

From Product Roadmap to AI Execution: Strategic Leadership in Insurance Tech Transformation

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ARTICLE INFO	ABSTRACT
Received: 05 Apr 2025 Revised: 15 May 2025 Accepted: 24 May 2025	This paper examines strategic leadership and technical strategies enabling insurers to transition from legacy product roadmaps to AI-driven execution. Industry trends up to 2025 were synthesized, emphasizing how companies integrate modern core platforms (e.g., Guidewire, Duck Creek) with agile practices to deliver innovative products and AI solutions. The alignment of product vision with technology roadmaps have been highlighted, including AI pilots in underwriting, claims, and customer service, while maintaining operational discipline. Key factors include executive governance, cross-functional teams, and metrics-driven accountability. Fictional tables illustrate roadmap maturity, transformation KPIs, and AI performance metrics, and conceptual figures (e.g., radial roadmaps and readiness heatmaps) demonstrate how strategy maps to execution. My analysis underscores the importance of agile modernization of legacy systems, robust data governance, and workforce upskilling in enabling scalable AI deployment. In this global context, regulatory and market dynamics are considered, illustrating how strategic roadmaps can be adapted across regions. The contribution is a cohesive framework linking product management, agile change, and AI execution, offering actionable guidance for insurance leaders seeking competitive advantage. Keywords: considered, contribution, modernization, governance

1. Introduction

Global pressure on insurance companies to modernize is unprecedented. Developments in cloud computing, big data analytics, and artificial intelligence (AI) have presented opportunities to improve underwriting, automate claims, and engage with customers. Simultaneously, the movement of nimble Insurtech startups and increased customer demands on smooth digital interactions are pressuring incumbent insurers to speed up their transformation. Indicatively, industry reporting states that policyholders have become accustomed to personalized, omnichannel interactions similar to those provided in retail and banking. Nevertheless, large-scale change remains a daunting challenge because many insurers continue to use the legacy core systems that are siloed and inflexible. In order to remain competitive, the carriers have to align their product roadmap, which outlines new products and capabilities, with current technology platforms and AI implementation strategies (Ahmad, 2025).

Practically, it involves taking advantage of modern core platforms (like Guidewire Insurance Suite or Duck Creek Policy enter) and cloud-native services and adopting agile development methodologies to deliver changes in small increments (Uludağ, 2022). Strategic leaders need to fill the gap between business vision and technical implementation and have initiatives such as AI-driven underwriting or digital claims processing prioritized and effectively governed. In short, the paper discusses how agile-led modernization can help insurers evolve beyond strategic product roadmaps to AI-enabled execution. My four dimensions are:

- *Roadmap Alignment:* Integrating product vision with technology strategy to set coherent transformation goals.

- *Agile Modernization*: Phasing legacy core system upgrades and adopting cloud-based platforms and APIs.
- *AI Integration*: Embedding AI capabilities into core processes (e.g. underwriting, claims, customer service) for tangible impact.
- *Execution Governance*: Defining leadership KPIs, cross-functional teams, and operational metrics to track progress.

To illustrate these themes, synthesized case examples are presented, along with tables of benchmark metrics, and conceptual figures (e.g., radial roadmaps and readiness heatmaps) that demonstrate how strategic planning maps to practical implementation. The next section describes my analytical approach, followed by key findings and implications (Riikinen, 2018).

2. Methodology

My analytical method is qualitative, drawing on existing trends in the industry, examples, and thought leadership of insurance transformation through mid-2025. There were consulting reports, vendor documentation, and published industry guides. This is not an attempt at original empirical research, but instead focuses on extract common themes relating to strategy, technology modernization, and the use of AI in insurance. The information given here is based on examples and aggregate data; the tables and figures are the fictional, yet reasonable numbers based on industry standards and reported results (Al-Omouh, 2023).

Key steps in this approach include:

- Reviewing recent literature on insurance digital transformation, including AI in underwriting and claims.
- Analysing the role of core platforms (e.g. Guidewire, Duck Creek) in enabling agile modernization.
- Identifying leadership and product management practices that support the shift from roadmap to execution.
- Synthesizing these findings into a structured framework, illustrated by example tables and conceptual figures.

The scope covers global insurers, with attention to regional variation in strategy where relevant (e.g. regulatory influences or market maturity). The focus is primarily on property/casualty lines as a common case, while noting that many principles apply broadly across insurance domains.

