Market Guide for Software Engineering Intelligence Platforms

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Initiatives: Software Engineering Technologies; Build a World-Class Software Engineering Organization

Software engineering intelligence platforms provide visibility of team activities with customizable dashboards and support metrics frameworks like DORA and SPACE. Software engineering leaders should use these platforms to drive improved productivity and value delivery.

Overview

Key Findings

- The software engineering intelligence platform market is small but growing. Software engineering leaders find it difficult to navigate this evolving market, where many vendors offer similar capabilities.
- Software engineering leaders are under increasing pressure to use data to demonstrate that their teams are delivering value. This data is often either unavailable or distributed across many different engineering systems making it difficult to collect and analyze.
- Software engineering leaders are wary of adding other engineering systems into an already crowded and fragmented landscape. They are concerned that such a solution may be perceived by their teams as an effort to micromanage, and about how this might impede or erode trust.

Recommendations

- Use a proof of concept (POC) engagement process to verify that the metrics and insights generated by a software engineering intelligence solution can be used to drive changes that lead to measurable improvements.
- Improve collection and analysis of software engineering data by using a software engineering intelligence platform to track key indicators of product success — such as value creation and developer productivity — and to demonstrate the value delivered by their teams.
- Avoid the perception that these platforms are yet another micromanaging tool by evaluating solutions with teams and practitioners as well as managers and leaders, and ensure that the chosen platform serves the needs of both groups.

Strategic Planning Assumption

By 2027, the use of software engineering intelligence platforms by software engineering organizations to increase developer productivity will rise to 50%, compared to 5% in 2024.

Market Definition

Gartner defines software engineering intelligence (SEI) platforms as solutions that provide software engineering leaders data-driven visibility into the engineering team's use of time and resources, operational effectiveness, and progress on deliverables. This data-driven visibility enables software engineering leaders and their teams to make smarter business decisions, which leads to the delivery of increased value to customers. SEI platforms must be able to ingest and analyze the signals created by common engineering tools and systems. They must provide rich, tailored, role-specific user experiences to enable leaders to more easily query data to identify important trends and gain contextual insights.

Software engineering intelligence platforms are used by software engineering leaders and their teams to better understand how software solutions are being built and delivered. Teams can more easily see where they are spending time and how they are approaching code quality (e.g., code reviews), and better understand team flow through key metrics like deployment frequency and cycle time. These platforms serve as a single source of truth for engineering data, providing a unified, comprehensive and transparent view of the engineering processes. Key engineering metrics for delivering digital products include team productivity, business alignment, software quality and operations effectiveness.

Software engineering leaders are coming under increasing pressure from C-suite leaders to provide more quantitative measures of value delivery. This is a challenge for software engineering leaders, as the data that describes the engineering process is distributed across a large number of engineering systems, such as version control, work tracking, test management and even communication tools. Software engineering intelligence platforms address this problem by making it easier to collect data from engineering systems, by providing off-the-shelf integrations to the most commonly used systems. Once the data has been collected and organized, these platforms generate engineering insights, which help software engineering leaders and teams to tell the story of software delivery using quantitative data.

Organizations can use SEI platforms to better understand their software development life cycle and gain insights into how their teams build software. These organizations can use these insights to continually adjust, experiment with and improve their processes and practices, yielding improved business alignment, higher quality software and happier, more productive teams.

The must-have capabilities for this market include:

- A means to collect data from leading DevOps tools (e.g., tools to plan, create, test and deploy software)
- A means to analyze the collected engineering data and generate metrics and insights which, when acted upon, will drive improved outcomes
- A means to generate reports and dashboards of key metrics and trends, across the engineering organization

The standard capabilities for this market include:

- An extended library of integration solutions enabling frictionless collection of engineering data from a wide variety of systems
- A more extensive set of metrics and insights, including support for leading framework metrics such as DevOps Research and Assessment (DORA)
- An ability to report the relationship between metrics; for example, to track quality with velocity
- Ability to monitor trends, benchmark against industry averages, and set targets or guardrails for important metrics

 Rich, flexible, web-based dashboards to view data trends, including the ability for role-based access, such as the ability to provide curated paths for different audiences (e.g., engineering manager versus product manager)

The optional capabilities for this market include:

