

# en **GO** ge

A  
U  
G  
2  
3

“There isn’t a person anywhere who isn’t capable  
of doing more than he thinks he can.”

-Henry Ford



Introducing

**Inderpal Kohli**

Vice President and Chief Information Officer,  
**Englewood Health**



# Table Of Content

---

<b>Introducing Inderpal Kohli</b>	<b>05</b>
<b>Vice President and Chief Information Officer, Englewood Health</b>	
<hr/>	
<b>ZIF Endpoint Management - DX+</b>	<b>08</b>
<b>By Suresh Kumar Ramasamy</b>	
<hr/>	
<b>Healthcare Revenue Cycle Management</b>	<b>11</b>
<b>By Rajeswari S</b>	
<hr/>	
<b>Generative UI - Use Cases</b>	<b>14</b>
<b>By Sekar Thanigaimani</b>	
<hr/>	
<b>The AI-Driven Era of Governance, Risk and Compliance</b>	<b>17</b>
<b>By Praveen Kumar Jothi</b>	
<hr/>	
<b>Design Sprints - An Introduction</b>	<b>21</b>
<b>By Team Unbox</b>	
<hr/>	

# Editor's Note

With AI technologies advancing rapidly, a significant portion of future writing will rely on AI-assisted tools, reaping considerable benefits in the process. The field of legislation is also witnessing the permeation of AI-assisted writing.

In Massachusetts and the US House of Representatives, several early bills were drafted by AI under the guidance of human users and legislators. One of the most well-known examples of AI-generated legislation is the bill – which regulates generative artificial intelligence models - that was drafted by Sen. Barry Finegold, using ChatGPT. The US House of Representatives introduced a bill that was written by an AI called Cirq. The bill, which would have created a new federal agency to oversee AI research, was not passed.

Although some AI-driven bills and speeches have been criticized for their brevity and lack of substantive policy details, they have opened doors to a future where AI plays a more prominent role in legislative processes. The adoption of the first novel legislative amendment to a bill written by AI can become a reality in the near future. The natural progression for AI-generated policies to become law could be microlegislation. It involves making precise modifications to existing laws or bills, catering to specific interests and purposes. However, this method could also lead to adverse consequences, as such amendments might be discreetly filed among a deluge of other changes, potentially avoiding proper scrutiny from the public.

In addition to the use of AI to draft legislation, AI is also being used in a variety of other ways in the political sphere. For example, AI is being used by political campaigns to generate social media content, by pollsters to simulate election results.

Yet, it is essential to tread carefully as we navigate this AI-driven political landscape. While AI can be a valuable tool, it is crucial to ensure that its applications remain ethical, transparent, and aligned with the best interests of society. Our collective responsibility lies in steering AI toward beneficial ends while guarding against potential misuse. Striking a balance between innovation and regulation is key to leveraging AI's potential while safeguarding against potential risks.

In this edition, Team enGAge spoke with **Inderpal Kohli, Vice President and Chief Information Officer, Englewood Health**. He spoke about his journey, his leadership style and the challenges he faced in his professional life.

**We have some insightful articles in this edition.**

**Suresh Kumar Ramasamy** has written, **ZIF Endpoint Management - DX+, A proactive solution.**

**Rajeswari S** has written, **Healthcare Revenue Cycle Management.**

**Sekar Thanigaimani** has written, **Exploring the Potential of Generative AI.**

**Praveenkumar Jothi** has written, **GRC 2.0: The AI-Driven Era of Governance, Risk, and Compliance.**

**Team UNBOX** has written, **Design Sprints – an Introduction.**

**Happy Reading!**



**Soumika Das**



## What's New in Tech

### **New skin-like sensors fit almost everywhere**

Researchers from the Munich Institute of Robotics and Machine Intelligence (MIRMI) at the Technical University of Munich (TUM) have developed an automatic process for making soft sensors. These universal measurement cells can be attached to almost any kind of object. It has the potential to bring about a general revolution in industries such as robotics, prosthetics and the human/machine interaction.

### **Robot team on lunar exploration tour**

Swiss researchers led by ETH Zurich are training legged robots for future lunar missions that will search for minerals and raw materials. To ensure that the robots can continue to work even if one of them malfunctions, the researchers are teaching them teamwork.

### **Revolutionary self-sensing electric artificial muscles**

Researchers from Queen Mary University of London have made groundbreaking advancements in bionics with the development of a new electric variable-stiffness artificial muscle. This innovative technology possesses self-sensing capabilities and has the potential to revolutionize soft robotics and medical applications.

### **Emulating krills to build a robotic platform for ocean navigation**

Brown University researchers have presented important first steps in building underwater navigation robots. They outlined the design of a small robotic platform called Pleobot that can serve as both a tool to help researchers understand the krill-like swimming method and as a foundation for building small, highly maneuverable underwater robots. It has the potential to allow the scientific community to understand how to take advantage of 100 million years of evolution to engineer better robots for ocean navigation.

**Source:** [www.sciencedaily.com](http://www.sciencedaily.com)

## Introducing Inderpal Kohli

Vice President and Chief Information Officer,  
Englewood Health



### Tell us about your journey in healthcare IT which brought you here today.

My journey in healthcare IT has been filled with passion, dedication, and continuous learning. It all began over 35 years ago when I first developed a love for information technology and computers. This early fascination led me to pursue an engineering degree in computer science and technology management, setting the foundation for my career in the IT industry.