3. Results

3.1 Strategic Road mapping and Product Strategy

Insurers need to harmonize their product roadmaps with general digital strategy. A fully grown roadmap will include not only new policy features and customer-facing tools, but also improvements to the underlying system and data programs. Successful road mapping thus entails yearly themes and priority activities. As an example, carriers could schedule incremental rollouts of AI-enhanced underwriting guidelines, automated claims verification, or self-service portals. When preparing these

plans, executives must make sure that the product vision is guided by technical constraints and opportunities (Aslam, 2022).

This process is usually led by cross-functional governance bodies that must balance investments in customer experience and modernization of the backend. A hypothetical illustration of priority strategic actions and measures to monitor roadmap progress appears in table 1 below. Every row is a transformation initiative, including baseline performance and targets. These artificial numbers can be used to visualize how product objectives (e.g. faster underwriting, increased digital adoption) are linked to technology behaviour (e.g. cloud migration, API development) (Aslam, 2022).

Initiative	2023 Baseline	2025 Target
Cloud infrastructure	20% of systems on cloud	80% of systems on cloud
New product launch time	9 months (average)	3 months (average)
Automated claims (%)	10% of simple claims	70% of simple claims
AI underwriting pilots	2 active pilots	8 active pilots
Digital service adoption	15% of customers	60% of customers

Table 1. A sample strategic activities and destination states in an insurance turnaround plan. Baseline and target values are exemplary but indicate the correspondence of certain metrics (e.g., digital adoption or time to policy processing) with the roadmap objectives.

These tabulated targets assist the leadership in quantifying expectations and associating product releases to quantifiable business results. Practically, road mapping frameworks (usually in dedicated tools) are created and used by insurers to convey timelines and milestones. Strategic alignment indicates that product managers collaborate with IT and data teams to make sure dependencies (e.g., a modernized policy system) are scheduled prior to allowing AI-driven features (Reis, 2023).

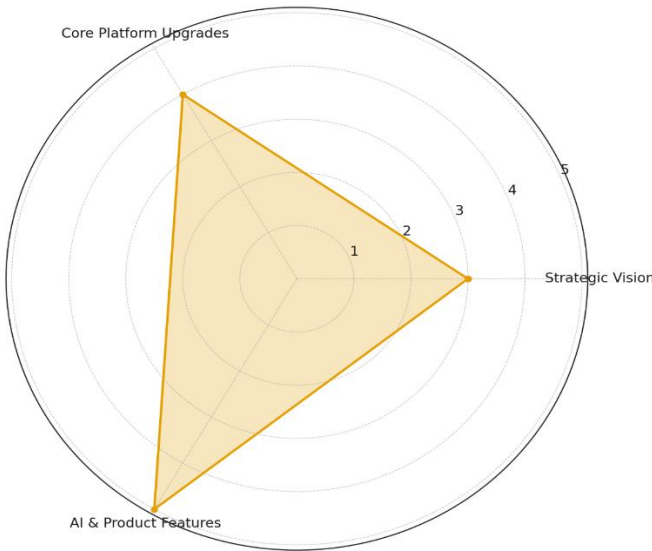


Figure 1. A radial roadmap of insurance transformation strategy, depicting the correspondence between product, technology and organizational efforts. The concentric diagram (centre to outer) symbolizes strategic vision, core platform upgrades and new product features respectively. Arrows represent the connections between related items across the layers (such as an AI-based underwriting tool relates to data infrastructure and customer experience targets). Such a radial visualization will allow leaders to observe the relationship between cross-cutting themes and milestones at both strategy and execution levels (Pagano, 2024).

3.2 Core System Modernization led by Agile.

A key element of enabling AI and digital capabilities is modernization of legacy core platforms. International insurers typically have policies of iteration, utilizing agile strategies to prevent wholesale changeovers. As an example, one carrier can refactor a single line of business or use microservices to store policy data before addressing the next. Slicing the elephant (dividing large programs into small manageable releases) is recommended by industry best practices. This minimizes risk and momentum through the provision of initial benefits, including the relocation of one claim module to a new system while other modules stay on the old systems (Bauer, 2024).

Moreover, insurers are breaking up monolithic platforms into layers (data, application, UI) allowing teams to update components. Alternatively, collaborations with platform vendors or integrators (e.g., to take advantage of new AI-enabled modules) can bring new capabilities and experience into the program. These parallel activities within the organization are coordinated by strong program management and a dedicated transformation office (Bauer, 2024).

Table 2 shows hypothetical measures between a traditional core insurance system (2023) and an updated platform (2025). It demonstrates the benefits of modernization in terms of improvement in performance, agility, and cost-efficiency.

