

# Future-proofing Insurance Claims Organization

Banking, Financial Services and Insurance



PURPOSE-DRIVEN

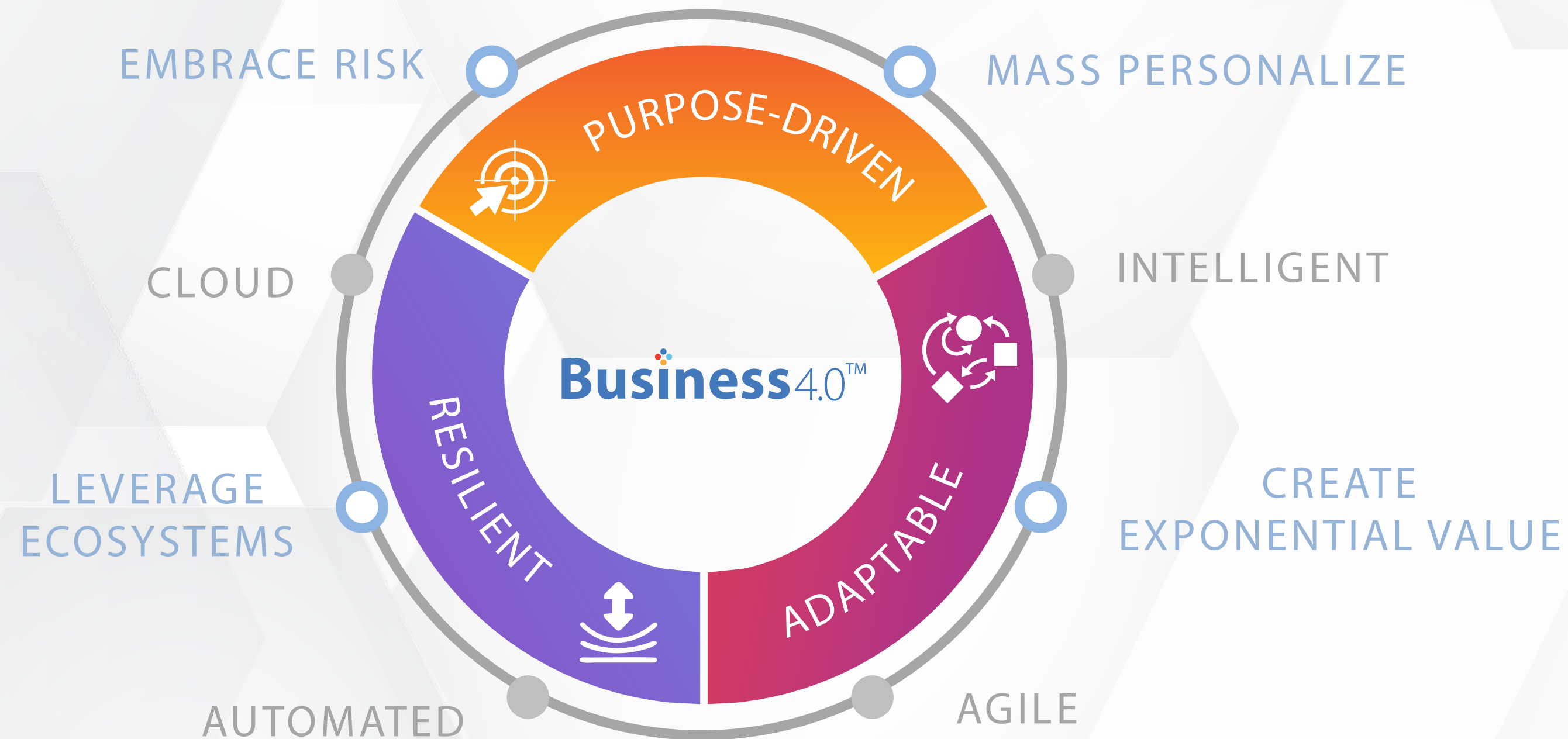


RESILIENT



ADAPTABLE

# PURPOSE-DRIVEN, RESILIENT, ADAPTABLE BUSINESS 4.0™



## About the Authors



### Muthu Natarajan

**Muthu Natarajan** is a consultant with the Guidewire Practice of TCS' Banking, Financial Services, and Insurance (BFSI) business unit. With over 19 years of IT experience in the insurance domain, he has worked with TCS' leading insurance clients across geographies and successfully delivered several key transformation engagements in policy administration, underwriting, claims, agency management and legacy modernization. Muthu has a Master's degree in Computer Applications from the University of Madras, Tamil Nadu, India.