- AI/ML-driven capabilities for example, the ability to "fill in the gaps" for incomplete or unstructured data (e.g., finding patterns in incomplete Jira data). Other examples might be building predictive models for engineering capacity or how long it will take to complete onboarding new team members.
- Large language model (LLM) powered conversational-style interfaces (chatbots) the ability to interact with the SEI platform using natural language prompts (e.g., to ask "show me the teams with the best deployment frequency").
- Automated and integrated developer prompts based on activities performed in order to improve the flow of value — examples include Teams/Slack integration and messaging when check-ins are too large, have too many comments or skip review stages.
- Next-level recommendations moving beyond dashboards of metrics, and insights, to solution fragments, such as patterns, scripts and templates that could be deployed to ameliorate identified bottlenecks or inefficiencies.

Market Description

Software engineering intelligence (SEI) platforms provide software engineering leaders with data-driven visibility into the engineering team's use of time and resources, operational effectiveness, and progress on deliverables.

In this way, these solutions help answer two important questions we frequently hear from Gartner clients:

- How do I gain better visibility of the activities engineering teams are engaged in?
- How do my engineering teams compare to others?

As shown below in Figure 1, software engineering intelligence platforms ingest and analyze data from common engineering tools and systems, such as version control solutions like Microsoft GitHub or work-tracking solutions like Atlassian Jira. These platforms typically collect only metadata, such as when a code change was committed, or when a ticket was created or closed. Based on an analysis of this data software engineering intelligence platforms are then able to build a richer, more complete picture of the activities performed by the software engineering team.

Figure 1: How Software Engineering Intelligence Platforms Work

Software engineering **Engineering data** intelligence platforms Issue Incident management management Velocity/ CI/CD flow **Business** Version Quality insights control assurance Security Organizational **Business** effectiveness value Monitoring Communication tools tools Source: Gartner

How Software Engineering Intelligence Platforms Work

Gartner

Software engineering intelligence platforms typically provide rich, tailored, role-specific and web-based user experiences that enable software engineering leaders and their teams to more easily query data to identify important trends and gain contextual insights.

Gartner classifies the reporting and insights produced by Software engineering intelligence platforms into four broad categories.

1. **Organizational effectiveness**: Using surveys or other quantitative metrics, determine if teams are healthy and productive. Are team members working together well? Do they trust each other to deliver?

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- 2. **Velocity/flow**: Is the team optimizing the flow of work through the development value stream, from concept to business value?
- 3. **Quality**: Is the team delivering a high-quality product? Is technical debt being tracked and managed?
- 4. **Business value**: Is the team delivering something of value to its customers, partners and workforce? Are the things that software engineering teams are spending effort on (stories and tasks, for example) the key strategic objectives?

Some vendors are more focused on different aspects of these four categories, however, the leading vendors in this space have broad coverage across all four.

Market Direction

Software engineering leaders are implementing software engineering metrics strategies, based on industry best practices and benchmarks, to identify ways to help their teams improve delivery. Gartner has seen a steady increase in interest from clients on topics such as software engineering intelligence, engineering metrics, developer productivity, and developer experience, with 2023 client interactions more than double those of 2022.

Key trends and competitive dynamics affecting the market (see Note 1) include:

- Scaling the adoption of SEI platforms will depend on the vendors' abilities to clearly define their value propositions and deliver valuable features over and above what clients already have available. Tools and platforms currently used in the software engineering organization include:
 - DevOps platforms (see Magic Quadrant for DevOps Platforms).
 - Enterprise agile planning tools (see Magic Quadrant for Enterprise Agile Planning Tools).
 - Value stream management platforms (see Market Guide for Value Stream Management Platforms).
 - Internal developer portals (see Market Guide for Internal Developer Portals).
 - Work management tools (such as Atlassian Jira and Microsoft Azure DevOps)

These tools already provide metrics, but in a fragmented way. Vendors of these tools are investing in software-engineering-intelligence-type features, such as delivering more-sophisticated dashboards and reporting, and insights and recommendations. This competitive pressure will impact the survivability of some SEI platform vendors, and may lead to a consolidation of the market by contraction or acquisition.