Over the course of 27 years, I've had the privilege of working in various sectors, starting as a software professional in the banking and financial industry. However, my true calling came when I transitioned to the healthcare sector and joined Columbia University Medical Center. This move allowed me to be part of cutting-edge informatics research and the development of advanced solutions that bridged the gap between biomedical research and patient care. The experience was both thrilling and educational, as I witnessed how technology could revolutionize patient care and contribute to medical advancements.

After my time at Columbia, I embarked on a thirteen-year journey with HSS New York, where I had the opportunity to impact patient care through technology solutions directly. I took on leadership roles and actively sought out opportunities to contribute to various clinical technology projects.

My involvement in numerous initiatives, including EMR implementation, imaging technologies, medical device integration, data analytics, mobile



**Inderpal Kohli**

technologies, and clinical safety improvements, further honed my skills and expertise in healthcare IT.

All these experiences culminated in my current position as a thought leader at Englewood. As a technology leader, I now have the privilege of aligning the organization's technology portfolio with its strategic initiatives and growth plans. I take pride in my journey, knowing that every step has prepared me to make a meaningful difference in the healthcare IT landscape and positively impact patient care and outcomes. The continuous evolution and challenges in healthcare IT keeps me motivated to stay at the forefront of innovation and make a lasting impact in the field.

### Please tell us something about your childhood. What values had been instilled in you that helped you excel later in your life?

Discipline! It is the key to success and a life-changing habit.

It is still a work in progress, as you know, we can always be better, but I try to lead a disciplined life both at work and at home.

Professionally, discipline has been the cornerstone of my success, propelling me to achieve my goals and excel in my career. By maintaining a disciplined approach, I ensure that I remain organized, focused, and reliable, allowing me to deliver consistent results and make a significant impact in my field. This steadfast commitment to discipline has fostered productivity and garnered trust from colleagues and superiors alike.

In personal life, discipline extends beyond its professional benefits. It has played a crucial role in nurturing healthier relationships by aiding effective communication and active listening. Demonstrating respect and empathy becomes natural through the practice of discipline, and it empowers me to foster strong and meaningful connections with those around me.

Discipline allows me to be more in control of my day and my plans and, more importantly, gives me a chance to influence the outcomes. In essence, the early cultivation of discipline during my formative years has driven my achievements and personal growth.

## **What have been some of the biggest challenges in your professional life and how that has shaped you?**

Throughout my extensive career, I have faced numerous challenges, but none have been as impactful as the last three years dominated by the COVID pandemic. The outbreak of COVID-19 revealed our remarkable ability to adapt and transform at an astonishing pace, surpassing even our own expectations. In a mere three months, we achieved a level of transformation that would typically require three years. The urgency brought on by the pandemic was unprecedented and presented unique challenges without an established care plan. As IT became an integral part of clinical care and operations, we found ourselves on the frontlines of patient care, tasked with designing and implementing solutions on the fly, without the luxury of time for thorough planning, testing, and validation. Our focus was on providing immediate

support to clinicians, patients, and families in their time of need. This experience has profoundly influenced my approach to designing solutions that promote accessibility, health equity, and equitable care. I am driven by the vision of utilizing technology to bridge the digital and access divide among different communities. I believe that AI and machine learning can play a pivotal role in addressing the disparities in outcomes across various population groups, facilitating ease of access, and ultimately striving for universal access to healthcare services.

I am determined to continue exploring innovative ways to positively impact patient care, ensuring that technology becomes a powerful force in promoting equality and inclusivity in healthcare delivery.

## **How do you think the COVID pandemic has changed the healthcare industry?**

The COVID pandemic has ushered in a profound transformation in the healthcare industry, revealing our ability to rapidly adapt while ensuring the delivery of safe care. This impressive feat was not merely a product of adrenaline-fueled responses but rather the culmination of years of meticulous groundwork and streamlined processes that could be accelerated without compromising safety. The urgency imposed by the pandemic demanded immediate action and yet again reinforced the vital role of IT in our healthcare delivery models.

However, the pandemic also brought to the forefront the harsh reality of unequal access to care among diverse communities and population groups. While digital healthcare solutions proved beneficial for many, they also exposed the glaring disparity for those without the means for connectivity, lacking technological capabilities, or facing limited opportunities. The consequences of this disparity may surface in the future, as missed screenings and preventive care could manifest into more complicated and challenging health issues.

The COVID pandemic has catalyzed change in the healthcare industry, prompting us to accelerate our technological advancements while highlighting the pressing need for equitable access to care.

## How would you describe your leadership style? Do you think leadership can be taught?

I would describe my leadership style as democratic, strongly emphasizing empowering my team and providing them with the necessary tools and support to excel. I believe in giving my team the autonomy they need to carry out their tasks effectively while also being available to step in and make executive decisions if conflicts or uncertainties arise. Collaboration is essential to me, and I am comfortable working as part of a team and offering guidance when needed.

One of the major roles of a leader is to ensure that the team's efforts are aligned with the organization's priorities. This involves empowering the team members, providing the resources and support they require, and setting realistic expectations to achieve the established goals and deadlines.

As for whether leadership can be taught, it can certainly be partially taught to learn specific skills. However, the full extent of leadership development comes from real-life experiences gained while working in the trenches alongside exceptional leaders and learning from both successes and failures. While formal education can provide some valuable insights, the hands-on experience genuinely shapes and refines one's leadership abilities.

## What advice would you give those who want to pursue a career in STEM?

For aspiring individuals seeking a career in STEM, I advise pursuing the best and most comprehensive education possible, irrespective of the specific field of study. A well-rounded education equips you with diverse knowledge that can be seamlessly applied to the realms of Science and Technology. When you ultimately choose to embark on a career in Technology, leverage all that you have learned to make a tangible impact in the real world.