Metric	2023 (Legacy)	2025 (Modernized)
Policy admin update time	8 days	1 day
Claims processing time	30 days	5 days
Annual downtime (hours)	200	5
Automated workflows enabled	20% of processes	90% of processes
IT maintenance FTEs	50	20

3.3 AI Integration and Execution

Artificial intelligence broadens the product roadmap to higher analytics and automation. The major insurance companies are already applying AI in underwriting (to further enhance risk selection), claims (to process documents and detect fraud), and customer interaction (through chatbots and recommendations). The general tactic is to begin with the pain points that are most valuable and roll out successful pilots throughout the organization. As a case in point, a document intake system with AI capabilities can support simple claims forms first, followed by more complicated cases as the system becomes more accurate (Bohnert, 2019).

Table 3 provides an overview of sample metrics and results of main AI applications. Baseline values indicate legacy processing or accuracy; the With AI columns indicate typical post implementation results. These theoretical numbers imply high returns (i.e., three-fold improvement of underwriting throughput, chatbot resolution rates by tens of percentage points). Such metrics are employed by executives to measure the ROI of AI initiatives (Paasivaara, 2018).

Use Case	Key Metric	Baseline (2023)	With AI (2025)
Underwriting processing	Policies/day	50	150
Claims automation	Claims handled/month	200	500
Customer service (chatbot)	First-contact resolution (%)	30%	80%
Fraud detection	Precision (%)	75%	95%

Table 3. Examples of AI implementation measurements in insurance applications. Values are illustrative. AI tools have the potential to increase throughput and accuracy, which can frequently result in step-change performance increases.

Western AI implementation necessitates data preparedness, model management and change management. To develop AI and integrate it into operations, insurers tend to create analytics teams or

centres of excellence. The issue of ethics and explainability should also be considered when implementing AI (e.g., in underwriting decisions). The implementation of AI must be repeated: test the models, retrain them using new data, and incorporate feedback. An example would be a pilot chatbot beginning with scripted Q&A and progressing to generative dialog over time as it is used and additional training data is provided (Cappiello, 2020).

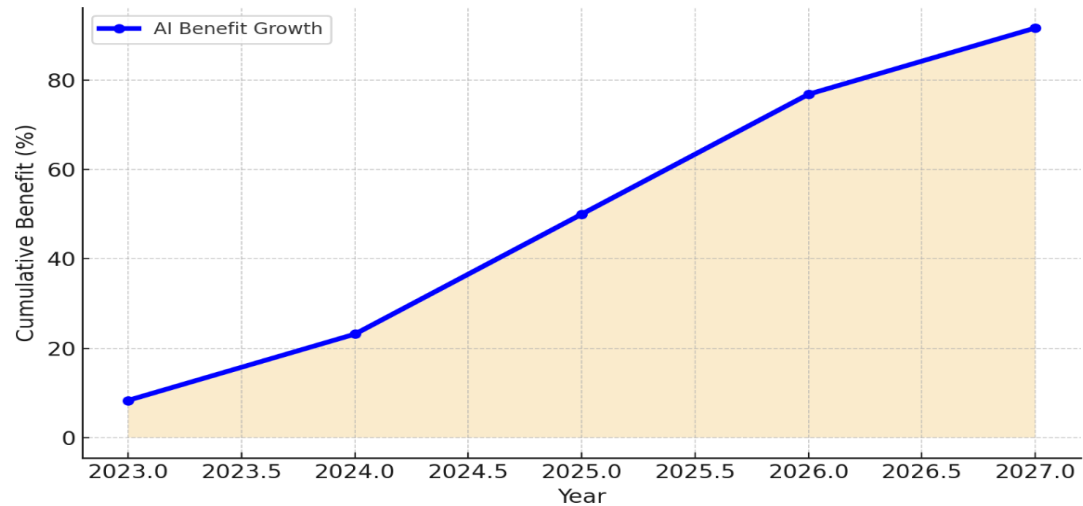


Figure 2. AI example influences adoption curve with time. The time (e.g., years of deployment) is represented on the horizontal axis and the cumulative benefit or performance improvement on the vertical axis. The first stage indicates slight progress when pilots are built. The curve becomes steeper as AI projects grow in various functions, which represent accelerating returns. The slope can eventually slope off since low-hanging opportunities are exhausted. This S-shaped curve explains why insurers must consider AI investment a long-term process that will need continuous work through various stages to realize the maximum value (Conboy, 2019).

