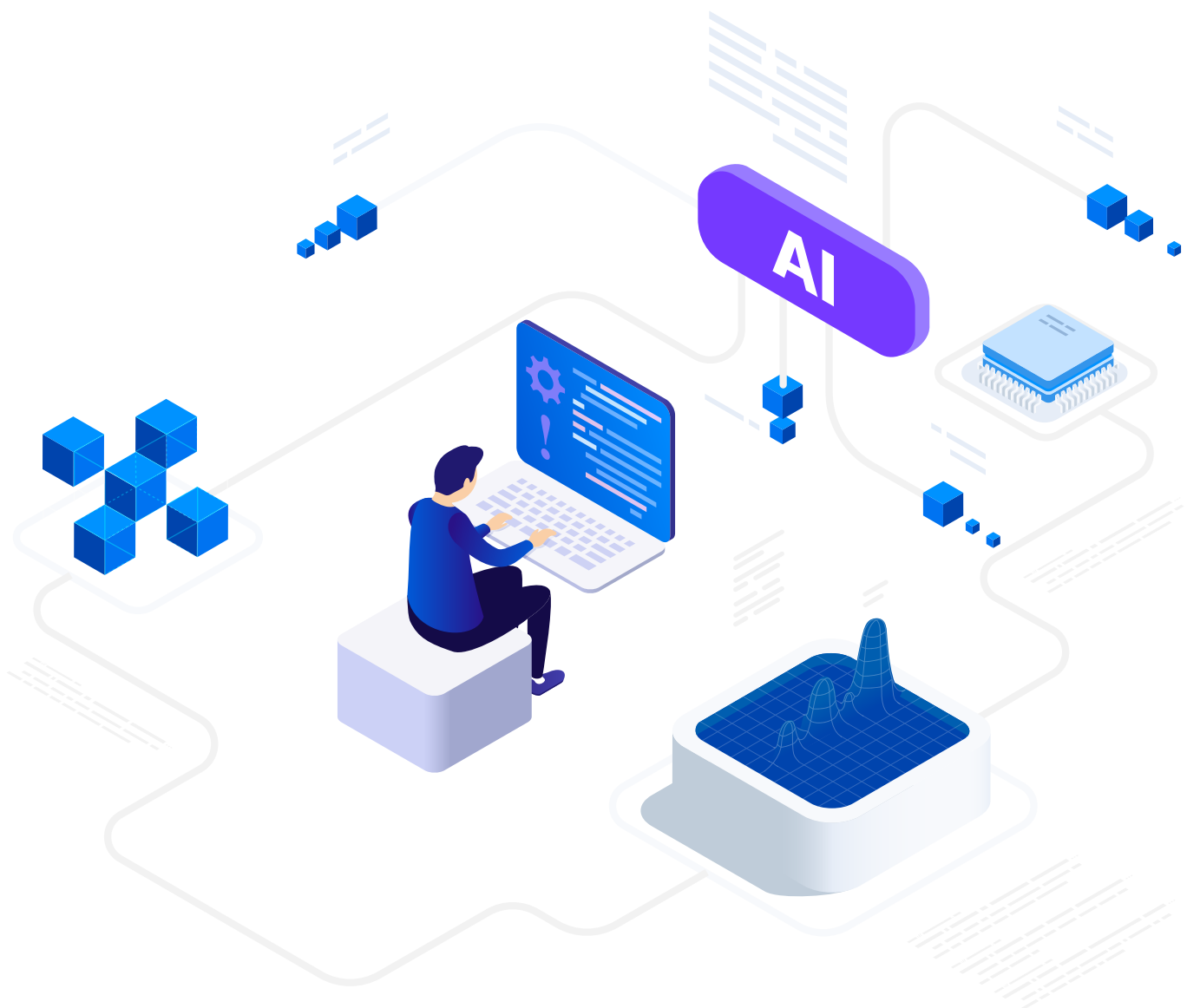


# Skan<sup>AI</sup>

## MAINTAINING COMPETITIVE **INSURANCE OPERATIONS** IN THE ERA OF **GEN AI**

DEC 2024



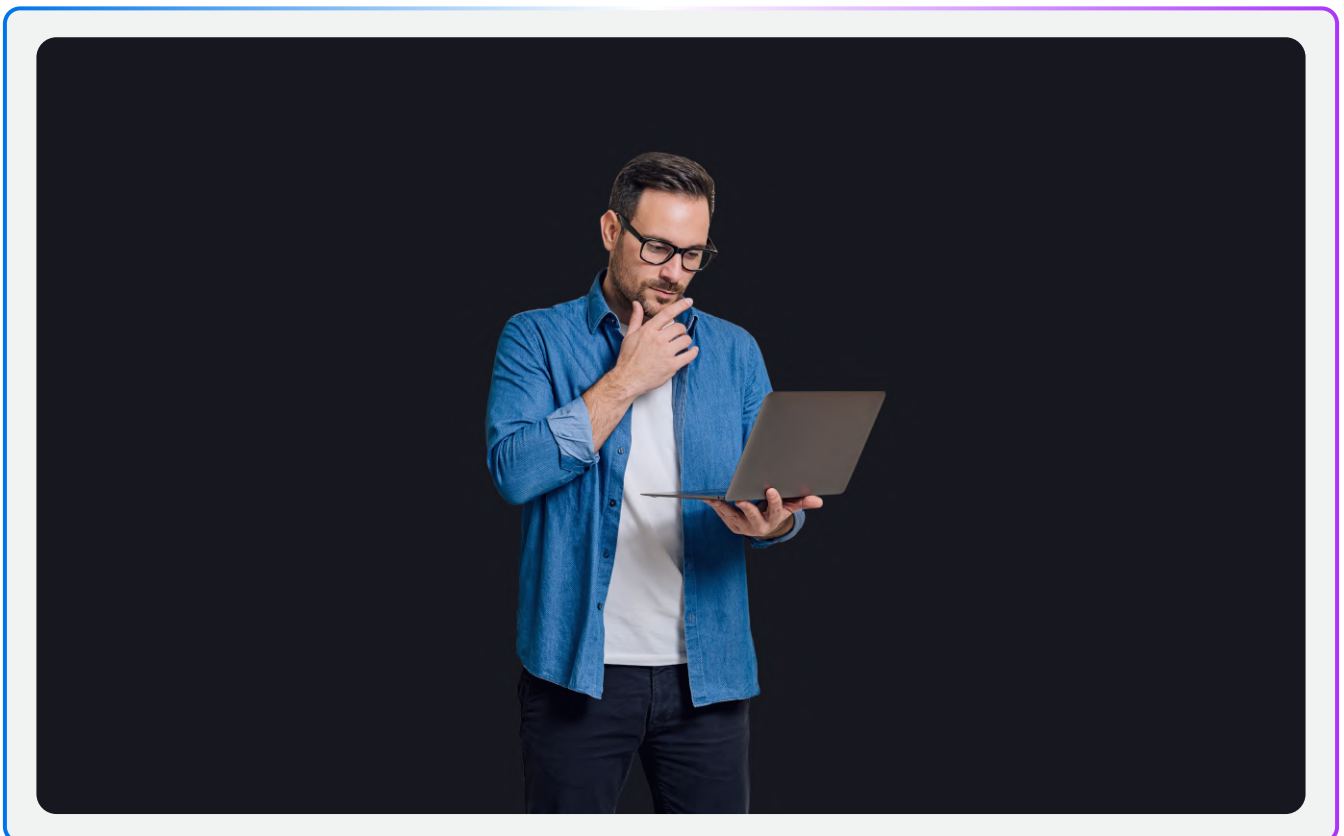
## Executive Summary

Recent technological breakthroughs have significantly enhanced the efficiency of insurance operations, particularly in areas like claims management and underwriting. Observations from leading insurers adopting these technologies indicate productivity gains of 30-40%, along with processing time reductions of up to 40% across various workflows.

These advancements empower insurers to not only streamline operations but also enhance decision-making, ensuring quicker, more accurate claims processing and underwriting. This positions them to meet rising customer expectations and maintain competitiveness in an increasingly data-driven and automated marketplace.

For insurers willing to embrace these Gen AI-driven solutions, the potential for long-term growth and operational agility is clear. However, those who delay adoption may soon find themselves at a strategic disadvantage, struggling to keep pace with more agile competitors.

As the industry evolves, it's imperative for leadership to recognize the value of process intelligence technologies in driving operational efficiency and staying ahead in a market where speed, accuracy, and cost efficiency are paramount. Insurers who move early will reap the rewards of increased market share and improved profitability.



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# Key Operational Challenges Impacting Efficiency and Costs in Insurance

## 1. Limited Visibility into End-to-End Processes Results in High Claims and Policy Issuance Costs

Insurers often rely on a disjointed mix of legacy systems, custom applications, and manual tools like email and chat platforms. As a result, process inefficiencies arise, with experienced operators completing tasks 2x to 3x faster than their less experienced counterparts.

Despite investments in automation technologies like Gen AI, Robotic Process Automation (RPA), and Business Process Management (BPM), low adoption rates persist due to a lack of clear insight into the reasons behind inefficiencies and the barriers to broader implementation. This lack of process insight hinders standardization and automation, which increases processing times, turnaround times, and customer service costs.

Traditional process mining tools like Celonis and UiPath fall short by relying on log data that misses a full view of operations, particularly those tasks performed outside core claims or policy systems. Supplementing with task mining provides limited insight into just 10-20% of operator activities.