As you progress in your STEM journey, remember to keep a human-centric perspective. Understanding the needs of individuals and communities will help you channel your technical skills toward creating solutions that genuinely improve lives and contribute to societal progress. Strive to be an empathetic technologist, aware of the ethical implications and implications of your work.

Additionally, seek opportunities for hands-on experiences and practical application of your knowledge. Engage in internships, projects, or volunteer work that allows you to use your skills in real-world settings. This exposure will provide valuable insights into the challenges and possibilities that await you in your STEM career.

## How do you envision the Future of Transformation in Healthcare?

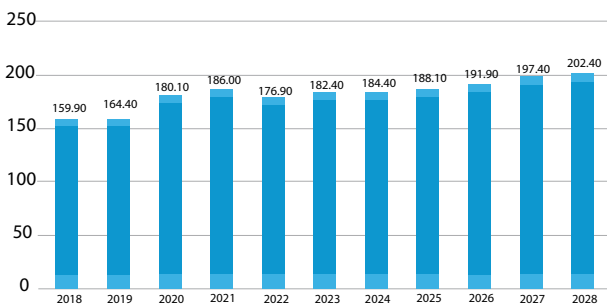
In the coming decade, healthcare will continue an accelerated transformation, prioritizing patient experience and engagement. Analog and Digital care will merge, combining in-patient services with seamless digital experiences. Data-driven patient profiles will enable personalized care. Telehealth and AI will expand accessibility and early interventions. Proactive health management and collaboration among stakeholders will drive a patient-centric and efficient healthcare system.



# ZIF™ Endpoint Management – DX+

According to Statista, there are 182 million laptops in use worldwide and expected to reach 202 million by 2028. With the growing need of laptops and other endpoints (Desktops and VDIs), irrespective of whether it is for personal use or professional use, the day-to-day challenge in Endpoints increases considerably.

**VOLUME** VOLUME GROWTH



Most recent update: Mar 2023  
Source: Statista Market Insights

From an organization’s point of view, IT team must ensure the smooth day-to-day operations of Endpoints. Given below are a few challenges on various categories,

## HARD WARE

- Laptop Heating Issue
- Laptop battery not yielding backup
- Device driver conflict/Disabled
- USB malfunction
- Firmware issue
- Disk failure
- Random reboot issue & improper shutdown
- Hardware changes (Removal of Ram)
- Date & time not in sync

## SOFTWARE

- Application & OS Patches are not up-to-date
- Usage of unauthorized software against organization policy
- Endpoints missing mandatory software

## COMPLIANCE

- GP not up-to- date
- Usage of un-approved add-ins
- Failed GP update

## RESOURCE OPTIMIZATION

- Slowness complaints
- User complaining about low disk space

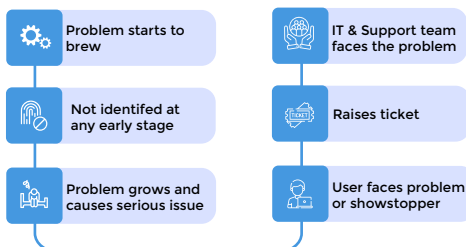
## NETWORK

- Frequent wireless disconnection
- High bandwidth usage
- Large file upload
- Printer service issue

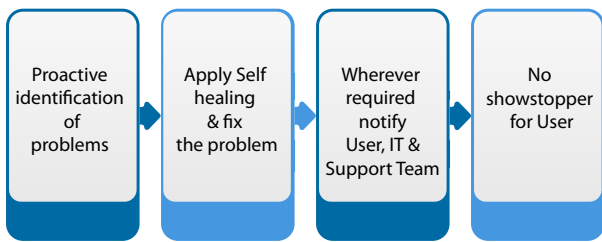
## WORK FROM ANYWHERE

- Unable to track the WFH users

**In normal situation** most of these problems are not known at early stage and cause serious challenges. Once the situation is bad, the IT department receive complaints from the users. Support team looks for solutions and fixes the problems.







ZIF Endpoint Management, a Digital Experience (DX+) solution, does exactly the same. It monitors for resource, compliance and change of state. If there are issues, ZIF automatically applies the necessary self-healing, some of them are listed below.

### Resource Monitoring

- Resource Utilization - Helps understand the resource (CPU, Memory, Disk, Network IO) utilization.
- Resource Optimization - Helps know the available resource capacity (CPU, Memory, Disk) across single or group of machines.
- Hardware Monitoring - CMOS Battery Monitoring, Fan speed, Temperature, Firmware.

### Compliance

- Compliance – Understand the unwanted application or process running at your endpoints
- Software, License & Patch updates – Get notified about the software which is not required to be installed or outdated as per org standard.
- Application Inventory – Understand the inventory of software installed on each endpoint.

- Authenticity – Ensure the right member is using the endpoint device.

### Change of State

- Change in behavior.
- Change in Communication.
- Change in target.
- Change in Pattern of data.
- Unauthorized usage of application.

### Self Healing

- Monitor the availability of mandatory software, if not, install
- Apply the GP and Patches, KBs
- Monitor the non-standard software, if any, uninstall
- Killing unwanted process/application
- Disk Defragmentation & Disk Cleaning.

In summary, DX+ acts proactively to know the symptoms and take necessary action. For e.g., a patch that is missing in an Endpoint can cause massive impact if not taken care of at right time, with DX+ in place, it automatically identifies the gap and applies the recommended patch. Similarly, wherever there are brewing issues, they are identified and addressed. Available as SaaS <https://zifdx.zif.ai/> and on-premises version, user can register, download and install the DX+ and get these benefits. DX+ plays a crucial role in Endpoint Security Management, we will see those in upcoming article.