- SEI platforms will be increasingly adding Al-powered features to differentiate offerings with the aims of reducing cognitive load and manual tasks, delivering a superior user experience, and helping users take action based on informed predictions. Examples include:
 - Use of GenAl to augment insights with practical suggestions.
 - Embedded conversational interfaces that provide the ability to ask questions and get insightful answers. User interface expectations are changing, dashboards and reports alone do not provide enough value.
 - Bots to automate admin or tedious tasks.
 - Forecasts for delivery parameters, such as dates and costs, to help leaders diagnose potential problems early, enabling proactive rather than reactive management strategies.
- Personalization and customization: The ability to tailor the platform to specific organizational needs and the needs of different user personas will make these platforms indispensable in the daily workflow.

Key adoption drivers in the next two to three years include:

- Visibility into software engineering data and trends: This will be crucial for boosting developer productivity and the delivery of business outcomes. In Gartner's Software Engineering survey for 2024, the software engineering leaders who have been most successful at meeting their own performance objectives reported higher usage of tools that track and report software engineering metrics for increasing developer productivity. 1
- Rationalization of the tooling landscape: There are opportunities to replace one or more existing tools with a software engineering intelligence platform, and make it the main dashboard engineering leadership is using daily.

Continued focus on efficiency: In Gartner's Software Engineering survey for 2024, 62% of software engineering leaders are expecting their operating budgets to increase in the next 12 months. ¹ This will bring some investment into efficient and effective execution in the form of tools to help software engineering teams improve delivery.

Market Analysis

Software engineering intelligence platforms provide software engineering leaders with data-driven visibility into the engineering team's use of time and resources, operational effectiveness, and progress on deliverables.

Common use cases for software engineering intelligence platforms are:

1. Reporting and benchmarking: Software engineering leaders are under increasing pressure from business stakeholders to provide data-driven answers to questions, such as: Where do engineering teams spend their time? Is engineering effort aligned to business objectives; and How does team performance compare to industry standards? These are first-order questions that organizations have been trying to answer with varying degrees of success for years. The challenge is that the data required to answer these questions is often distributed across numerous software engineering tools and DevOps platforms. Collecting and conditioning this distributed and nonhomogeneous data so that it can drive effective dashboards and reporting solutions, or provide benchmarking capabilities, has the potential to be a significant and expensive undertaking.

The more established vendors in this market understand the need to solve this essential problem and have responded with features that focus on the collecting, reporting and benchmarking of data. This is supported by the fact that most vendors surveyed for this Market Guide (84%), identified engineering management and leadership as their primary users.

2. Insight discovery: Collecting and normalizing data from a wide variety of engineering systems allows leaders to generate insights that are based on multivariate analysis. For example, how does quality change as velocity increases? Do defect rates spike around certain events, like deployments? Useful insights can be used to drive better outcomes. Delivering insights from engineering data delivers second-order value above reporting and benchmarking.

3. Recommendations to drive improvements: Finding insights is important but it is still up to an experienced software engineering leadership team to know what action to take to drive improvements. Delivering insights that are backed by recommendations should be the ultimate goal of an SEI platform. The insight may be that lead times are longer than industry averages, but the real value comes in knowing what remediations will lead to improved outcomes. For example, a tool might recommend a policy deployment pattern or organizational structure based on analysis of the collected data.

Given that this market is still maturing, early entrants are primarily focused on the first use case, and are targeting solutions to engineering management and leadership, and features that are focused on collecting, reporting and benchmarking data. These features aim to enable software engineering leaders to answer questions like "What activities are software engineering teams expending time and effort on?" and "How are my teams performing compared to other teams? In other words, am I getting value for my R&D investment?"

We also note that vendors in this market — who in an attempt to differentiate itself focus on the second and third use cases to deliver insights and recommendations — do so at the expense of extensive integrations and benchmarking features. These vendors tend to be more niche but may end up delivering more innovative and ultimately more valuable benefits to clients because they provide teams with the tools they need to self-improve. This is where it is likely the bulk of productivity gains will come from.

Representative Vendors

The vendors listed in this Market Guide do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings.

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Vendor Selection

We consider the vendors in Table 1 representative of the Software Engineering Intelligence platform market because their products are marketed and sold specifically as a software engineering intelligence platform and align with Gartner's market definition.

Representative vendors were selected based on one or more of the following criteria:

- Clients expressed interest via searches on gartner.com or asked about the vendor during inquiries.
- Vendors offer differentiated, innovative capabilities while meeting the baseline market definition and demonstrating a vision to outperform the competition.
- Vendors that have been identified as key competitors to each other in this market.