## 2. Limited Insight into Operator Utilization Leads to Overstaffing and Higher Costs

The rise of remote work post-pandemic has led to reduced operator utilization, with efficient workers often completing tasks quickly and experiencing significant downtime. When productivity is measured by completed claims or tasks per day, low utilization often goes undetected.

Current methods of tracking utilization, such as self-reporting tools or BPM systems, fail to provide a complete picture of operator activity. Many tasks are done outside of BPM workflows, making it difficult to assess actual operator activity.

This lack of insight into real-time operator performance often results in overstaffing and inflated costs. Companies that implement advanced monitoring tools have seen significant improvements in efficiency, boosting operator utilization by up to 50% over multiple quarters.

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### 3. Lack of Visibility Into Service Costs for Different Clients, Particularly in Group and Health Insurance

Insurance teams manage diverse client portfolios, where some clients are more expensive to serve due to demographic, geographical, or business-type factors.

Without a clear understanding of unit costs for each client or claim type, insurers struggle to adjust fees or develop appropriate products.

Insurers that have adopted Gen AI to gain deeper insights into service costs have a significant competitive advantage, allowing them to optimize pricing models and improve profitability.



## Breakthroughs in Process Intelligence and Workforce Management

Two key breakthroughs in process intelligence and workforce management are changing how insurers (1) capture all operator activities across different applications and (2) do so cost-effectively at scale.

### Breakthrough 1

#### Comprehensive Activity Tracking Across Diverse Systems

A significant breakthrough in process intelligence lies in the ability to track and stitch together processes with close to 100% data fidelity. Meaning ability to track every screen and every click that performed during the process.

This applies also to the processes that lack a case ID—such as claim numbers or other unique identifiers. In many operational scenarios, especially in complex environments, processes don't always have a case ID attached.

### Breakthrough 2

#### Cost-Effective Scaling with Advanced Technologies

The challenge of processing vast amounts of data efficiently and at scale has been a historical barrier in process discovery and understanding. Many tools have been limited by the high cost and short-term scope of data processing, but solutions like Skan AI have pioneered a solution that makes scaling effortless.