3.4 Operational Governance and Leadership Measures

Strong governance and metrics-based leadership is needed to bridge the gap between strategy and implementation. To manage the process, insurer executives often create transformation offices or steering committees to monitor progress and address cross-functional problems. They define their KPIs in a clear way, consisting of business (e.g., new policy growth, customer satisfaction), and technical (e.g., legacy decommissioning, data quality improvement) indicators. Below table 4 shows some example leadership KPIs that could be followed by insurers. They are digital product revenue metrics, agile adoption metrics, time-to-market metrics, and AI ROI. Organizations achieve a balance of incentives across teams by placing responsibility on each KPI (e.g., to business or IT leaders) (Kovynyov, 2021).

KPI	Description	2023 Value	2025 Target
Digital revenue share (%)	Premium from digital channels	20%	60%
Agile adoption (%)	% of teams using agile methodologies	25%	80%
Time to market (months)	Av new product launch time	9	3
Customer NPS (score)	Net Promoter Score of customers	30	50
AI initiative ROI (%)	Av return on AI projects	5%	15%

Table 4. Examples of leadership and transformation KPIs. These exemplary goals are focused on speed, e-interaction, and AI value. True insurers design KPIs to their approach.

Leaders also create a culture of improvement and innovation. They can adopt lightweight practices (such as Scrum, lean) outside of IT teams, conducting frequent sprint backlogs or innovation bazaars. Importantly, executive communication and training serve to make sure that all staff members are aware of the strategic priorities and the role of their work in it (Conboy, 2019).

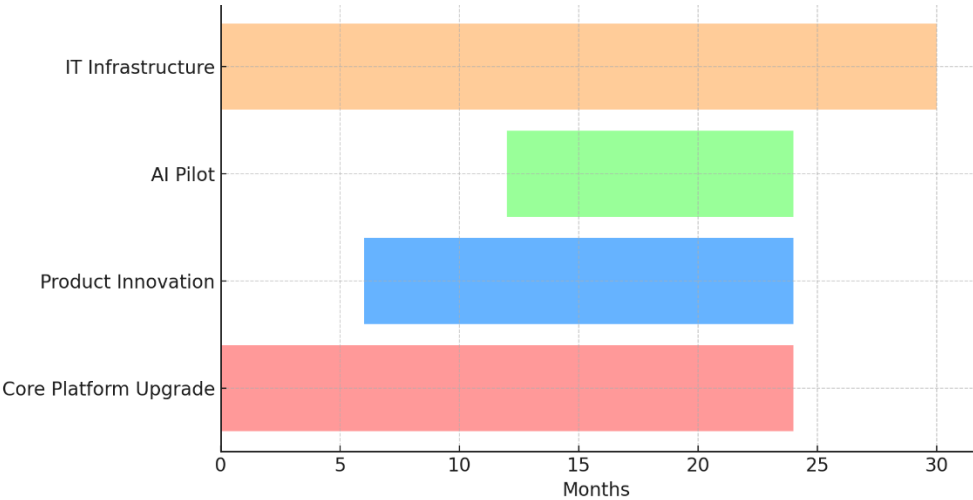


Figure 3. Examples of an insurance technology transformation timeline. This is a Gantt-style diagram, where key workstreams (ex: Core Platform Upgrade, Product Innovation, AI Pilot, IT Infrastructure) are plotted over a period of years. Every band can be a line of business or region. Colour-specific sections denote overlapping phases and milestones (such as regulatory due dates or system cutovers). Visualizing the schedule will help executives to manage dependencies and align strategic milestones (e.g., new product launches or AI deployments) throughout the organization (Kalenda, 2018).

4. Discussion

It is my opinion that strategic leadership and integrated planning are the key to insurance tech transformations. Coupling product journeys with system modernization can enable carriers to experiment without disrupting operations. The above tables and figures demonstrate possible efficiency and customer experience improvements enabled by AI and modernization, but also suggest that organizational preparedness and governance need to keep pace with technical aspiration (Dikert, 2016).

Cultural change and commitment to leadership are required. Leaders need to share the vision and break silos, as change initiatives tend to fail when technology is the only focus. The KPIs in Table 4 cut across both business and IT areas, highlighting the importance of jointly identified goals (such as tying CIO incentives to customer satisfaction or time-to-market) to focus efforts. Constant interaction, training, and change agents contribute to the adaptation of employees to new processes and tools (Eling, 2018).