Table 1: Representative Vendors in Software Engineering Intelligence Platforms (Enlarged table in Appendix)

Vendor	Headquarters	Product
Allstacks	North Carolina, U.S.	Allstacks Value Stream Intelligence Platform
Code Climate	New York, U.S.	Velocity
Digital.ai	North Carolina, U.S.	Digital.ai Al-Powered DevSecOps
Faros Al	California, U.S.	Faros Al
GitLab	All Remote	GitLab DevSecOps Platform
Harness	California, U.S.	Software Engineering Insights
Hatica	California, U.S.	Hatica
Jellyfish	Massachusetts, U.S.	Jellyfish
LinearB	California, U.S.	LinearB SEI+
Logilica	Sydney, Australia	Logilica
Oobeya	California, U.S.	Oobeya Software Engineering Intelligence Platform
Opsera	California, U.S.	Opsera Unified DevOps
Plandek	London, U.K.	Plandek
Planview	Texas, U.S.	Planview Viz
Pluralsight	Utah, U.S.	Pluralsight Flow
Sleuth	California, U.S.	Sleuth
Swarmia	Helsinki, Finland	Swarmia
Waydev	California, U.S.	Waydev

Source: Gartner (March 2024)

Vendor Profiles

Allstacks

Allstacks is marketed as a value stream intelligence platform that helps organizations to track and improve software development for more predictable software delivery outcomes by aligning engineering output to business objectives. Mainly active in North America, EMEA, and APAC, Allstacks offers private cloud and public cloud deployment options.

Primarily targeting engineering management and leadership, Allstacks considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Work item visibility and tracking

Allstacks supports both DORA and SPACE metrics and also include process mapping and bottleneck identification as well as capacity and forecasting capabilities.

Code Climate

Code Climate Velocity is marketed as a software engineering intelligence platform that provides comprehensive enterprise visibility to boost productivity and efficiency, improve team health, and maximize engineering impact. Mainly active in the North America, Latin America and EMEA markets, Code Climate Velocity offers on-premises, private cloud and public cloud deployment options.

Primarily targeting engineering management and leadership, Code Climate considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)

- Quality metrics (e.g., defect count, code coverage)
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Benchmarking and comparisons
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

Code Climate Velocity provides enterprise level scaling and supports large-scale transformation initiatives and large complex organizations. The tool integrates with cloud and self-hosted version control systems and Atlassian's Jira Software.

Digital.ai

Digital.ai's Al-Powered DevSecOps Platform includes outcome-driven analytics and predictive intelligence to drive actionable insights across engineering teams. Industry frameworks such as DORA and flow metrics are augmented with additional metrics to support role-specific needs. Digital.ai sees the most customer engagement in North America and EMEA, and offers on-premises, private cloud and public cloud deployment options.

Primarily targeting developers and teams, Digital.ai considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Business value metrics (e.g., product revenue growth, customer satisfaction, Net Promoter Score).
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards

- Context-specific insights and recommendations
- Work item visibility and tracking
- Integrated AI

Digital.ai also extends analytics with predictive intelligence solutions that focus on optimizing and managing risk across the software delivery life cycle.

Faros Al

Faros Al supports data-driven engineering operations with a combination of out-of-the-box integrations as well as custom data collectors. Faros Al promises consolidated views of engineering data, including support for metrics frameworks like DORA and SPACE. Faros Lighthouse Al provides a prompt interface for Al-augmented data querying and chart building, as well as a workflow automation tool for automating common tasks. Mainly active in North America, and Europe, Faros Al offers on-premises, private cloud and public cloud deployment options.

Primarily targeting engineering management and leadership, Faros considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Work item visibility and tracking
- Integrated Al

The Faros platform emphasizes frictionless integration, which promises engineering insights without clients having to restructure their existing tools or processes. In addition to a standard set of prebuilt metrics and dashboards, the platform provides access to the collected raw-data and prebuilt metrics, thereby aiding metric transparency and enabling the creation of custom metrics and dashboards.

GitLab

GitLab's Value Streams Dashboard identifies trends, patterns and opportunities for improvements in the delivery of software solutions. The Value Streams Dashboard incorporates DORA metrics, value stream analytics, flow metrics and vulnerability metrics. GitLab has a global presence, but sees most customer engagement in EMEA and North America. GitLab offers on-premises, private cloud and public cloud deployment options.