#### Source:

<https://www.statista.com/outlook/cmo/consumer-electronics/computing/laptops/worldwide#volume>

# About the Author

Suresh Kumar Ramasamy has 20 years of experience in Native Applications, Web, Cloud and Hybrid platforms from Engineering to Product Management. He has designed & hosted the monitoring solutions.

He has been instrumental in conglomerating components to structure the Environment Performance Management suite of ZIF Monitor.

Suresh enjoys playing badminton with his children. He is passionate about gardening, especially medicinal plants.



**Suresh Kumar  
Ramasamy**



# Healthcare Revenue Cycle Management

We all visit hospitals for various types of care, get treated and get reimbursed for our hospital charges. But do we know what really happens at the back end in this whole healthcare journey? Do we know what processes are followed between we submit our bills and get it reimbursed? The answer would be predominantly - NO.

This article is the first part that helps you understand the chain of activities that happen from the time we visit a healthcare provider for our care, get admitted into a hospital till the hospital receives its payment for their services. These activities are summed up to be called the **Revenue Cycle Management**.

## Stakeholders and their Roles

There are 3 main stakeholders to the RCM process - Patient, Healthcare Provider and Healthcare Payer.

**Patients** register themselves with the hospital, get treated according to the insurance plan they are enrolled in and get reimbursed for their medical cost.

**Providers** provide medical services to the patient, submit medical bills to the insurers and get reimbursed for their services.

Payers are the people who pay for the healthcare services. They take in the medical claims, evaluate it, and reimburse the hospitals depending on the policy rules.

## Types of Payers

Payers are of 2 types - private and public or the government-run.

In the US, there is a huge government-run centre called the CMS, The Centres for Medicare and Medicaid Services which provides health coverage to more than 100 million people through various schemes such as Medicare, Medicaid, Children's Health Insurance Program, etc. which caters to the elderly, low-income groups, children, retired military people, and so on. Key private insurance companies of US would be Cigna, Humana, Blue Cross Blue Shield, among others.

Similarly, in India, we have government-run healthcare schemes such as Ayushman Bharat Yojana, Pradhan Mantri Suraksha Bima Yojana, Aam Aadmi Bima Yojana (AABY) and so on which cater to diverse group of people. Some key players in private health insurance sector would be Star Health and Allied Insurance, Bajaj Allianz General Insurance, ICI Lombard Health Insurance, among others.

## The Process

The RCM process comprises of 3 major categories of activities - Front office, Claims office, and Back office.

## Front Office

The front office plays a role when the patient calls the hospital for an appointment or pre-registration. The front office performs activities such as taking in the details of patient, details of ailment, medical history, checking their insurance details and their eligibility of medical coverage.

The front office also analyzes the various components and benefits covered under an insurance plan such as pre-ailment coverage, room rent entitlements, ambulance cost coverage, co-pay, deductibles, co-insurance, etc.

Revenue Cycle Management Market in terms of revenue was estimated to be worth \$49.6 billion in 2023 and is poised to reach \$84.1 billion by 2028, growing at a CAGR of 11.1% from 2023 to 2028 according to a new report. In 2022, North America held the largest market share for revenue cycle management

Then the patient meets with the doctor, disease is diagnosed, and treatment plan is decided. Before starting the treatment, the hospital must do a pre-authorization check. **Pre-authorization** is a key step in RCM where the hospital checks with the insurance company if the proposed treatment is covered under the medical plan the patient is enrolled in.

After getting the necessary approvals from the insurance company, the patient's admission, treatment, medical intervention, procedure happens one after the other and the patient is discharged.



## Claims Office

Now, the claims office's crucial role begins. They have to submit the medical documents or medical claim to the payer to get reimbursed. In this process, they perform Medical Coding, which is again a crucial process in RCM where every step of the patient's medical activity is coded as per the medical coding standards ICD and CPT.

The procedure, diagnosis, treatment given, tests performed, surgical instruments used are assigned a code followed by an activity called the Charge Entry, where all these codes are converted into a value which sums up to a medical cost of the services provided to the patient.

Before submitting the medical claim to the payer, another key activity called the Claims Scrubbing happens, where the claim is thoroughly scrutinized by the claims department as final check before submission. Claim scrubbing is the process of scanning the practice's medical claims for errors that would cause payers (i.e., insurance companies) to deny the claim.

Once, the claims are submitted, the role of payer or the insurer starts with Claims Processing. The payer analyzes the claim, validates the documents submitted for accuracy, adequate information, and authenticity.

The decision-making activity of the payer whether to reimburse the claims, how much to reimburse, etc. is called the Claims Adjudication. Insurance companies use a combination of automated and manual verification for the adjudication of claims. Based on the claim adjudication, the insurance company reimburses an amount to the hospital.

The insurance company also sends a notification known as an explanation of benefits (EOB) which includes details of the claim amount paid, amount not paid, reasoning for each of these, patient responsibility amount (in cases of co-pay or co-insurance), covered amount, discount amount and so on. For the amount paid, the payer also sends an Electronic Remittance Advice (ERA) which details out the break-up of the amount reimbursed, denied amount, etc.

As a final step to the RCM process, the insurance company settles the amount that it is due to pay the healthcare provider for the treatment rendered to the insured patient.