By leveraging advanced computer vision and Gen AI models, Skan AI is the only platform that enables cost-effective, large-scale process discovery. It observes thousands of workstations simultaneously, arming insurers with the ability to continuously monitor and improve operations without disrupting the workforce.

These capabilities provides insurers with a unique opportunity to address some of the industry's most pressing **challenges**. The following case study highlights how a Fortune 100 Life & Annuities insurer used Skan AI's solutions to achieve remarkable results.

## Case Study: A Day in the Life of a First-Line Manager at a Fortune 100 Insurer

Skand AI's Process Intelligence solution redefined daily operations for a first-line manager overseeing claims at a Fortune 100 insurance company.

Using Skand AI's lightweight Virtual Assistant software installed on each workstation, the insurer captured and monitored relevant user activities across all applications without disrupting workflows.

Prior to deployment, the platform automatically detected all applications used by the workforce to complete an instance of their claims process. With inputs and validation from the process owner, specific applications were designated for process tracking, while other programs were filtered out as non-essential. Key data attributes, like Claim IDs, were assigned to connect related tasks and create a seamless process view across all systems and operators.

With these capabilities in place, Skand AI tracked activities across diverse platforms—from mainframes to custom-built applications and Microsoft tools—capturing an accurate and complete view of processes in **real time** across varying geographical locations.

Each morning, Jane, a first-line manager, logs into Skand AI's dashboard to view the utilization rates for her team of claims adjusters, shown in Figure 1.

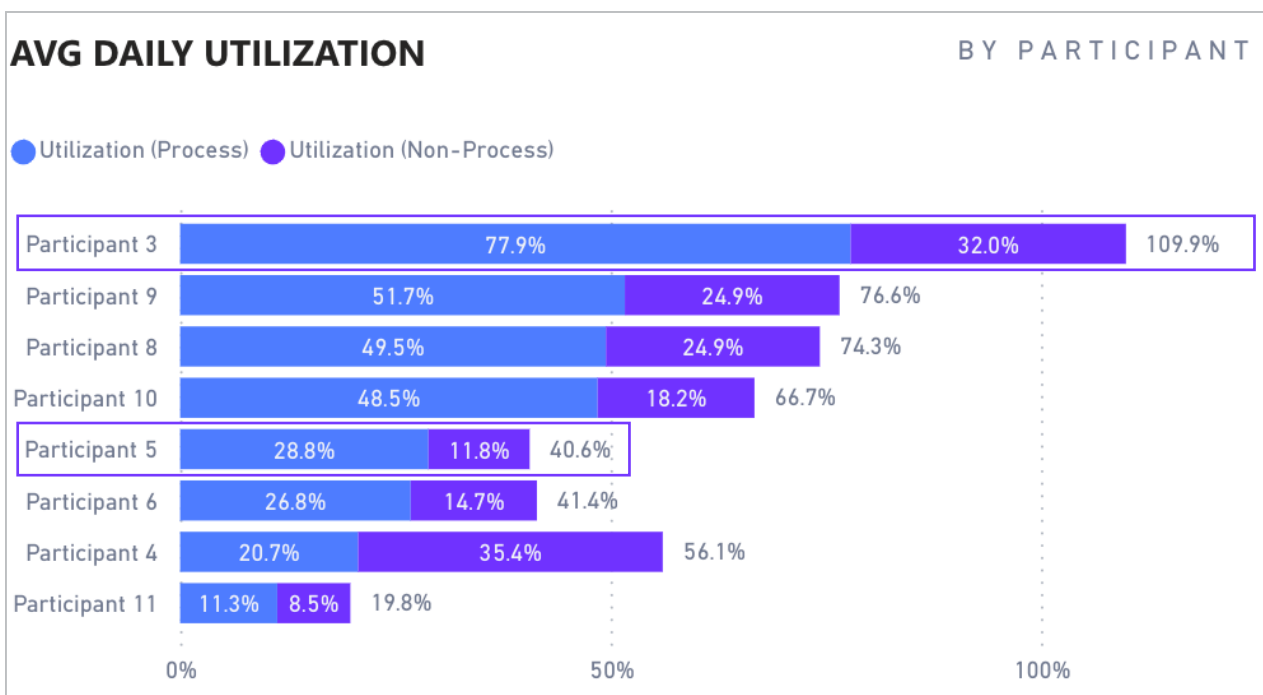


Figure 1: Claim "adjuster" utilization" view for the first-line manager

The system provides a clear breakdown of utilization across both process-related and non-process-related applications, giving Jane an insightful view of her team's activity. She can customize the time period for analysis—set here to a standard 6.5-hour workday but easily adjustable. Reviewing the past week's data, Jane notices substantial fluctuations in utilization among her claims adjusters. Curious about these differences, she narrows her focus to closed claims of a specific type to investigate further.

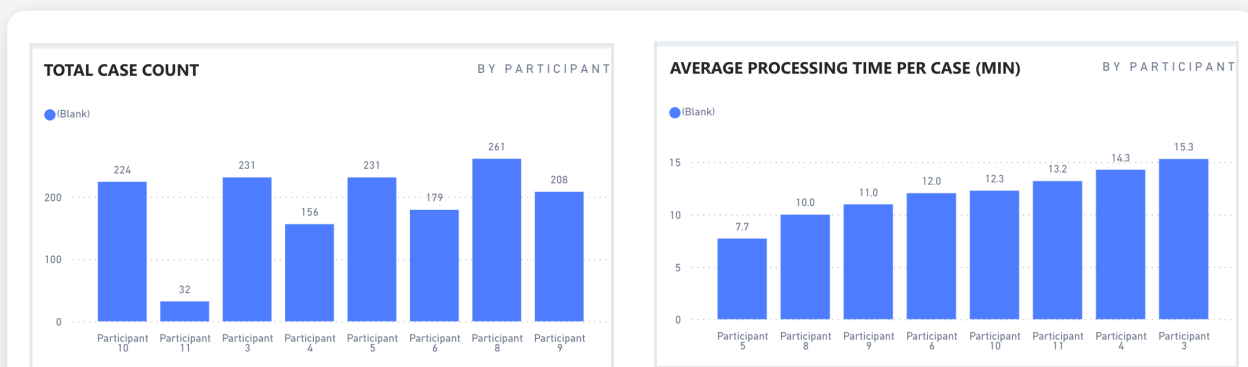
Examining the productivity charts in Figure 2, Jane quickly identifies a notable discrepancy.