Primarily targeting developers and teams, GitLab considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Role-specific customizable reporting and dashboards
- Work item visibility and tracking
- Integrated AI

GitLab offers software engineering intelligence as a feature of GitLab. Unlike many other vendors in this market, GitLab does not provide a wide range of integrations to other engineering systems outside the GitLab platform.

Harness

Harness offers software engineering intelligence capabilities via the Software Engineering Insights module in the Harness software delivery platform. It ingests data from over 40 DevOps tools to help organizations discover bottlenecks in the software development life cycle, assesses team productivity, and improves developer experience. The Software Engineering Insights module enables software engineering leaders to articulate engineering investments, improve team productivity and align their efforts to business outcomes. The product sees the most traction in EMEA and North American markets. Harness offers private cloud and public cloud deployment options.

The primary users of the product include engineering management and leadership. Harness considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage, test case creation metrics)
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking
- Integrated AI

Harness Software Engineering Insights also supports scorecards and dashboards to highlight factors that impact sprint predictability, including anomalies and unplanned work.

Hatica

Hatica is an engineering management platform that provides analytics, actionable insights and engineering workflows. It enables teams to identify and improve their business alignment and delivery velocity while maintaining the health of processes and people. Mainly active in the North American and APAC markets, Hatica offers on-premises, public cloud or private cloud deployment options.

Primarily targeting Engineering management and leadership, Hatica considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Benchmarking and comparisons
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

Hatica also provides analytics and actionable insights that plug directly into the engineering workflow as well as support for automations to help promote continuous improvement and well-being.

Jellyfish

Jellyfish positions itself as an engineering management platform, assisting organizations in aligning engineering efforts with business outcomes, promoting operational efficiency in delivery, and fostering the development of effective engineering teams. The platform achieves these goals through the analysis of data derived from issue-tracking solutions, git repositories, incident management tools and calendars. Mainly active in the North American and EMEA markets, Jellyfish offers public cloud deployment options.

Primarily targeting engineering management and leadership, Jellyfish considers itself strongest in the following categories:

Activity metrics (e.g., coding time, commits per day)

- Flow metrics (e.g., lead time, cycle time, throughput)
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking
- Integrated AI

The Jellyfish solution uses a work allocations model, which is refined and validated by a customer dataset representing a range of engineering organizations from small high-growth startups to larger corporations.

LinearB

LinearB SEI+ is a software engineering intelligence platform for research and development leaders to improve their team's operational efficiency and align with business goals. Mainly active in the North American and EMEA markets, LinearB SEI+ offers on-premises, private cloud, and public cloud deployment options.

Primarily targeting engineering management and leadership, LinearB considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations

Work item visibility and tracking

LinearB also provides a workflow automation tool (gitStream) to perform selective continuous integration and standardize code merge practices using policy-as-code to reduce bottlenecks in the code review process. Postmerge tracking and analysis measures the impact of different contribution types on software engineering metrics.

Logilica

Logilica provides software engineering leaders with the visibility to manage engineering productivity and ensure that teams allocate investments and effort to align with business priorities. The dashboard helps to visualize software delivery efficiency, identify bottlenecks, and show the distribution of work by individual or work profile. Mainly active in North America with moderate adoption in EMEA and APAC, Logilica offers on-premises, private cloud and public cloud deployment options.

The primary users of the product include engineering management and leadership. Logilica considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

The platform comes with prebuilt reporting and context-specific drill-downs for common industry frameworks including SPACE and DORA. In addition to prebuilt connectors to common DevOps tools, Logilica enables enterprises to upload data from less common software tools, spreadsheets or local databases through Logilica's open APIs, and to customize metrics and dashboards.

Oobeya

Oobeya is marketed as an engineering intelligence platform and helps organizations with over 50 engineering metrics encompassing DORA and Agile metrics. Mainly active in the EMEA market, Oobeya offers on-premises and private cloud deployment options.

Primarily targeting engineering management and leadership, Oobeya considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

The Oobeya platform uses metrics to identify anti-patterns, bad practices, bottlenecks or roadblocks in the software delivery process, which the vendor collectively calls "symptoms."