If claims are denied, the provider interacts with the payer to know the reason for denial and the patient to get the required documents/information for resubmissions. Denial Management is a stream of work by itself in the RCM process which includes appeals, resubmissions, and resolutions.

To be continued in the second part of this series.

**International Classification of Disease (ICD)** is a morbidity classification published by the United States for classifying diagnoses and reason for visits in all health care settings. **Current Procedural Terminology (CPT)** is a uniform language for coding medical services and procedures to streamline reporting, increase accuracy and efficiency.

Source: Wikipedia

## About the Author

Rajeswari is part of the Solutions & Strategy team at GS Lab I GAVS. She has been involved in technical and creative content development for the past 15 years. She is passionate about learning new technologies, gardening, music and writing. She spends her free time watching movies or going for a highway drive.



**Rajeswari S**



# Exploring the Potential of Generative AI

Use Cases in Healthcare, BFSI and IT Services

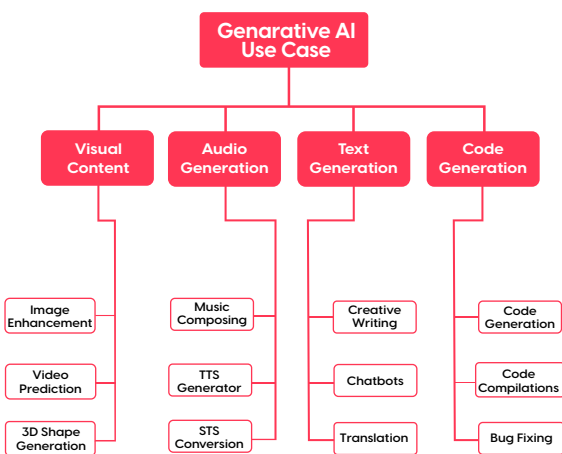
Unleashing the power of artificial intelligence, Generative AI has emerged as a ground-breaking technology that pushes the boundaries of automation further than ever before. By training on vast datasets, Generative AI models possess the remarkable ability to create diverse content, including text, visuals, audio, and even code, in response to natural language prompts, as depicted in the diagram below. In this blog, we delve into the exciting world of Generative AI, exploring its potential use cases across various industries, such as healthcare, banking, financial services, insurance (BFSI) and IT services.

## Healthcare

Generative Artificial Intelligence holds immense potential as a digital assistant for physicians and healthcare providers, revolutionizing the accuracy of patient diagnoses. By analyzing a comprehensive range of data from past health records, including medical notes, medical images, prescription, wearable devices data, lifestyle information etc., it can offer them a personalized treatment plan/wellness plan, recommendation on whether to increase or decrease cost of insurance, value of insurance coverage and so on. The application of Generative AI in healthcare has the potential to significantly enhance patient care and outcomes.

## Banking, Financial Services and Insurance (BFSI)

Generative AI offers numerous possibilities for the BFSI industry across the globe in achieving operational excellence. By harnessing its capabilities, the BFSI industry can optimize processes such as fraud detection, risk management, and real-time decision making. Generative AI also facilitates tasks such as writing assistance, data analysis, report summarization, and speech-to-text conversion, streamlining documentation processes.



Moreover, virtual assistants powered by Generative AI, such as chatbots, prove instrumental in efficiently handling customer complaints and queries, allowing for more personalized and tailored services that enhance customer satisfaction. By empowering employees with advanced capabilities and driving productivity, Generative AI adds substantial business value to the BFSI industry.

## **IT – Software development & Infrastructure Services**

Generative AI can be leveraged to read the logs of events, errors, warnings, and sessions of various devices (router, network switches, firewall, wireless devices, servers etc.,) and recommend early warnings, preventive maintenance plan, customized best practices and recommendation plan on which processes needs attention.

Knowledge Transition between vendor and customer is a challenge. In many cases, documented information about the IT Landscape / Infrastructure, Software application(s), Architecture, Design, known errors / issues/known risk(s), Knowledge Base Articles, SOP – Standard Operating Procedure etc., for Key / critical business system may not be available. By leveraging Generative AI, IT staff members who possess knowledge about the systems and applications can effectively document this knowledge, mitigating the business risks associated with reliance on key individuals or contractors who hold such information. Furthermore, this approach helps new team members get the right information, learn the right processes, and decreases the Mean Time to Repair, resulting in improved productivity through the consistent capture and maintenance of this knowledge.

In Agile projects, grooming plays a pivotal role in ensuring that user stories are thoroughly discussed, enabling the team to gain a comprehensive understanding of the required functionality. This includes considerations for design, integrations, and expected user interactions. Generative AI can be instrumental in documenting these discussions, capturing, and maintaining such knowledge. As a result, productivity is enhanced, and there is reduced

dependence on key team members, leading to more efficient project execution.

The advent of Generative AI has opened up a world of possibilities across various industries, revolutionizing the way we approach automation and content creation. From healthcare to banking, financial services, and even IT services, Generative AI has showcased its potential to enhance operations, improve outcomes, and drive productivity. By leveraging its capabilities, healthcare providers can achieve more accurate diagnoses and personalized treatment plans, while the BFSI industry can optimize processes, detect fraud, and deliver tailored services to customers. In the realm of IT, Generative AI can streamline documentation, facilitate knowledge transfer, and improve productivity by capturing and maintaining intellectual knowledge.

With each use case, Generative AI demonstrates its power to transform industries, advance innovation, and unlock new frontiers of possibility. However, there must be a governance/review mechanism should be put in place to review the outcome of Generative AI to ensure the technology is rightly utilized without compromising privacy and compliances.