The first bar chart reveals that two of her adjusters, both with a total of 231 processed claims over the week, show vastly different processing times.

Claim Adjuster 5 has the lowest average processing time at just 7.7 minutes per case, while Claim Adjuster 3's average processing time is nearly twice as long.

This insight immediately prompts Jane to explore why two adjusters handling an identical claim volume exhibit such contrasting levels of efficiency.

The utilization chart in Figure 1 sheds further light on the situation. Claim Adjuster 5, the more efficient processor, shows a significantly lower utilization rate—a reflection of working from home and perhaps finding ways to streamline the workflow. Meanwhile, Claim Adjuster 3, though less efficient in processing time, shows a notably high utilization rate of 109%, indicating consistent, intense activity.

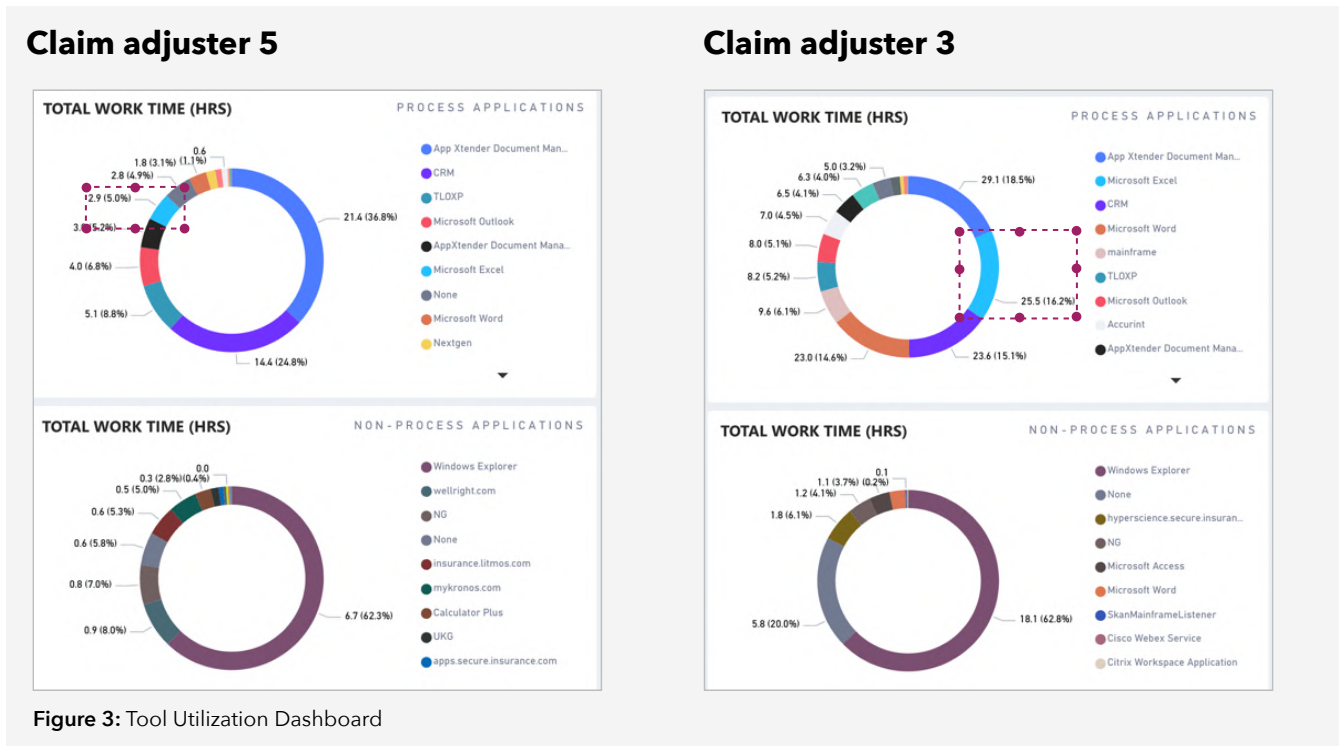


**Figure 2:** Total number of claims processed and average processing time per claim

Jane sees an opportunity here. It's clear that Claim Adjuster 5 has developed a method to complete tasks faster, which could potentially benefit the whole team. To understand and potentially replicate this approach, Jane reaches out to John Smart, her Operations Improvement Consultant, for a deeper analysis and potential standardization across the team.

## Driving Process Improvement and Automation

With just a few clicks, John is able to pinpoint the difference in tool usage between Claim Adjusters 3 and 5. Reviewing Skan AI's Tool Utilization charts in Figure 3, he notes that the more efficient Claim Adjuster 5 relies primarily on the company's proprietary claims system and CRM, with minimal use of Excel. In contrast, Claim Adjuster 3, who has a slower processing time, uses Excel five times more frequently—a possible bottleneck in their workflow.