Opsera

Opsera offers software engineering intelligence via its Unified Insights module in the Opsera Unified DevOps platform. The platform offers visibility to over 150 KPIs spanning agility, security, audit and compliance, quality, IT operations, and developer productivity. Opsera sees the most traction in North America, and offers on-premises, private cloud and public cloud deployment options.

The primary users of the product include engineering management and leadership. Opsera considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Organization Effectiveness metrics (e.g., team happiness, retention)

- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking
- Integrated AI

Opsera Unified Insights contextualizes metrics by role (engineering leaders, developers, product owners or release managers, for example). The Unified Insights module is part of a broader DevOps orchestration platform that enables building and orchestrating DevOps pipelines.

Plandek

Plandek is marketed as an intelligent analytics and performance improvement platform that helps teams to ship the right features faster and accelerate roadmap delivery. Mainly active in the North American and EMEA markets, Plandek offers public cloud deployment options.

Primarily targeting engineering management and leadership, Plandek considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Business value metrics (e.g., product revenue growth, customer satisfaction, Net Promoter score)
- Benchmarking and comparisons
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

The Plandek platform promotes a metrics-led culture of continuous delivery improvement in teams to build a best-in-class delivery capability.

Planview

Planview Viz is a value stream analytics solution providing visibility into delivery processes, and alignment to business value. Planview Viz provides integrations to commonly used software engineering tools. These include source-code hosting, and issue tracking and planning tools that enable the consolidation of engineering data from diverse teams, tools, and departments. Web-based dashboards measure fully connected product value streams and improve decision making. Mainly active in EMEA and North America, Planview Viz offers on-premises, public cloud and federal cloud deployment options.

The primary users of the product include engineering management and leadership. Planview considers itself strongest in the following categories:

- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Business value metrics (e.g., product revenue growth, customer satisfaction, Net Promoter score)
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking
- Integrated AI

Planview supports a wide range of integrations including test management, agile planning, DevOps, and product management.

Pluralsight

Pluralsight Flow is marketed as an engineering transformation platform combining software engineering intelligence with research expertise to support modernization. Mainly active in the North American and EMEA markets, Pluralsight Flow offers private cloud and public cloud deployment options.

Primarily targeting engineering management and leadership, Pluralsight considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

Pluralsight supports its software engineering intelligence capabilities with an experienced team of implementers and practitioners guided by a developer success lab.

Sleuth

Sleuth positions itself as a metric tracking solution designed to bring transparency and control to the software development process. Sleuth monitors activity and flow metrics, establishing connections between engineering efforts and business value. A web-based dashboard, offering real-time insights on the health of software deployments, provides teams with actionable insights on how to improve outcomes. Sleuth's capabilities extend to identifying potential bottlenecks by tracking team progress and performance, and empowering businesses to implement smooth, reliable and frequent software updates. Mainly active in the North American and EMEA markets, Sleuth offers public cloud deployment options.

Primarily targeting engineering management and leadership, Sleuth considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Benchmarking and comparisons
- Capacity planning and forecasting
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking

Sleuth has a strong focus on DORA metrics and provides users of the platforms with automated recommendations to improve development processes based on analysis of DORA metrics.

Swarmia

Swarmia describes itself as an engineering effectiveness platform, extending visibility across three principal domains: business outcomes, developer productivity and developer experience. Swarmia provides integrations to commonly used software engineering tools such as source code hosting, issue tracking and chat applications. The platform enables close-to-real-time tracking of strategic initiatives and essential engineering metrics (including DORA and SPACE) providing software engineering teams with insights to drive continuous improvement. Swarmia offers public cloud deployment options.

Mainly active in Europe and North America, and primarily targeting engineering management and leadership, Swarmia considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Quality metrics (e.g., defect count, code coverage)
- Organization Effectiveness metrics (e.g., team happiness, retention)
- Capacity planning and forecasting
- Context-specific insights and recommendations

- Work item visibility and tracking
- Integrated AI

Swarmia also offers reports to identify anti-patterns such as siloing or too much work in progress, as well as support for developer experience features such as team working agreements, which describe how a team wants to work together.

Waydev

Waydev is marketed as a software engineering intelligence platform and helps engineering leaders and teams to make informed decisions, ship faster, and align engineering with business goals. Mainly active in the North American and EMEA markets, Waydev offers on-premises, private cloud and public cloud deployment options.