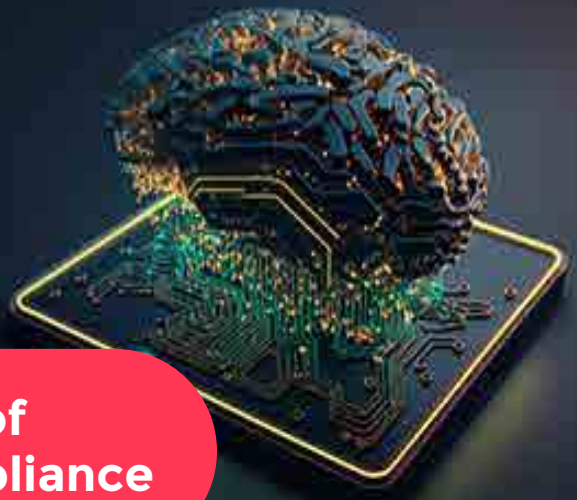
# About the Author

Sekar has around 30+ years of experience in IT Services/Product Management. Over his career, he has managed Product Engineering/ Development, Software Application Services, IT Infrastructure services, Digital Transformation, GRC, BCP, Automation, Continual Improvement. He has also designed, implemented and managed Certification programs like SEI-CMI-DEV & SVC, ISO 9001, ISO 27001, ISO 45001, ISO 22301, HIPAA, SOC2, GDPR, PCI-DSS, NIST etc.



**Sekar Thanigaimani**





## GRC 2.0: The AI-Driven Era of Governance, Risk, and Compliance

In an era of rapid technological advancements, the integration of artificial intelligence (AI) into various industries has become inevitable. One area where AI is making a significant impact is Governance, Risk, and Compliance (GRC). The convergence of AI and GRC is revolutionizing the way organizations approach governance, manage risk, and ensure compliance.

### Unlocking the Power of AI & ML in GRC

In the realm of GRC, the integration of Artificial Intelligence (AI) and Machine Learning (ML) is causing a paradigm shift in how organizations handle risk, bolster compliance efforts, and make well-informed decisions. The following are ways in which AI and ML can elevate your GRC processes:

#### Advanced Risk Assessment

AI and ML techniques enable organizations to analyze large amounts of data, uncover patterns, and identify potential risks. Automated risk assessment processes evaluate the likelihood and impact of risks, facilitating proactive risk management and mitigation.

#### Simplified Compliance Monitoring

AI simplifies regulatory compliance monitoring by swiftly analyzing extensive datasets against relevant regulations and policies. It detects anomalies and potential breaches, generating timely alerts for investigation.

This ensures ongoing compliance while reducing manual effort.

#### Combatting Fraud

AI and ML can detect and prevent fraud within GRC initiatives. By analyzing historical transaction data, user behavior patterns, and other relevant information, these technologies identify suspicious activities. Prompt action can be taken to safeguard the organization's integrity.

#### Intelligent Predictive Insights

AI and ML enable organizations to leverage predictive analytics for informed decision-making in GRC strategies. By analyzing historical data, patterns, and trends, these technologies forecast potential risks and compliance issues. Proactive measures can then be taken to optimize governance processes.

#### NLP for Enhanced Analysis

AI's Natural Language Processing (NLP) capabilities extract critical information and deeper insights from unstructured textual data, such as legal and regulatory documents. This streamlines compliance analysis by efficiently classifying documents and identifying key clauses, saving time and effort.

#### Intelligent Automation

AI and ML offer intelligent automation, freeing GRC professionals from repetitive tasks. Automating activities like compliance monitoring and risk assessment allows teams to focus on strategic initiatives, enhancing productivity and efficiency.

## AI in GRC – Realtime

AI systems have the potential to make decisions and draw conclusions based on complex algorithms and data. However, errors or biases in these systems can lead to unintended consequences such as compliance violations, reputational damage, and financial losses. To mitigate these risks, organizations must establish tailored governance, risk management, and compliance frameworks for AI. Here are five critical questions for board directors and senior executives to consider:

### **Do we know which business units, departments, or functions are already using AI and how they utilize it?**

Identifying all AI systems within the organization can be challenging, especially if some teams are using AI without the knowledge of the IT department. Conducting an audit in collaboration with IT is essential to gain a clear understanding of AI usage.

### **Have we documented governance processes for AI development, deployment, and use?**

Developing comprehensive and flexible governance processes for AI involves various stakeholders, including data scientists, IT professionals, and business leaders. Engaging with these stakeholders to understand their needs and concerns is crucial in establishing effective governance.

### **Do we have a systematic approach to evaluate gaps, overlaps, and risks associated with AI use?**

The complexity of AI systems, with multiple algorithms, data sources, and models, makes risk evaluation challenging. Collaborating with data scientists and AI experts is key to developing a rigorous methodology for identifying and evaluating risks related to AI usage.

### **How do we identify and manage reputational, relational, regulatory, and operational risks while remaining agile in adapting to AI changes?**

AI technology is dynamic, requiring organizations to be agile in risk identification and management.

Working with legal, compliance, and risk management professionals is necessary to assess and manage risks associated with AI, ensuring compliance, and adapting to the evolving AI landscape.

### **How can we ensure transparency, dependability, and credibility of our AI algorithms and models?**

Building trust in AI systems involves developing algorithms and models that are explainable, reliable, and trustworthy. Collaboration with data scientists and AI experts is essential to ensure transparency and credibility of AI systems for stakeholders.