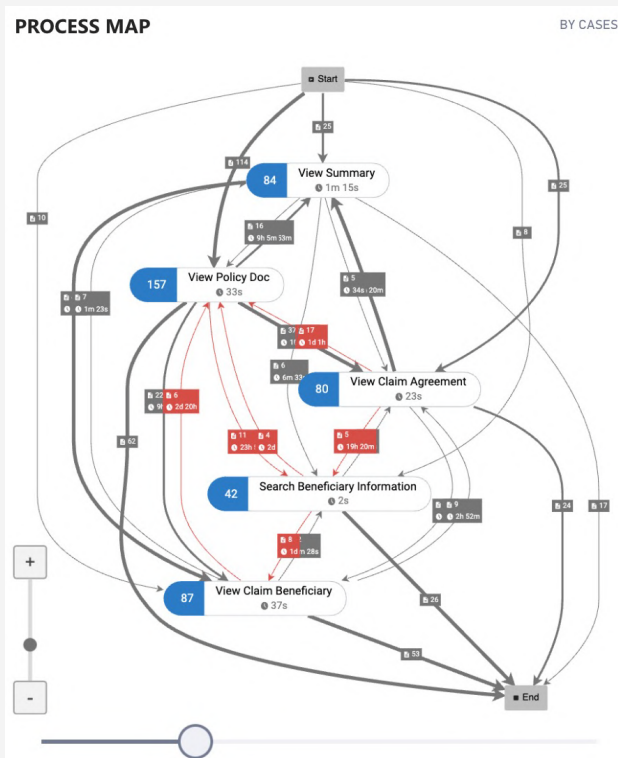
John hypothesizes that Claim Adjuster 3 may be performing additional calculations outside the primary claims applications, slowing down their processing time. However, before diving into process standardization or training, he decides to examine the process variations in greater detail.

With a few clicks, John pulls up the process maps for both Claim Adjusters 3 and 5, seen in Figure 4.

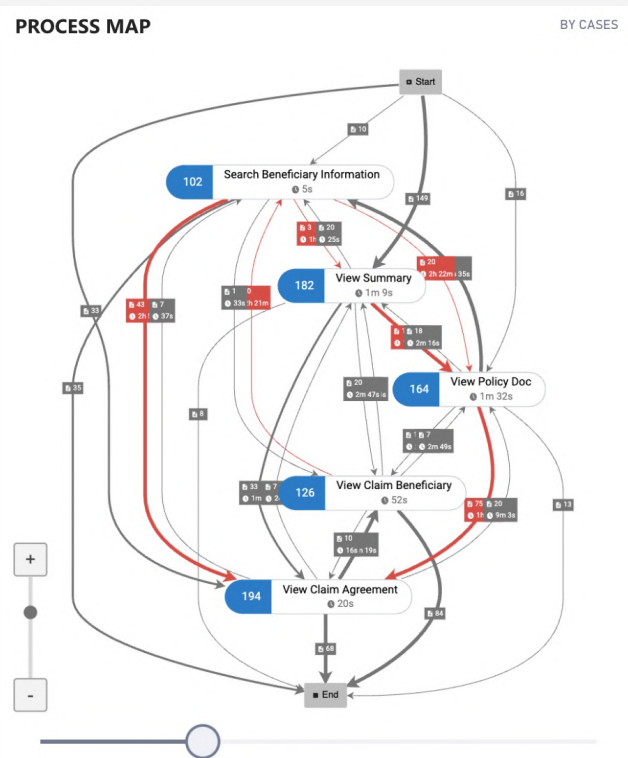
As he examines these maps, John notes that in addition to using different tools, each adjuster follows a distinct process flow. Processing a claim involves thousands of clicks across dozens of screens, making it difficult to interpret a process map based on individual activities alone. Skan AI overcomes this complexity by using Gen AI to aggregate individual clicks into meaningful subprocesses like "Search Beneficiary Information" or "View Policy Document." This feature allows John to view these aggregated subprocesses for clarity, and, if needed, he can recalibrate and adjust the AI-generated grouping to better match operational standards.



## Claim adjuster 5



## Claim adjuster 3



**Figure 4:** Processing maps for Claim Adjusters 3 and 5, showcasing automatic aggregation of activities within sub-processes to enhance clarity and streamline analysis

To ensure the most effective path forward for process standardization, John dives into the specific clickstreams for each adjuster (Figure 5), selecting sample claims processed by both Adjuster 3 and Adjuster 5.

This review validates his hypothesis: Adjuster 3's workflow includes additional steps in Excel that slow down the process. Confident in his findings, John exports Adjuster 5's efficient process flow in BPMN format from Skan AI into his modeling tool. Equipped with this data, he is ready to initiate process standardization and training, setting the foundation for a more streamlined and effective claims handling process.

## Claim adjuster 5

### Case Clickstreams

Case ID	Clickstream
01-0005-8050	<a href="#">🔗</a>
01-0006-7011	<a href="#">🔗</a>
01-0007-1709	<a href="#">🔗</a>
01-0007-2324	<a href="#">🔗</a>
01-0007-3808	<a href="#">🔗</a>
01-0008-8228	<a href="#">🔗</a>
01-0012-1390	<a href="#">🔗</a>
01-0012-8601	<a href="#">🔗</a>
01-0013-0626	<a href="#">🔗</a>
01-0013-7813	<a href="#">🔗</a>
01-0013-8178	<a href="#">🔗</a>
01-0014-0245	<a href="#">🔗</a>
01-0014-0503	<a href="#">🔗</a>
01-0014-1393	<a href="#">🔗</a>
01-0014-1880	<a href="#">🔗</a>