### Gayathri Devi

**Gayathri Devi** is a business consultant with the Insurance industry Advisory Group of TCS' Banking, Financial Services, and Insurance (BFSI) business unit. With over 13 years of experience in the property and casualty insurance domain, she has worked with TCS' leading insurance clients the world over. Gayathri has led business analysis of several key engagements across the insurance value chain and built innovative auto insurance solutions such as connected auto platform, telematics-based underwriting, and so on. Gayathri has a Bachelor's degree in Information Technology from Avinashilingam University, Tamil Nadu, India, and a Master's degree in Business Administration (Finance and Systems) from the PSG Institute of Management, Tamil Nadu, India.

### Ramesh Ramaswamy

**Ramesh Ramaswamy** is an insurance transformation practice leader in TCS' Banking, Financial Services, and Insurance (BFSI) business unit. Ramesh advises large insurers on business and technology transformation strategy and has over 22 years of experience in design and delivery of large agency transformation, policy administration, underwriting and claims transformation programs across the US, the UK, Europe, Japan, and India. Ramesh holds a Bachelor's degree in Engineering from College of Engineering, Guindy, Chennai, India.



# Abstract



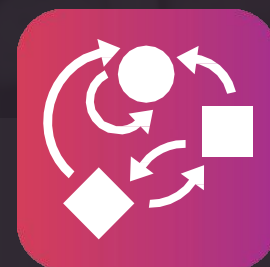
Claims processing is the keystone of insurance business as it embodies insurers' ultimate commitment to their customers. While many property and casualty (P&C) insurers have modernized their core claims platform from a technology perspective, the platforms are largely book-keeping systems with limited ability to positively impact customer experience or cut processing costs and settlement time. The recent COVID-19 pandemic has accentuated this problem for insurers, heavily burdening the claims personnel, especially in areas such as travel, business interruption, and property. Furthermore, siloed digital adoption in claims operations with primary focus on specific areas like first notice of loss (FNOL) and fraud detection has hindered straight-through processing (STP), same-day settlement, and rules based automated adjudication for more complex claims. While the need for end-to-end digitalization in claims operations is clear, insurers face an array of challenges due to complexity of claims, diversity of skillsets needed to adjudicate, distributed teams, and the absence of a comprehensive digitalization strategy that addresses critical opportunities for technology intervention, as well as regulatory requirements. This white paper examines the claims value chain and highlights opportunities for digitalization across the claims lifecycle.



PURPOSE-DRIVEN



RESILIENT



ADAPTABLE

# Digitalization of the Claims Value Chain: A Strategic Differentiator



Digital technologies are reshaping customer expectations and redefining industry boundaries. Despite tremendous development in artificial intelligence (AI), machine learning (ML), blockchain, augmented reality, drones, and other technologies, these advancements are yet to be effectively used in mainstream claims operations. That said, some insurers have experimented with emerging technologies by running pilots. In our view, insurers should focus on building an adaptable digital spine with the flexibility to service future claim scenarios. Insurers must also consider tapping into the insurtech ecosystem through different means including application programming interfaces (APIs) to access services like automated inspections, on-demand claim handling, and AI powered fraud detection processes.

In the emerging post COVID scenario, digitalization of the claims value chain will be a strategic differentiator in a marketplace where customer centricity has become synonymous with competitive advantage and market leadership. For many insurers distributing products through intermediaries, claims processing is the only opportunity to make a positive impact at the 'moment of truth', when emotions run high. A delighted claimant will remain a customer for life. A resilient claims platform elevates the claims operations to the next level, improving the accuracy of claims payouts, reducing settlement time, and ensuring better outcomes both for insurers and claimants while shielding insurers against systemic shocks and once-in-a-lifetime events.





# Digital Opportunities across the Claims Value Chain



Customers seek a claims process that is intuitive, accelerates settlement time, and transparent on the adjudication decisions. Redesigning the processes that involve customer interactions and automating the manual processes are essential to provide a simple and faster claims service. To future-proof insurance claims organization for the post-pandemic era, insurers must invest in skilled and experienced professionals and partner with the right technology and service providers to develop a resilient claims processing system for the future. AI, analytics, and automation technologies have the potential to transform claims processing by improving fraud detection, reducing expenses, and eliminating human intervention. The first step in the journey should be to benchmark the digital maturity of the existing claims operations, identify areas for digital intervention, and appropriately prioritize and channel investments toward key digital initiatives across key processes like FNOL (see Table 1), claim creation (see Table 2), and settlement (see Table 3).