Primarily targeting engineering management and leadership, Waydev considers itself strongest in the following categories:

- Activity metrics (e.g., coding time, commits per day)
- Flow metrics (e.g., lead time, cycle time, throughput)
- Benchmarking and comparisons
- Role-specific customizable reporting and dashboards
- Context-specific insights and recommendations
- Work item visibility and tracking
- Integrated AI

Waydev provides both team and individual productivity perspectives. The "one-to-one" feature group offers several ways to track and report developer progress and performance over time.

Market Recommendations

Software engineering leaders should:

- Use this Market Guide to evaluate vendors that offer software engineering intelligence platforms and look for evidence for how these solutions can improve outcomes across the following four categories:
 - Velocity and flow
 - Quality
 - Organization effectiveness
 - Business alignment
- While evaluating vendors, prioritize team productivity metrics over individual productivity to reinforce team-first accountability.
- Evaluate software engineering intelligence solutions with teams as well as managers and leaders.
- Validate that insights on the software development life cycle can be used to drive improvements in software engineering practices and processes by trialing potential solutions with your teams and evaluating the value of generated insights as well as reporting and benchmarking capabilities.
- Assess vendors based on their depth and breadth of integrations with your existing tooling for software development, DevOps, workplace collaboration and IT service management.
- Evaluate user experience of the platform and its effect on reducing cognitive load and manual tasks.

Evidence

¹ Gartner Software Engineering Survey for 2024: This survey was conducted to identify the most important roles and skills for software engineering leaders and the change in their demand and importance since last year, understand how talent is sourced generally and for acquiring necessary artificial intelligence (AI)/machine learning (ML) skills, and what tools are seen to increase developer productivity and the metrics used to measure them. It also examines how software engineering leaders anticipate change in their operating budgets and the cost management steps taken. It further aims to identify the quality and testing techniques and programming languages software engineering leaders currently use and/or plan to use; their frequency of usage of UX design, user research and Al in generating components of user experience; and its impact on user satisfaction, accessibility and usability. It also intends to understand the software engineering leaders' responsibilities they find most difficult, the career paths available for senior-level individual contributors and how they are set up, how organizations attract and retain top performers in those career paths, and what management training is offered to staff. The survey was conducted online from October through December 2023 among 300 respondents from the U.S. (n = 241) and U.K. (n = 59). Qualifying organizations operated in multiple industries (excluding the IT software industry and education sector) and reported enterprisewide revenue for fiscal year 2022 of at least \$250 million or equivalent, with 63% over \$1 billion in revenue. Qualified participants were highly involved in managing software engineering/application development teams and the activities they perform.

Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

Note 1 Gartner's Initial Market Coverage

This Market Guide provides Gartner's initial coverage of the market and focuses on the market definition, rationale for the market and market dynamics.

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

Use the Right Metrics in the Right Way for Enterprise Agile Delivery

How to Measure and Improve Developer Productivity

Market Guide for Value Stream Management Platforms

Magic Quadrant for DevOps Platforms

Market Guide for Internal Developer Portals

Essential Software Metrics: DORA

Is DORA, SPACE or DevEx the Right Software Metrics Framework?

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Table 1: Representative Vendors in Software Engineering Intelligence Platforms

Vendor	Headquarters	Product
Allstacks	North Carolina, U.S.	Allstacks Value Stream Intelligence Platform
Code Climate	New York, U.S.	Velocity
Digital.ai	North Carolina, U.S.	Digital.ai Al-Powered DevSecOps
Faros Al	California, U.S.	Faros Al
GitLab	All Remote	GitLab DevSecOps Platform
Harness	California, U.S.	Software Engineering Insights
Hatica	California, U.S.	Hatica
Jellyfish	Massachusetts, U.S.	Jellyfish
LinearB	California, U.S.	LinearB SEI+
Logilica	Sydney, Australia	Logilica
Oobeya	California, U.S.	Oobeya Software Engineering Intelligence Platform
Opsera	California, U.S.	Opsera Unified DevOps
Plandek	London, U.K.	Plandek
Planview	Texas, U.S.	Planview Viz
Pluralsight	Utah, U.S.	Pluralsight Flow

Sleuth	California, U.S.	Sleuth
Swarmia	Helsinki, Finland	Swarmia
Waydev	California, U.S.	Waydev

Source: Gartner (March 2024)