## Claim adjuster 3

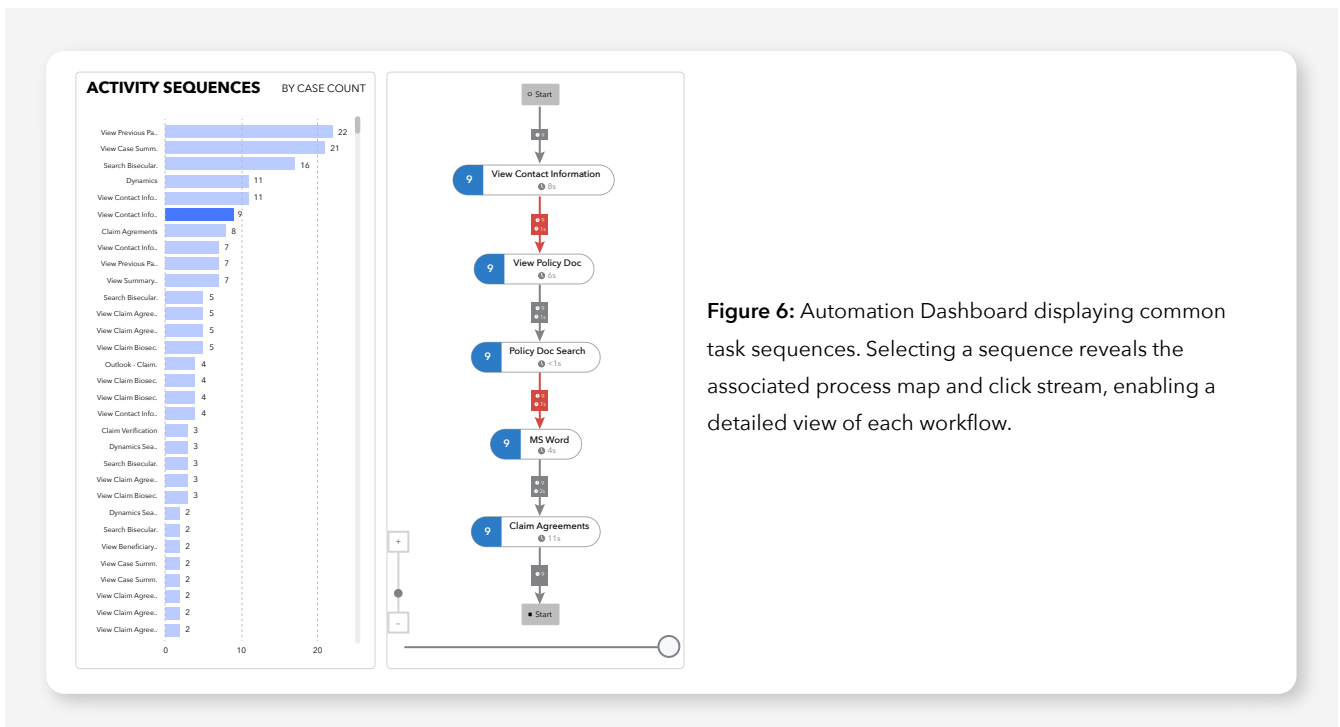
### Case Clickstreams

Case ID	Clickstream
01-0015-6955	<a href="#">🔗</a>
01-0021-6897	<a href="#">🔗</a>
01-0021-7075	<a href="#">🔗</a>
01-0021-7184	<a href="#">🔗</a>
01-0021-7208	<a href="#">🔗</a>
01-0021-7222	<a href="#">🔗</a>
01-0021-7385	<a href="#">🔗</a>
01-0021-7411	<a href="#">🔗</a>
01-0021-7467	<a href="#">🔗</a>
01-0021-7488	<a href="#">🔗</a>
01-0021-7499	<a href="#">🔗</a>
01-0021-7521	<a href="#">🔗</a>
01-0021-7541	<a href="#">🔗</a>
01-0021-7554	<a href="#">🔗</a>
01-0021-7564	<a href="#">🔗</a>

**Figure 5:** Clickstream Selection Panel, with each link providing access to a detailed click stream that visualizes all activities performed for this claim—offering a sequential, movie-like view of the claim adjusters' workflow

Once the process is standardized, John shifts focus to exploring potential automation opportunities within the claims workflow. He engages Michael, an automation specialist, to determine which parts of the process could be automated for greater efficiency.

Using Skan AI's automation opportunity analysis tools, Michael examines the most common task sequences performed by Claim Adjuster 5 (see Figure 6). By identifying frequently repeated steps, Michael can pinpoint areas where automation would yield the greatest impact.



**Figure 6:** Automation Dashboard displaying common task sequences. Selecting a sequence reveals the associated process map and click stream, enabling a detailed view of each workflow.

He decides to export the data in PDD and BPMN formats to kick off automation initiatives. Skan AI's PDDs are rich with operator activity details, significantly accelerating automation development. (See Figure 7.)


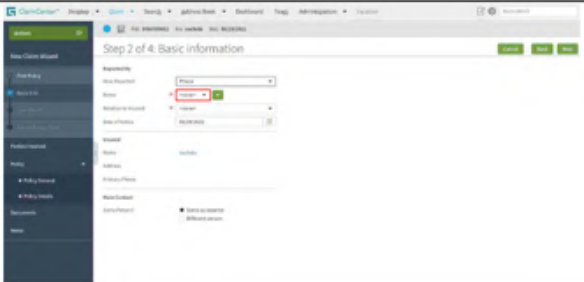
Step	Sub Step	Activity Name / Event Details	Image
2		Click Enol Wizard Full Wizard Step Set Enol Wizard Basic Info Screen Row Basic Info Detail View Pane  <b>Total Cases:</b> 8400%  <b>Application:</b> 10.96.0.24:8080	
2.1		Click on [ ] type of [Text] <b>Widget path:</b> id_   t_Text   n_   acpu_5.41   scp_u_0   clipboardupdate_0   p_0 => id_   t_Combobox   n_FNOLWizard- FullWizardStepSet- FNOLWizard_BasicInfoScreen- PanelRow-basic info detail view panel_ -ReportedBy_Name   p_1   aria-required_true   et_SELECT	

Figure 7: PDD export

What we've covered so far is **Process transformation**.