 <b>Digital Opportunity</b>	Area of Impact			
	 <b>Customer experience</b>	 <b>Claim outcome</b>	 <b>Adjudication</b>	 <b>Settlement</b>
FNOL reporting through multiple channels - phone, emails, call center, social apps, chatbots, smart speakers, and internet of things (IoT)	High	Low	Low	Medium
Self service capabilities for third-party service providers	High	Low	Low	Low
‘Claims wall’ to enable direct communication between claimants and adjusters	High	Low	Low	Low
Document management using intelligent technologies and cloud storage for claims artifacts and case history documents	Medium	Low	Medium	Medium
Claim settlement time prediction leveraging advanced algorithms and ML	High	Low	Low	Low
Proactive injury and liability management and third-party liability predictability	Low	High	Medium	Medium

Table 1: First Notice of Loss
















<div>  <div>Digital Opportunity</div> </div>	Area of Impact			
	 <div>Customer experience</div>	 <div>Claim outcome</div>	 <div>Adjudication</div>	 <div>Settlement</div>
Claim segmentation based on severity and loss location using predictive analytics and AI led automation	Low	Medium	Medium	Medium
Dynamic claims tracking and reassignment based on severity	Low	High	Low	Low
Case management leveraging intelligent technology led automation and aided by insights drawn from customers’ mobile data, chat, images, and data from drone assessments and IoT devices	Low	High	Medium	Medium
Diagnosing claim outcomes and offering resolution paths leveraging auto adjudication engine incorporating analytics enabled dashboards	High	Medium	Medium	Low
Service engagement between third parties and insurance carriers and repair shops through digital channels and automation of processes such as invoice verification and approval	Low	Low	Medium	Low
Visual surveys, digital inspection, and automated data capture through a cognitive vision framework	Low	Low	Medium	Medium
Vehicle and property damage assessment using AI and geospatial imaging, pre- and post-event images, videos, and drone images	Medium	High	High	High
Litigation evaluation using litigation calculator and analytics technologies	Low	High	Low	Medium

Table 2: Case Creation, Segmentation, Assignment, and Adjudication



 Digital Opportunity	Area of Impact			
	 Customer experience	 Claim outcome	 Adjudication	 Settlement
Cognitive agent for STP of routine claims with predictable characteristics and patterns	High	High	High	High
Reserve allocation using analytics and reserve management using AI driven dashboards for real-time view and tracking	Low	Low	Low	Low
Dispute avoidance in complex claims using algorithmic decision-making powered by ML and data insights	Low	Medium	Medium	Low
Predict maximum medical improvement (MMI) condition for workmen's compensation (WC) claims	Low	Medium	Medium	Medium
Quantum of payout calculation using analytics	Low	High	Low	Low
Instant payment services to third parties - concierge services, medical provider, cyber security and repair units, garages	Low	Low	Medium	Low
Support for multiple payment modes based on customer preference	High	Low	Low	Low
Parametric claim payment automation	High	High	High	High

**Table 3: Claims Settlement, Subrogation, Recoveries, Litigation Management, and Fraud Detection**

 <b>Digital Opportunity</b>	Area of Impact			
	 <b>Customer experience</b>	 <b>Claim outcome</b>	 <b>Adjudication</b>	 <b>Settlement</b>
Subrogation opportunity scoring based on advanced analytics	Low	High	Low	Low
Subrogation process handling leveraging blockchain	Low	High	Low	Low
Litigation propensity (legal case creation) along with document repository using AI technologies	Low	High	Low	Low
Risk prediction and prioritization of claims with the likelihood of large settlements	Low	High	High	High
Content manipulation and location spoofing prevention	Medium	High	High	High
Fraud scoring based on analysis of structured and unstructured data like loss details, photos and voice; automatic assignment of cases with high fraud score to special investigation unit (SIU)	Low	High	Medium	Medium
Fraud detection using AI and web-crawling tools to identify suspicious and fraudulent claims, reveal networks, and discover hidden patterns	Low	High	High	High

**Table 3: Claims Settlement, Subrogation, Recoveries, Litigation Management, and Fraud Detection**



## The Way Forward



As insurers step into the post-COVID era, they must augment their claims transformation and modernization programs by bringing in a higher degree of process automation, reducing and streamlining workflows, and adopting AI-powered decision engines. We envision a future claims ecosystem with varied stakeholders coming together on a digital platform to enable faster and smoother processing with limited or no human intervention. Connected platforms that facilitate data-driven decision making and incorporate cognitive tools for proactive monitoring and fraud detection coupled with resilient operating models with the ability to quickly adapt to evolving market conditions (see Figure 1) will enable seamless claims processing and enhance customer experience.

## Proactive



Comprehensive fraud check and auto processing with limited or no manual intervention



Proactive monitoring services managed by advanced analytics and cognitive agents

## Seamless



Better data capturing at all stages of the claims cycle



Intelligent case management to differentiate between fraudulent and genuine claims

## Connected



Digital ecosystems to bring together various stakeholders and leverage partner competencies to reduce claims lifecycle



Communication strategies to provide automatic and meaningful status updates

## Resilient



Robust operating models to handle new types of claims arising from new realities created by economic downturns and paradigm shocks



Reskilling claims workforce to improve productivity and facilitate error-free processing

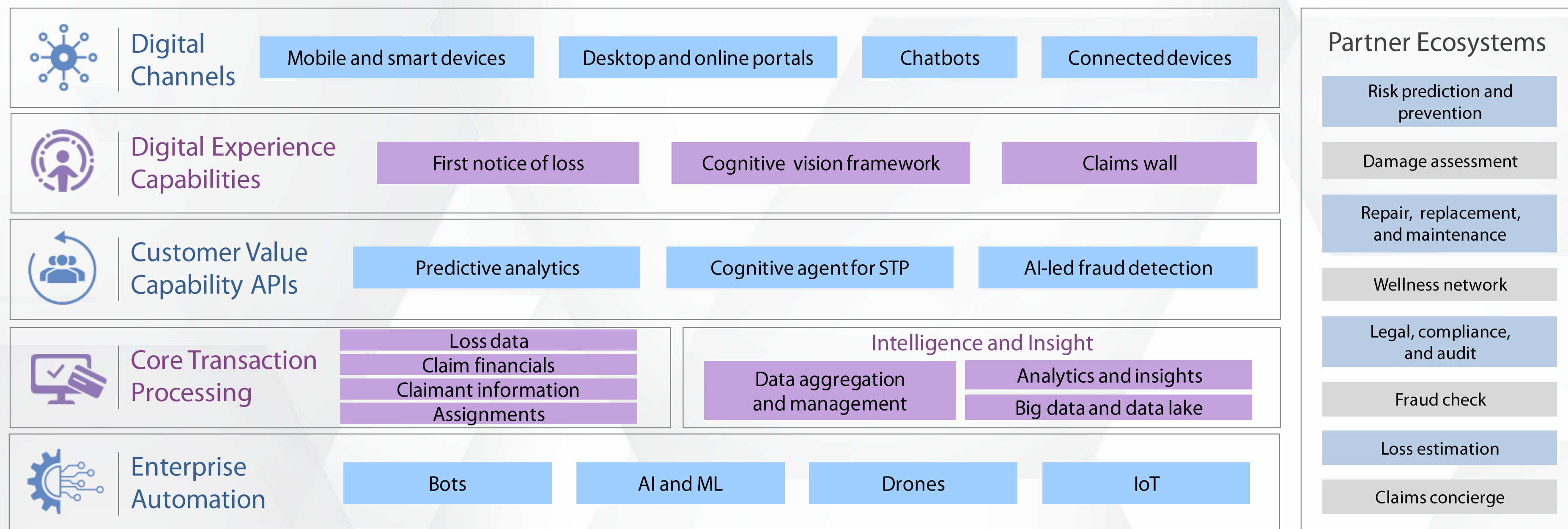
**Figure 1: Future of Insurance Claims Processing**



Moving to a digital claims processing platform (see Figure 2) will require insurers to:

- Reimagine the claims process from the perspective of all the stakeholders to enable a seamless claims experience while minimizing adjudication expenses and settlement time.
- Build a robust claims administration platform either by implementing a commercial off-the-shelf (COTS) product or through a greenfield transformation to accommodate current and future claims scenarios like parametric insurance.
- Create an omni-channel digital experience supported by context specific analytics and insight engines delivered on secure and agile infrastructure.
- Embrace the insurtech ecosystem to bring best-in-class capabilities like damage estimation, field inspection through on-demand workforce, and technology led fraud detection to the claims function.
- Lay down a structured change management process with focus on transparent communication aimed at making claim handlers and adjusters willing and active participants in the change.





**Figure 2: Digital Claims Reference Architecture**

In the future, claim volumes and adjustment expenses will go down due to proactive initiatives of insurers. However, insurers will likely witness an unexpected surge in new types of claims due to new developments and inventions in adjacent industries such as the rise of autonomous cars, AI-powered smart homes, and space trips. This coupled with external factors such as unforeseen paradigm shocks like the ongoing pandemic and businesses reimagining their operations will require insurers to constantly reinvent, reskill, and rethink their claims operations to stay on top of the game. Needless to say, insurers that act fast will gain an edge over their peers and lead in the post-COVID era.



## Contact

For more information on TCS' Banking & Financial Services,  
please visit <https://www.tcs.com/banking-financial-services>

Email: [bfsi.marketing@tcs.com](mailto:bfsi.marketing@tcs.com)

---

### About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match.

TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at [www.tcs.com](http://www.tcs.com)

All content / information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content / information contained here is correct at the time of publishing. No material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed in any form without prior written permission from TCS. Unauthorized use of the content / information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties.

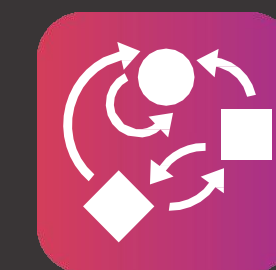
**Copyright © 2020 Tata Consultancy Services Limited**



PURPOSE-DRIVEN



RESILIENT



ADAPTABLE