Personalized Solutions:
fathom™ customizes every solution to meet the unique needs of each client— adapting everything from the visualizations of individual dashboards to the structure of each solution's underlying architecture.

Applies Cross-Industry Best Practices:
fathom™ solves problems and captures opportunities for many different industries, and can create breakthroughs by taking the lessons learned from one industry and applying them to clients in others.
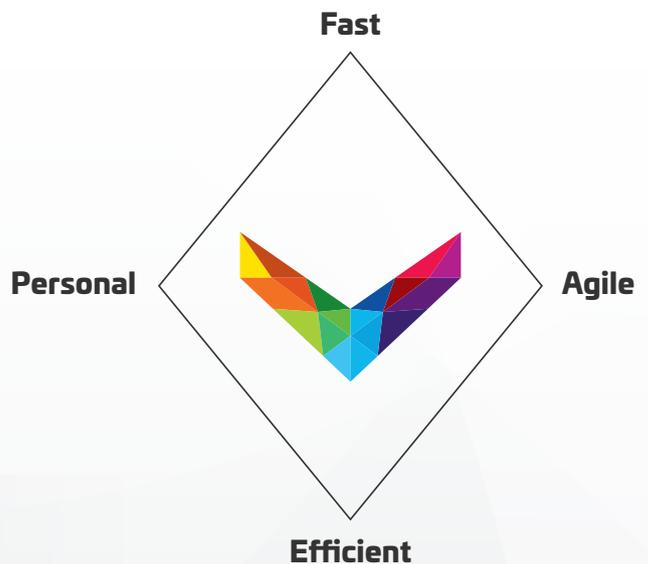
PARTNERING WITH fathom™

Working with fathom™ is smooth, straightforward, and simple. fathom™ leverages a lean organizational model, making every engagement:

Fast: Work is completed without multiple rounds of validation across multiple departments.
Agile: Solutions can rapidly change course or incorporate new capabilities as needs evolve.
Efficient: Operating without corporate bloat, layers of complexity, or unnecessary overhead.
Personal: Executive teams provide direct access, and champion client projects—start to finish.

SCHEDULE YOUR CONSULTATION: info@fathom.com

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