## Using AI to enhance Employee Experience

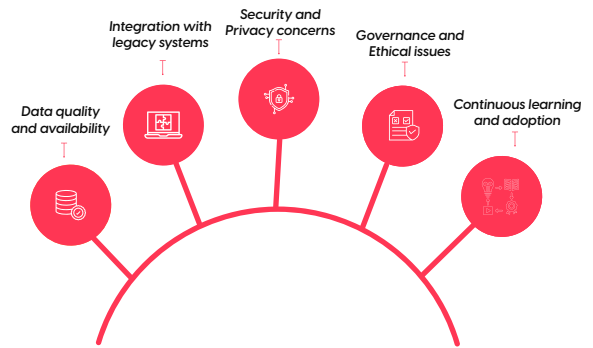
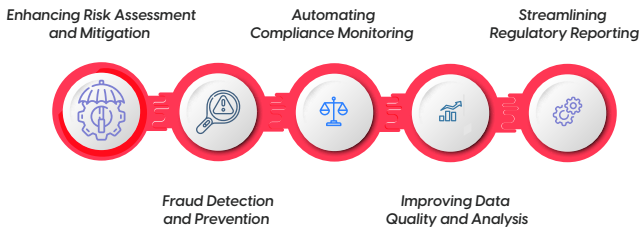
Integrating AI into employee experience offers significant advantages. One example is the implementation of AI-powered search capabilities in policies and procedures, enabling intelligent searches. This empowers employees to ask questions and find information using their own terms, enhancing accessibility, and increasing the likelihood of finding relevant information. This positively impacts an organization's compliance culture.

Additionally, administrators no longer need to include every possible keyword in policy documents. They can focus on crafting effective policies while relying on AI to deliver the appropriate content to users. AI-enabled search functions can be limited to information extracted from the company's policies, ensuring data security and relevance.

This approach extends beyond policies to encompass a searchable code of conduct and compliance training for employees. The language modeling capabilities of AI can also identify indicators for potential incident reports, simplifying the reporting process for employees.

## What is the role of AI and ML in GRC solutions?

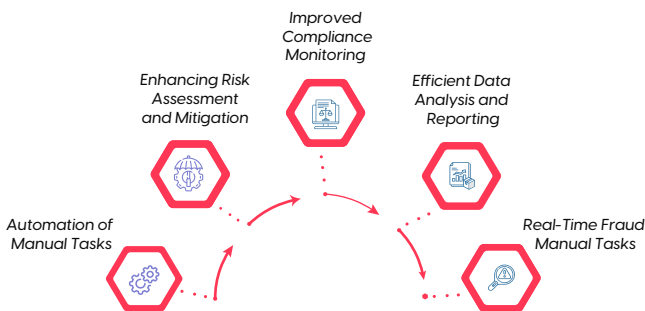
AI & ML are transforming GRC software, improving risk assessment, compliance monitoring, and decision-making. Their role will continue to expand, shaping the future of intelligent and proactive governance, risk, and compliance solutions.



In the AI-driven era of GRC, organizations benefit from improved efficiency, risk assessment, and decision-making. However, challenges include potential biases, lack of transparency, and the need for effective governance to ensure ethical and responsible use of AI technologies.

## What are the benefits of employing AI & ML in GRC software?

Leveraging AI & ML in GRC software yields benefits like enhanced risk assessment, improved compliance monitoring, and advanced predictive analytics, empowering better decision-making and proactive risk management.



## What are the benefits of employing AI & ML in GRC software?

Implementing AI and ML in GRC systems presents challenges for organizations. Key hurdles include data quality, algorithm bias, interpretability, and ethical considerations, requiring careful planning and expertise for successful integration.

Relevant Links for Further Exploration

<https://medium.com/@engmoez96/how-to-use-chatgpt-in-grc-7d84035e90da>

How to use ChatGPT to facilitate your life as GRC professional?

<https://www.linkedin.com/pulse/accelerating-auditing-ai-unlocking-power-artificial-augustine>

Accelerating Auditing with AI

*"Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war." - Center for AI Safety (CAIS)*

# About the Author

Praveen Kumar Jothi is a cybersecurity lead with 11 years of experience in the IT industry.

His expertise encompasses IT infrastructure, Identity and Access Management (IAM).

Additionally, Praveen is an active traveler and motorcycle enthusiast. He channels his passion for biking by running a biking club in the state.



**Praveen Kumar  
Jothi**



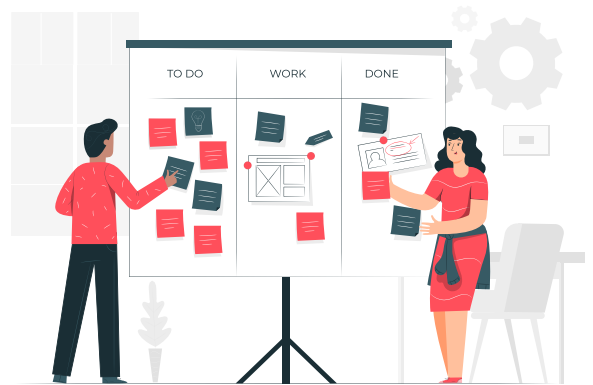
## Design Sprints – An Introduction

Around the year 2010, the term design sprint emerged. The design sprint methodology is a highly collaborative approach widely used to resolve a business challenge with optimal use of time and development resources. A simple framework, a design sprint allows teams to decipher critical business-related problems in a short span of time. While design sprint is often confused with design thinking, there are several differences, starting with the fact that design thinking is a philosophy used to approach a problem. Design sprints are used to create a prototype using dedicated resources from various departments and in a limited time. Simply put, a design sprint is applicable in a situation where the idea is already defined.