It begins with daily monitoring and workforce management, then progresses through process standardization, employee training, and automation initiatives. Over the course of six quarters, this Fortune 100 insurer improved Claims Adjuster utilization by 50% and increased the number of completed claims per day by 40% (see Figures 8a and 8b).

Overall, productivity rose by 31% during the same period. It's clear this company is on track to surpass its competitors in both cost-efficiency and claims processing time.

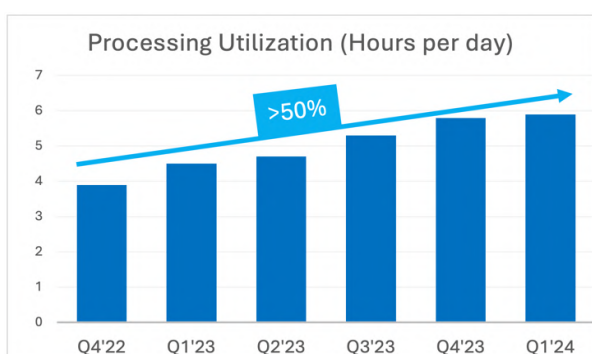


Figure 8A: Example of utilization improvements achieved with Skan AI at a Fortune 100 insurer.

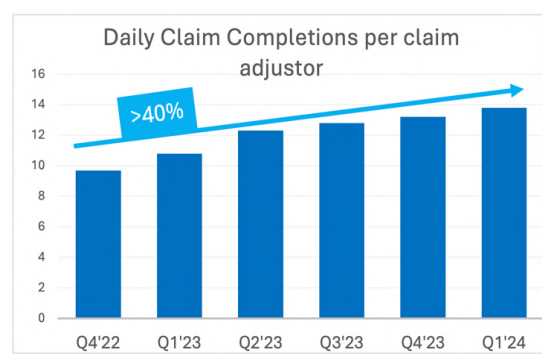


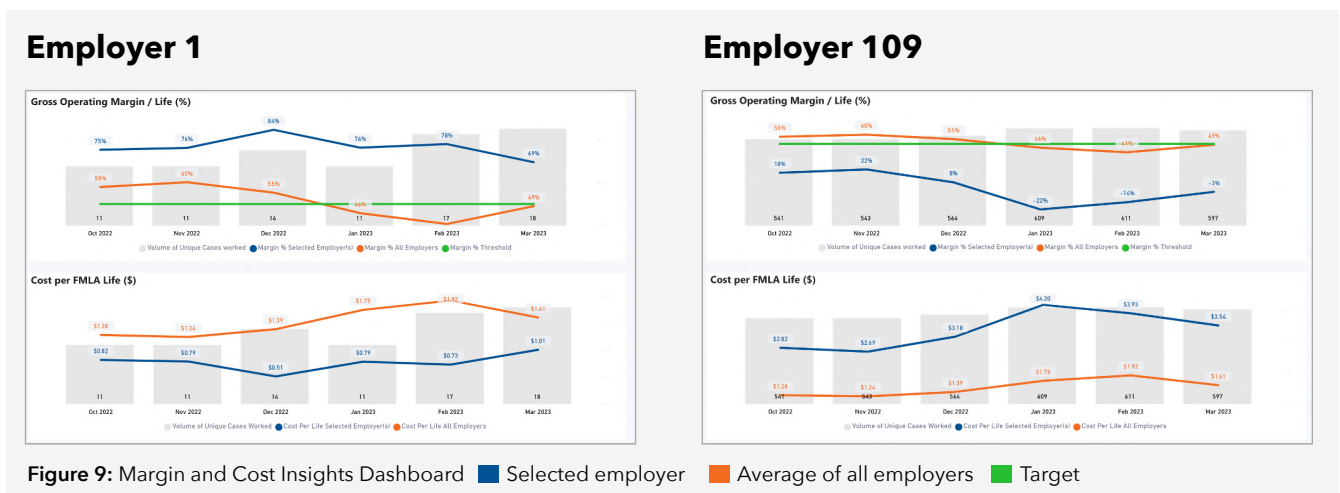
Figure 8B: Example of daily claims completions per claim adjustor, showcasing improvements driven by process standardization and automation.

## Beyond Process Improvements: Financial Insights and Workforce Planning

Skon AI's process intelligence capabilities go beyond just streamlining operations. They offer powerful insights that can enhance decision-making across finance, sales, and workforce planning.

By seamlessly integrating key client data—such as contract fees, employee pay rates, expected PTO, and employee seniority—Skon AI delivers intuitive dashboards for finance teams, sales leaders, and other departments within the organization.

For instance, by merging process data with this client-specific information, Skon AI can accurately calculate the margin per employer. As shown in Figure 9, this analysis reveals that Employer 1 has a positive margin, while Employer 109 has negative margin.



Skon AI also enables a deeper dive into the underlying causes of poor margins, such as those for Employer 109. By analyzing the data, it becomes apparent that the unit cost for Integrated Cases is disproportionately high, as seen in Figure 10.

Additionally, Skon AI reveals that the incidence rate of Short-Term Disability (STD) claims for this employer is significantly higher compared to others. These insights allow organizations to pinpoint specific cost drivers, helping them take targeted actions to improve margins and overall financial performance.

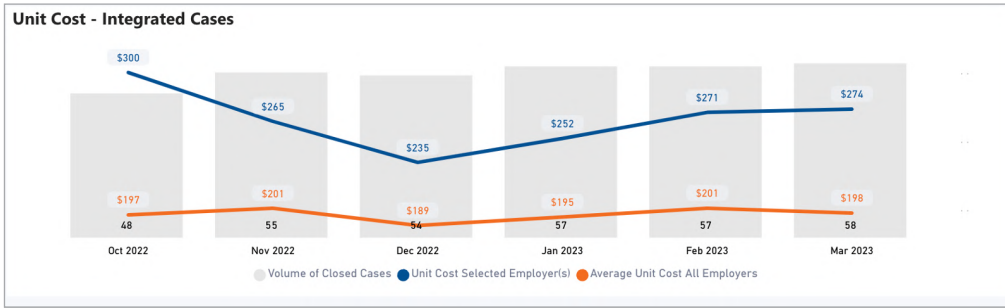


Figure 10: Example of a detailed cost analysis for a specific claim type.

This insight empowered the insurer to have highly targeted discussions with clients during contract renewals. By clearly understanding which employers were profitable and which were not—along with the underlying reasons—the insurer could tailor its approach to optimize outcomes.

Furthermore, Skan AI integrated client data with process intelligence to dramatically improve staffing forecasts, which had an immediate impact on both recruitment efforts and the bottom line. By combining process time with expected PTO, employee seniority, and other relevant factors, Skan AI projected staffing needs for each role more accurately, as shown in Figure 11.

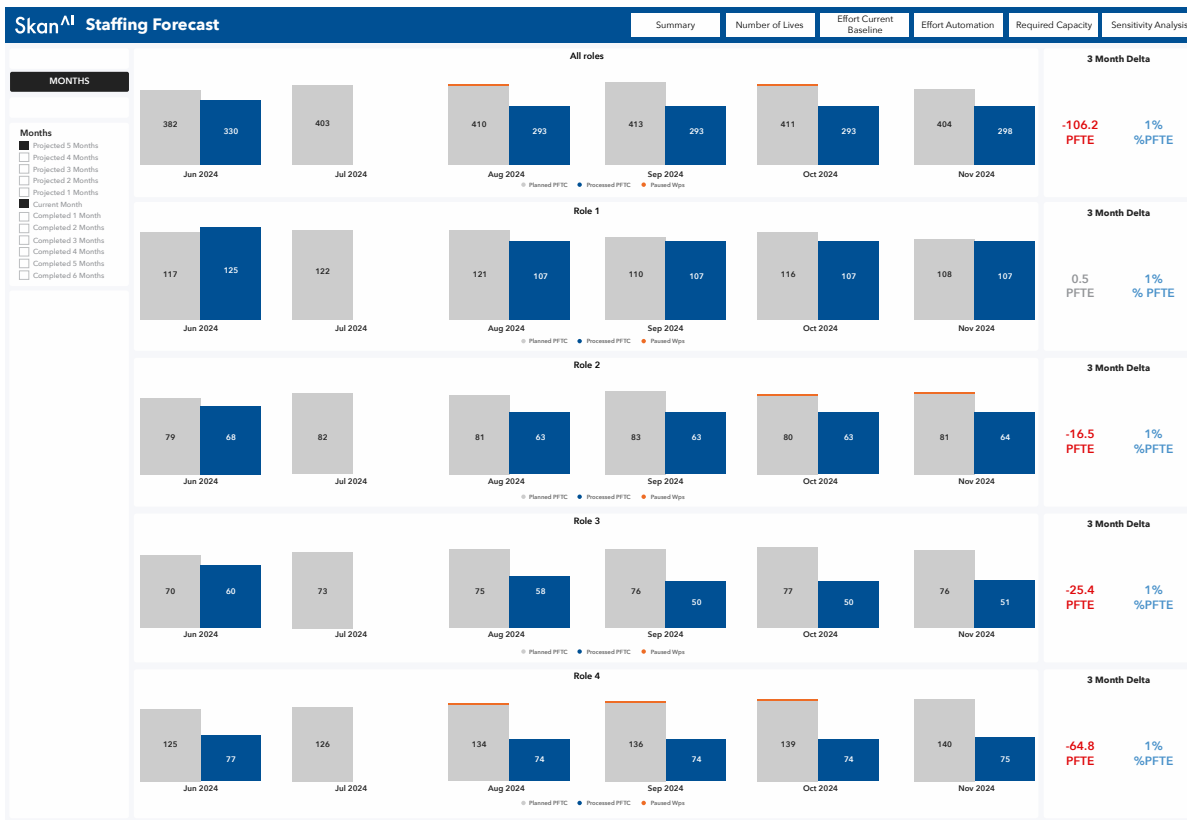


Figure 11: Forecast Comparison ■ Manual forecast ■ Skan AI forecast

## Shaping the Future of Insurance: Gen AI and the Next Era of Efficiency

This case study highlights the profound impact that embracing advancements in Process Intelligence and Workforce Management can have on claims processing and other insurance operations.

By leveraging real-time data and process insights, organizations can transform how they approach everything from daily operations to long-term strategic planning. Looking to the future, the potential of Gen AI to drive further transformation is even more exciting.

Innovations on the horizon include:



**Conformance and Error Analysis:** Real-time monitoring that ensures processes align with Standard Operating Procedures (SOPs), while providing instant alerts for any deviations. This level of precision not only maintains consistency but also improves compliance and reduces errors.



**Smart Reference and Next Best Action:** AI-driven suggestions for operators based on established SOPs and historical process data, offering real-time guidance to optimize workflows. This continuous, proactive support boosts operational efficiency and decision-making in real time.



## Conclusion

The journey toward operational excellence in the insurance industry is just beginning, and those who integrate Gen AI into their operations will be well-positioned to lead the charge. Adopting changes will give insurers a significant competitive advantage, not only by driving cost savings and reducing processing times but also by fostering a culture of continuous improvement and productivity.

As we've seen, the future of insurance operations is one where data-driven insights and intelligent automation are at the forefront. Insurers who invest in these technologies today will be ready to outperform their peers and adapt to the evolving demands of the industry, ensuring long-term success in an increasingly competitive landscape.



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