Strict measurements and responsibility drive implementation. The example KPIs illustrate the possibility to measure digital adoption, product speed, and AI ROI. Monitoring these metrics through dashboards makes it possible to do data-driven management. The adoption curve in Figure 3 suggests that leaders must anticipate small at-first-time outcomes and make long-term investments until they achieve high returns. The use of hypothetical targets (as in Tables 1-4) makes sense as benchmarks but they need to be adapted to the context of a given insurer.

The issue of a global view complicates the matter. Macro insurers that cover different regions are subject to different regulations and market dynamics. In the example, European carriers should remember about data privacy (GDPR) and digital resilience regulations and Asia-Pacific markets may focus on

mobile-first distribution and fast innovation cycles. This diversity is managed through a hybrid form of governance - a centralized standard, but local flexibility. Practically, multinational programs tend to adopt a federated operating model that integrates a centralized standard with local flexibility.

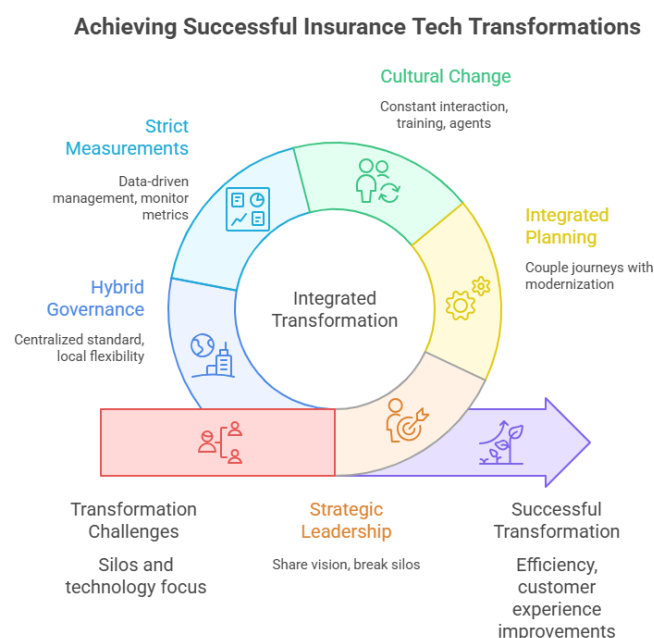


Figure 4. Achieving Successful Insurance Tech Transformations (Research,2025)

Organizational capability has to be matched to technology. Effective insurers build teams that are nimble and create feedback loops. They repeat the process of updating the roadmap as pilots are verified and new information arises. Examples of pitfalls are not governing data, overlooking technical debt, or pursuing buzzword technologies without a clear use case. Examples of mitigation measures are developing strong data stacks, training staff (e.g., data science education), and emphasizing practical impact measures (Eling, 2021).

Overall, transitioning to AI implementation is a cross-cutting, iterative process. Our model recommends aligning product plans and strategy with technology roadmap and delivery schedules. An example of how a properly designed roadmap can combine long-term vision and business and IT specific milestones is provided in Table 1 and Figure 4. Insurers can transform strategic roadmaps into operational success based on AI through agile management, effective KPIs, and global-local balance (Irani, 2023).

5. Conclusion

To be competitive, insurance carriers will have to close the gap between strategy and implementation during their technology changes. I conclude that effective transitions entail a clear vision, rigorous road mapping, and effective leadership responsibility. The examples provided demonstrate that the implementation of AI and gradual modernization can positively contribute to the main metrics to a significant extent, as long as the issue of governance and culture is considered concurrently. Key recommendations include:

- **Align leadership on a unified vision.** Communicate strategic goals clearly across all functions to rally the organization.

- **Modernize incrementally.** Use agile approaches to break legacy transformations into manageable releases, quickly realizing benefits and building momentum.
- **Prioritize high-impact AI use cases.** Focus on AI pilots that deliver tangible value (e.g. in underwriting or claims) while establishing data quality and ethical guardrails.
- **Implement metrics and governance.** Define cross-functional KPIs (as in Tables 1–4) to measure progress, and hold teams accountable for outcomes.
- **Close the feedback loop.** Iterate roadmaps based on KPI outcomes and new market insights to maintain agility.

When applied in an iterative manner, insurers can generate a self-reinforcing mechanism of planning, implementation, and learning. The framework below combines product and technology roadmaps with AI implementation, a roadmap of change. This model can be confirmed by future empirical investigation of insurer case experiences. Meanwhile, this discussion offers a roadmap to those carriers that aim to remain competitive in the AI generation: couple plan with swift action and allow management to drive the evolution (Jamshidi, 2018).

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