### Purpose of a Design Sprint

Design sprint is a collaborative process that is performed to resolve a realistic problem. While it does not apply to all processes or challenges, it is applicable where efficiency and focus are imperative to address the problem on hand. Design sprints are best suited for situations with a clearly defined problem. The main purpose of design sprints is to create an environment that will reduce the brainstorming phase of a design process from months to weeks. Design sprints can save the time spent on ideation and back forth volleying by unifying various teams to share a vision with a clearly defined set of deliverables and solutions.

Some examples of situations where design sprints can be used include improving user engagement for an app, redefining the customer onboarding process, or exploring a product's viability over time.

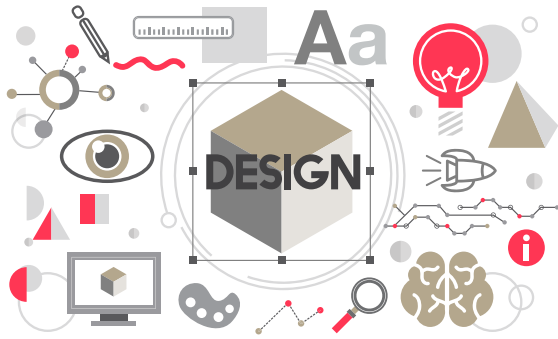


If the user engagement is low, design sprint brings important people in the design process together to work on a viable solution in the shortest span of time. Without design sprints, this problem is addressed in silos where each team presents their take or opinion. While all the ideas might be good, it becomes difficult to find a unified approach to resolving the issue.

### People Involved

There are several people involved in a design sprint process. The facilitator is at the center of the entire process, bringing participants together and ensuring everyone is on track. This person will be involved in the pre-sprint and sprint process, using their special skills to get the work done. The designer understands the aesthetic and design elements, thus ensuring the prototype is user-friendly and functional. The tech expert is the one who brings the vision of the product or app to reality. They use their knowledge and tech skillset to create the product.

The marketer focuses on marketing the product by explaining the sellable features of the design in a detailed manner. Finally, the product chief is pivotal to the entire design sprint process. Typically, this person is the CEO or the head of customer service. They are responsible for the product, and their opinions matters the most. Typically, this person is the CEO or the head of customer service. They are responsible for the product, and their opinions matters the most.



## Timelines

While the Google Ventures model suggests a 5-day schedule, realistically, it can be cumbersome to get all the members of the design sprints team to work within the said timeline. However, keeping in mind that a design sprint is a collaborative effort that brings together people from different departments, it is important to expedite the process without losing the integrity of the exercise. As all design sprint participants need to be present, giving people enough time to respond with their ideas is essential.



**DAY 1 - Understand** - It is the first step where every member of the design sprint team comes together to share their knowledge and insights. This involves understanding the problem the app or product is aimed to resolve. Various parameters are discussed, including competitor knowledge, target audience, business angle, technology capabilities, and feasibility.

**DAY 2 - Define** - The next step is defining the problem statement that will be addressed. This is done based on evaluating everything gathered from the first step and adding context. The team identifies the sprint's focus, goals, and success parameters here.

**DAY 3 - Sketch** - Having defined the objective of the sprint, individual members give ideas that are used to brainstorm for the next step. This is important as it shows how each member perceives and addresses the problem. If the design sprint is about refining the home page of a website, members of the design sprint team will come up with individual ideas and suggestions. Each idea is individually presented with their reasoning and logic. The ideas from this process are reviewed and evaluated before finalizing the creative direction.

**DAY 4 - Decide** - The team collaborates to identify the best idea or approach. Sometimes, a culmination of all ideas presented is used to create the final concept or direction that will be prototyped. This stage cements the ideation process, and the team moves to the prototype.

**DAY 5 - Prototype** - In the world of design sprints, the term prototype is used differently from standard product development. In this, the team creates a concept prototype that will be used to gain the target audience's response. This process is about creating a concept that is easy to validate and one that is also the fastest. Simply put, a prototype in a design sprint is an experiment that helps test the hypotheses.

**DAY 6 – Validate** – The final step in the design sprint process is critical to the success of the entire process. The prototype created is typically tested with five users and the feedback received through one-on-one discussions helps understand the concept's viability. The concept needs to be reworked or improved if the results are unviable. This step concludes the design sprint process.

UNBOX is a UX practice at GS Lab | GAVS, where we design world-class yet practical digital experiences for our customers. In numerous engagements, we have been involved in various stages of the product development lifecycle, including PoCs and MVPs. Our experience in UX allows us to navigate vast domains and different customer segments easily. Unboxing user experience aspects at an early stage of the product surely does reap benefits later.

## About the Author

### Team UNBOX

**U:** Usability

**N:** Next Generation Media

**B:** Branding

**O:** Optimized Solutions

**X:** Experience

Unbox is a User Experience team at GS Lab | GAVS. The team prides itself on being the experience strategists who elevate their client's digital growth and add to their business value.

Focus areas of the team being Branding, User Research, Visual Design and User Testing. Team has a mix of skills like Researcher, Information Architect, Interaction Designer, Brand Designer and Visual Designer. Team specializes in user research, working on new product concepts, redesign/revamp of existing products and feature enhancements. Team also helps in discovery phases involving UX for early product validation from business users. Agile collaboration with UI development teams to ensure the required product experience.

# en **GA** ge

GAVS Technologies | [www.gavstech.com](http://www.gavstech.com)



Follow us on:

