

# KL TIMES

## The Kritilabs Newsletter



September 2024  
ISSUE #2

**Kriti**  
Labs

# BUSINESS



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2. Mr. Jason (HR)

## ABOUT KRITILABS TECHNOLOGIES

Kritilabs is a global leader in Digital Transformation and innovatively powered by AI and IOT with large scale implementations across a wide spectrum of Industries, with more than 10 global patents, and with many awards and recognition from “Who’s Who” of Indian Industry including FICCI, CII, Nasscom, TiE Chennai, AIMO, Times of India et al.

# Message from Co-Founders



Hello fellow Kritilabians,

We have fostered a strong innovative culture at Kritilabs. This is obvious from our products and other initiatives which are work in progress in the Products and Engineering Division as well as the IT Platform and applications Division. But this is not restricted to these alone, We have seen innovative pivots and improvements in Sales, Delivery, Operations, Production and even in Finance and Inventory. Each of these divisions have leaders and teams who are proud of not only their past achievements but also of the ongoing improvements in their routine. The flip side of such pride and sense of achievement in an innovative culture is an instinctive recoil against ideas from outside the group. There is this “not invented here” syndrome to suggestions from outside. Innovators need to have an open mind and a keen sense of observation, seeing, and listening for new ideas to come to them. Who better to start with than our own colleagues with whom we work.

At-least 10% of our working and private time we need to spend with our colleagues to build rapport, trust and respect so that we will be receptive when a great suggestion or input will trigger a major innovative thought process in our minds or even to finish what we have taken up. I see a major gap here where interdependent teams with a common goal don’t seem to meet spontaneously or at a scheduled time to plan and exchange ideas as to how to accomplish tasks that will take them nearer to a common goal.

In a way I hope this Newsletter is a stepping stone towards fostering a collaborative effort through inter department communication. Towards this, I would like to pose a social problem crying for a solution. If we are able to take our combined efforts to a Design and perhaps even a POC level, it will be great. This requires inputs, suggestions, brainstorming from everyone from every division.

While we talk about our demographic advantage - 50% of our population is below 25 years and 65% is below 35 years., we also have 10.1% population above 60 years and is likely to rise to 13.4 % by 2030. In terms of our population this is sizable - 140 million. In contrast an aging US has 58 million. In India, 15 million live alone of which 75% are women.

Our healthcare system again is not the best to take care of this size of the aged population nor can 80% afford it.. But whether one needs treatment or not, a senior citizen requires monitoring and attention and someone responsible has to be alerted in case of health emergencies, accidents, etc.

Please provide ideas for systems, public devices/infrastructure, wearable devices, mobile apps, platforms, website, alerting mechanisms, etc for a system such that when registered senior citizens’ status’ are critical and require immediate attention, close relatives or designated authorities etc can be alerted,

Please send your thoughts to the editor on this so that we can brainstorm and think of a system for our aging population.

Best Wishes,  
Dr. L. N. Rajaram



September is the last month of 2<sup>nd</sup> quarter and we continue to make rapid strides in terms of innovation and commercialization. Our “customer centric focus” is very deep and all our process improvements and innovation focus on how we can help the customers in their journey and how we can value-add to their processes and systems and make their life better than yesterday. I want to thank you all for contributing in this journey to make a better planet.

Mr. Srikrishna V, CEO and Co-Founder

# Message from the Editor



Dear Kritians,

As we step into another exciting month, it's inspiring to reflect on how far we've come and the direction we're headed. September marks a time of continued innovation and collaboration, where every department has contributed significantly towards our shared goals. During the launch of the newsletter on Friday, Sep 27<sup>th</sup> afternoon, both Dr.L.N.Rajaram and Srikrishna talked about how they want the newsletter to be not only a platform for sharing insights and achievements but also about expressing one's creativity which could be in their own language as well. So, we will not be restricting to newsletter content to be only in English; We will accept content in tamizh, kannada, hindi,

telegu, Malayalam, Bengali and other languages as well.

On a lighter vein, whenever we speak of September, I am reminded of the Tamizh film "Alaipayuthe" song "September Maatham, September Maatham, Vazhvin thunbathai tholaithu vittom". I am sure many of you can resonate with the above vibrant song!!

In the past month (Aug2024), we witnessed some of the happenings from Corporate, HR, Mechanical, Platforms, Engineering et al and how with some of the incremental ideas from each of the teams, we are able to run a streamlined production operation, cater to the requirement of a large prospect like the Railways and exhibit a deepened commitment to sustainability. Our efforts in conceiving smarter solutions to various customer problems have begun to attract attention from various corners of India and the world.

This month, we continue to sharpen our focus on customer-centric development while enhancing our internal processes. As always, the collaborative spirit of our team has been the backbone of these strides. I want to take a moment to thank each of you for your dedication, creativity, and hard work. We are a collective force, constantly pushing boundaries and redefining what's possible.

This September edition features exciting updates from across all departments. From new project launches to notable milestones, we're eager to celebrate and share the progress we're making. I encourage everyone to stay connected, contribute your ideas, and continue to fuel this momentum as we move forward together.

Let's embrace the opportunities ahead with the same passion and tenacity that defines us at Kritilabs. I am proud to be part of this incredible journey, and I look forward to seeing what we'll achieve next.

Wishing you all a successful and fulfilling month!

Warm regards,

Dr.RV

Editor, KL Times

## Memories





## KL Times - Monthly Newsletter Launch

CEO and Co-founder Srikrishna and Director & Co-Founder Dr. L.N.Rajaram launched the first ever edition of the KL Times - The monthly newsletter from KritiLabs on Sep 27<sup>th</sup> at 2.30pm and urged everyone to come out with their creative talents, insights for the newsletter apart from the departmental performances and achievements as well. They also stressed that the content can be in any language, thereby making it very inclusive for everyone to participate & contribute.



It's an awesome start Doc. –Kalpana

The first and a very impressive one too –Akhtar


Great effort & excellent mode of knowledge sharing, show casing innovation.  
This will motivate all concerned for sharing & learning. –Anbalagn





## Quality and Process Excellence

We successfully cleared the ISO 9001:2015 surveillance audit which happened on Sep 17,2024. The auditors recommended the formation of a community of internal auditors, comprised of department heads and next-level managers who are subject matter experts. This initiative will empower leaders to cross-audit different functions, identify process gaps, and recommend improvements. By implementing this, KritiLabs is poised to elevate process excellence to new heights, ensuring we are ready to compete globally.

## SOCIAL MEDIA PAGES


LinkedIn  : <https://www.linkedin.com/company/kritilabs/>


Facebook  : <https://www.facebook.com/KritilabsTech>


Twitter  : <https://twitter.com/kritilabstech>

## September Posts

### 03/09/24- TOI POST

 <https://www.linkedin.com/feed/update/urn:li:activity:7236621939652341762>

 <https://www.facebook.com/share/p/prsmmFbgyp3G7adQ/>

 <https://x.com/kritilabstech/status/1830856610606088443>

### 07/09/2024- Ganesh Chaturthi Post

[in https://www.linkedin.com/feed/update/urn:li:activity:7238040793335087104/](https://www.linkedin.com/feed/update/urn:li:activity:7238040793335087104/)

[f https://www.facebook.com/share/p/y5KN5XegitNJQk6F/](https://www.facebook.com/share/p/y5KN5XegitNJQk6F/)

[X https://x.com/kritilabstech/status/1832456295355707595](https://x.com/kritilabstech/status/1832456295355707595)

### 07/09/2024- Ganesh Chaturthi Kritilabs Celebration Post

[in https://www.linkedin.com/feed/update/urn:li:activity:7238162656333885441/](https://www.linkedin.com/feed/update/urn:li:activity:7238162656333885441/)

### 13/09/2024- Power Of Smart Locks Slides

[in https://www.linkedin.com/feed/update/urn:li:activity:7240211353741754368/](https://www.linkedin.com/feed/update/urn:li:activity:7240211353741754368/)

[f https://www.facebook.com/share/v/XzVqD8qUrb6Sb1LY/](https://www.facebook.com/share/v/XzVqD8qUrb6Sb1LY/)

[X https://x.com/kritilabstech/status/1834087038426992826](https://x.com/kritilabstech/status/1834087038426992826)

### 20/09/2024- Kritilabs Blog

[in https://www.linkedin.com/feed/update/urn:li:activity:7242784776116461568/](https://www.linkedin.com/feed/update/urn:li:activity:7242784776116461568/)

### 28/09/2024- SmartSeal Secure transportation

[in https://www.linkedin.com/feed/update/urn:li:activity:7245650943776579584/](https://www.linkedin.com/feed/update/urn:li:activity:7245650943776579584/)

[f https://www.facebook.com/share/p/hBSdakov8RmQuAvJS/](https://www.facebook.com/share/p/hBSdakov8RmQuAvJS/)

[X https://x.com/kritilabstech/status/1839885245166055684](https://x.com/kritilabstech/status/1839885245166055684)

## A call for software professionalism



Software professionalism is not just about technical brilliance; it is about consistently delivering high quality product within the committed time, says L. N. Rajaram, Director of Chennai-based Expert Software Consultants Ltd (<http://bit.ly/F4TRajaramESC>). "It is about both knowledge and the skills to apply it correctly. Skills can be mastered only through the discipline of repeated practice."

He rues that the most neglected skills of measuring and managing one's own time and defects are in fact the essence of software professionalism. "A professional understands the dynamics of his/ her professional activities. A professional knows what the right practices to be followed are, and the precautions to be taken. A professional understands the consequences of doing or not doing the recommended practices. Finally, the software professional is continuously experimenting and learning and mastering his/ her own best practices that give best results," explains Rajaram, during the course of a recent email interaction with Business Line.

<https://www.thehindu.com/business/Industry/A-call-for-software-professionalism/article16181005.ece>



On the eve of Ganesh Chaturthi, we conducted a drawing competition for all KritiLabs employees around 60 entries came in, Out of which 8 best entries were shortlisted by the jury their names and creations are displayed for your view.

These are the participants who have contributed and won in the Ganesh Chaturthi art competition.



G. Ajit  
Field Executive



Gayathree  
Firmware



Pravin  
Warehouse and logistics



Jagadesh  
Customer Support



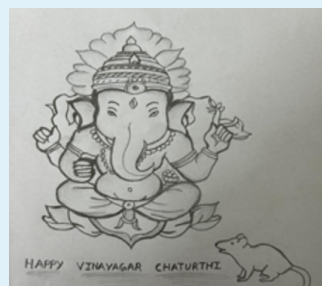
Krishnan Das  
Field Executive



Nabanita Paul  
Customer Support




Harish Kumar,  
Electronics Lab




P.S. Sathyaraj  
Production Team

*Congratulations*


**WINNERS OF ENGINEERS DAY '2024  
QUIZ CONTEST**



Vignesh R  
Production Team



Madhumitha K  
Production Team



Poornima R  
Firmware Team

On account of Engineers day celebrated on 15<sup>th</sup> September.

We had an interactive Quiz session Conducted by Dr LN Rajaram. We covered a wide area of General engineering subject.

The winners of the competition

1. Vignesh R
2. Madhumitha K
3. Poornima R



34 Students of CPAT – TVS on 28<sup>th</sup> September visited our factory premises as part of their Industrial visit, which is part of study curriculum.

Our connect to various technical institutes is greatly appreciated, and it is a bridge for sharing knowledge to upcoming young talent.

Students who participate in such visits connect with us for employment after successful completion of studies.

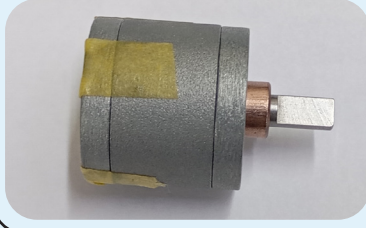


As part of the efforts to bring down the cost, the Purchase Department in Kritilabs has reached to the suppliers directly in China in buying various parts towards stepper motor parts and support the client also efficiently and effectively.

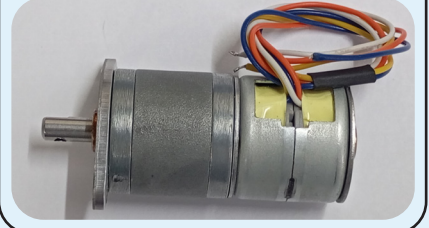
**Mini Stepper Motor**  
(Client : BPCL)



**Assembled Gear for Stepper Motor**  
(Client : BPCL)



**Motor with Gear from New Vendor**  
(Client : BPCL)



### In House : Training

To strengthen the internal customer and to bring more visibility to the transaction and to the organization as a whole , the team members Mr Vignesh Shyam and Mr Lokeshkumar Ganesan had underwent communication and negotiation training recently.

### Made in India

In order to reduce the dependency from overseas market the team has also identified in domestic market and developed the below products to serve better for the various parts.

**Gear Output with Shaft**



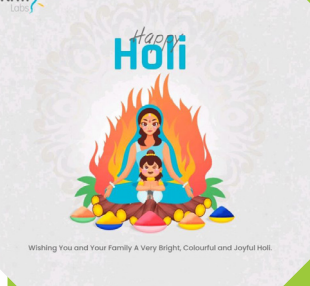
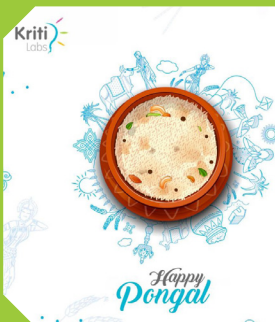
**Double Gear**



**Brass Motor Gear**



## Celebrations Posters







# Finance Function

## How Forecasting and Budgeting Work's Together

### What is Forecasting?

Forecasting refers to the process of predicting future financial outcomes by analyzing historical data, market trends, and current conditions. It's essentially a forward-looking activity that helps individuals or businesses estimate future sales, expenses, cash flows, or other financial metrics.

### What is Budgeting?

Budgeting is the process of creating a detailed financial plan that outlines how resources will be allocated over a specific period. It sets a financial framework for managing income, expenses, and savings, ensuring that financial objectives are met.

### How Does It Works Together?

Although different, forecasting and budgeting are complementary processes. Forecasting provides valuable input for creating realistic budgets, ensuring that financial plans are based on probable future conditions rather than assumptions. Conversely, budgets can act as a performance yardstick, helping to identify discrepancies between actual results and forecasts.

For example, if a company forecasts higher sales for the next quarter, it can adjust its budget accordingly to allocate more resources to production, marketing, or distribution. As actual results come in, the forecast can be revised, and the budget adjusted to keep the business on track toward its financial goals.

### Challenges in Forecasting and Budgeting

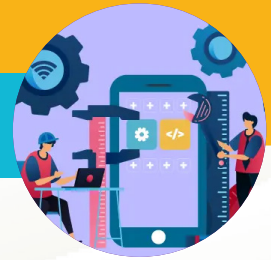
- \* **Data accuracy:** Inaccurate or incomplete data can lead to flawed forecasts and budgets.
- \* **Market volatility:** Economic downturns or unexpected events like pandemics can render forecasts and budgets obsolete.
- \* **Over-optimism:** Both businesses and individuals may overestimate revenues or underestimate expenses, leading to financial shortfalls.

### Conclusion

Forecasting and budgeting are critical tools for managing finances, whether in a business or personal setting. While forecasting helps in predicting future outcomes, budgeting ensures that resources are allocated wisely to achieve those outcomes. When used together, they create a powerful framework for financial planning, allowing individuals and organizations to navigate uncertainty and move confidently toward their goals.

Effective forecasting and budgeting require continual review and adaptation to changing circumstances, but with the right approach, they can drive success in a dynamic financial environment.

By :- Lalit Kumar S  
( Finance Team )



## TOP NEWS

### KritiLabs Kicks Off New Deployments for VAIOT Box and ALS Tracker

We are excited to announce the kickoff of new deployments with major companies in the industry. The VAIOT Box, our AI-driven visual analytics solution, is now being deployed for JioBP and EcomExpress, expanding its applications in logistics and energy. Meanwhile, our flagship ALS Tracker is being rolled out for IOCL, further showcasing its capabilities in IoT-based asset management. These initiatives mark a significant step in delivering innovative solutions across sectors.

### Smart Authentication System Enhances Security at SM, Production, and Mechanical Entrance

We're excited to introduce a cutting-edge authentication system now installed at the SM, Production, and Mechanical building Entrance. The system verifies entry using employee IDs, ensuring only authorized personnel can access the premises. This upgrade enhances security and streamlines the entry process, reflecting our commitment to modernizing workplace operations and maintaining a safe, efficient environment for all.



### Exciting News: Library Set-Up Underway!

We are thrilled to announce the upcoming establishment of a library featuring a wide range of technical and non-technical resources. This initiative aims to support personal and professional development for all team members. We warmly welcome contributions from everyone! If you have books, articles, or other materials to donate, your input will help enrich our collection.

## CURRENT PRODUCTS

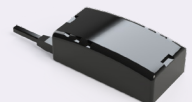
### ALS Intellilock V2.0: The Ultimate Smart Lock Solution



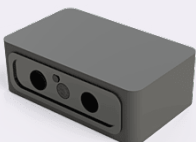
The ALS Intellilock V2.0 redefines security with its cutting-edge smart lock technology, designed for industrial and commercial use. We are currently working on the beta version, focused on delivering the best features for robust access control,

### ALS Tracker: Revolutionizing Vehicle Monitoring

We are currently working on the beta version of the ALS Tracker, an advanced vehicle tracking system utilizing GSM, GPS, and GPRS technologies, fully compliant with India's AIS 140 standard for public transport and commercial vehicles. It provides real-time alerts for speed limits, route deviations, and emergencies, enhancing safety, operational efficiency, and regulatory compliance.



### VAIOT Cam



Exciting advancements are underway in the beta version of the VAIOT Driver Monitoring System! Now integrated with voice alert systems, the VAIOT Cam stands as a cutting-edge product that ensures enhanced driver safety by seamlessly responding to critical driving behaviors. This progression reinforces our commitment to vehicle intelligence and opens doors for future innovations in driver assistance technology.



## VAIOT Box: Transforming Surveillance with AI



The VAIOT Box enhances existing CCTV cameras by integrating advanced AI capabilities. Utilizing Machine Learning, Deep Learning, and Computer Vision, it supports various analytics use cases and enables edge-level decision-making. This powerful hardware solution is a cost-effective upgrade for surveillance systems. It has started being used for multiple use cases, including PPE monitoring and fire detection, based on current market needs. Experience improved safety and operational efficiency with the VAIOT Box!

## Events and participation

### Exciting Workshop Recap: GUVI Sawit AI

We are excited to share that we participated in the GUVI Sawit AI Workshop held on September 21 at IIT Madras. The workshop focused on the latest advancements in artificial intelligence and machine learning, providing an excellent platform to explore cutting-edge technologies and connect with industry experts. It was an enriching experience that fostered collaboration and innovation in the AI space!

### Smart Manufacturing Awareness Workshop: A Productive Journey

We are excited to announce our participation in the Smart Manufacturing Awareness Workshop, organized by SMDTC, which took place on September 30<sup>th</sup> and October 1<sup>st</sup> at IIT Madras. This workshop offered valuable insights into optimizing the use of machines, tools, and equipment in manufacturing processes, focusing on energy savings and enhancing productivity. Participants explored the latest techniques and best practices for operational efficiency. We are proud to highlight that **Anand Ganesh K** from our hardware team participated and received a certificate for his involvement.



### Celebrating Our Event Winners!

We are thrilled to announce the winners of our recent events.

#### \* Ganesh Chaturthi Drawing Event

One of the winners: Gayathri V, Products and Engineering



#### \* Engineers Day Quiz

One of the winners: Poornima Ram, Products and Engineering



Congratulations to both Gayathri and Poornima for their outstanding performances!

## Achievements

### ALS eSeal Upgrade: Achieving High Success Rate in Production



We are pleased to announce a major achievement with our ALS Lock Seal production. Recent upgrades have significantly boosted production rates, achieving an impressive success rate. This enhancement not only increases efficiency but also strengthens our commitment to delivering high-quality, secure locking solutions to our customers.



### Homonym was contributed by Kalpana of Production

#### What are Homonyms?

Homonyms are words that have the same spelling and pronunciation but different meanings.

Example: **Address**

Let us look at sentences that differentiate the meanings:

1. I will give you the address of the doctor's clinic. (Address here is a noun)
2. The CEO is going to address the employees on 5<sup>th</sup> of this month. (Address here is a verb)



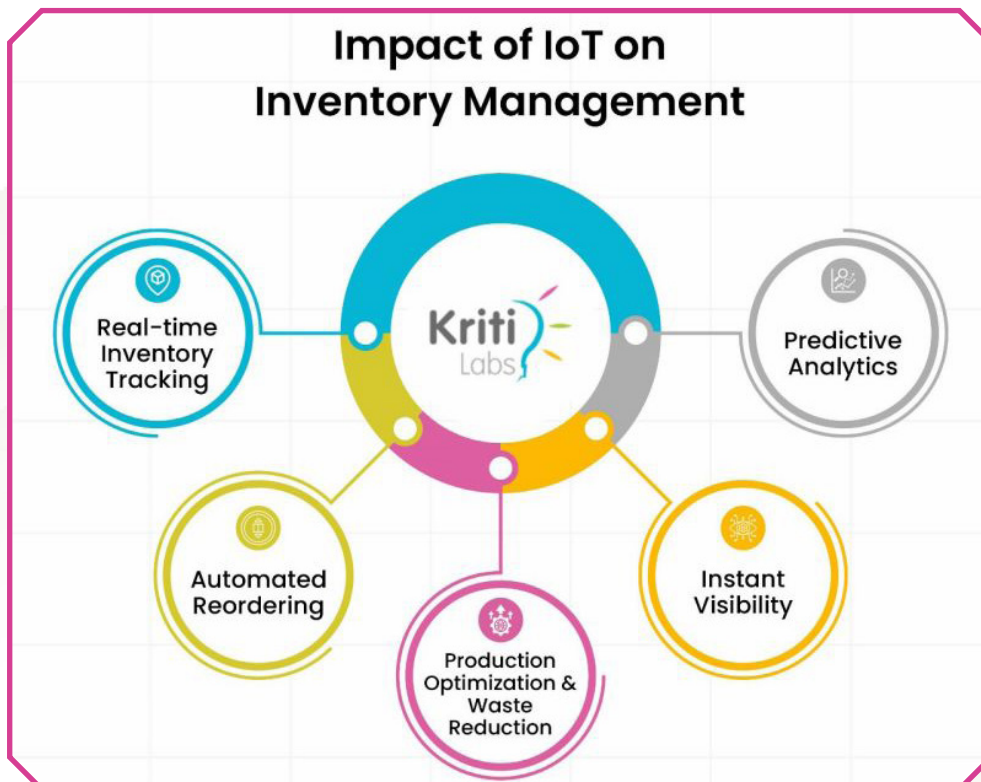
# Process Excellence Function

At KritiLabs Technologies, the Process Excellence team is key in defining, streamlining, and optimizing our organizational processes. Our focus is on ensuring that every function has a well-defined process and performance metrics to track the process implementation status. The functions need to align with industry best practices, enabling efficiency, consistency, and quality across all functions. Process excellence is vital for our organization as it drives continuous improvement, enhances customer satisfaction, and supports our journey toward becoming a globally competitive company.

In September 2024, we successfully cleared the ISO 9001:2015 surveillance audit. The auditors recommended the formation of a community of internal auditors, comprised of department heads and next-level managers who are subject matter experts. This initiative will empower leaders to cross-audit different functions, identify process gaps, and recommend improvements. By implementing this, KritiLabs is poised to elevate process excellence to new heights, ensuring we are ready to compete globally.

Continuous improvement is a key element of process excellence at KritiLabs, focusing on making incremental enhancements to our operations. We encourage all employees to actively contribute by suggesting process improvements that address areas such as cost reduction, rework reduction, waste reduction, increased revenue, improved customer satisfaction, or enhanced productivity. These ideas will help drive our collective success.

Together, we are driving our organization towards higher performance and international recognition.





## Internal systems

### What we do as internal systems team?

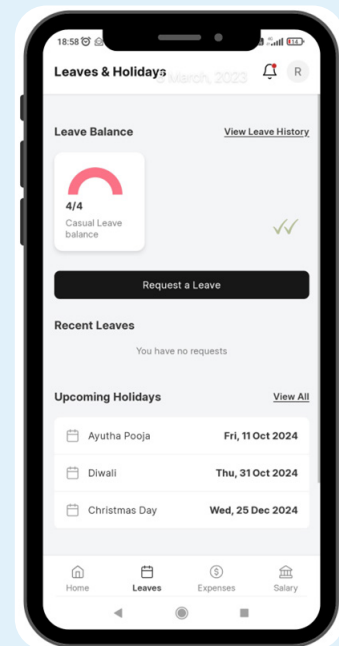
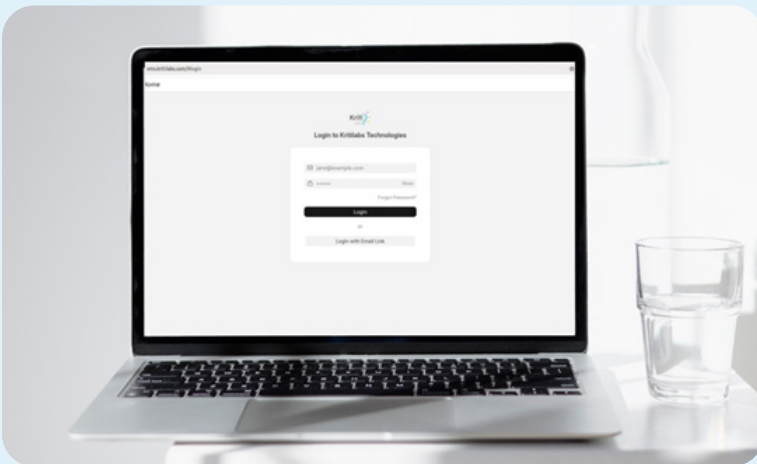
Help and support our colleagues by facilitating system and laptops, mail, software, application with secured network and policy controls to ease out their daily operations and functions and exploring our product usage options internally.

### EMS - ERP Management system

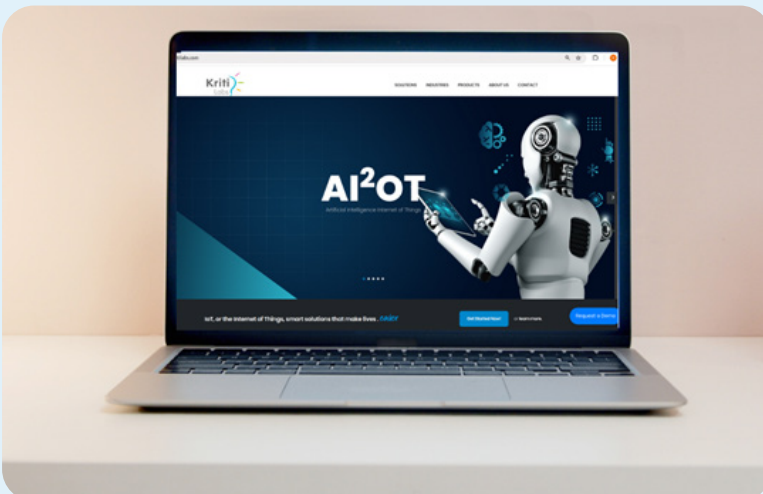
Introduced EMS application to manage our leaves and attendance and recruitment process etc .

We can access website using mobile or laptop browser using employee id to view profiles, leaves, Holiday list and apply a leave request, etc.

Thanks to our HR colleagues and contribution with customization by Swetha. You may contact [ersupport@kritilabs.com](mailto:ersupport@kritilabs.com) for any queries related to EMS portal



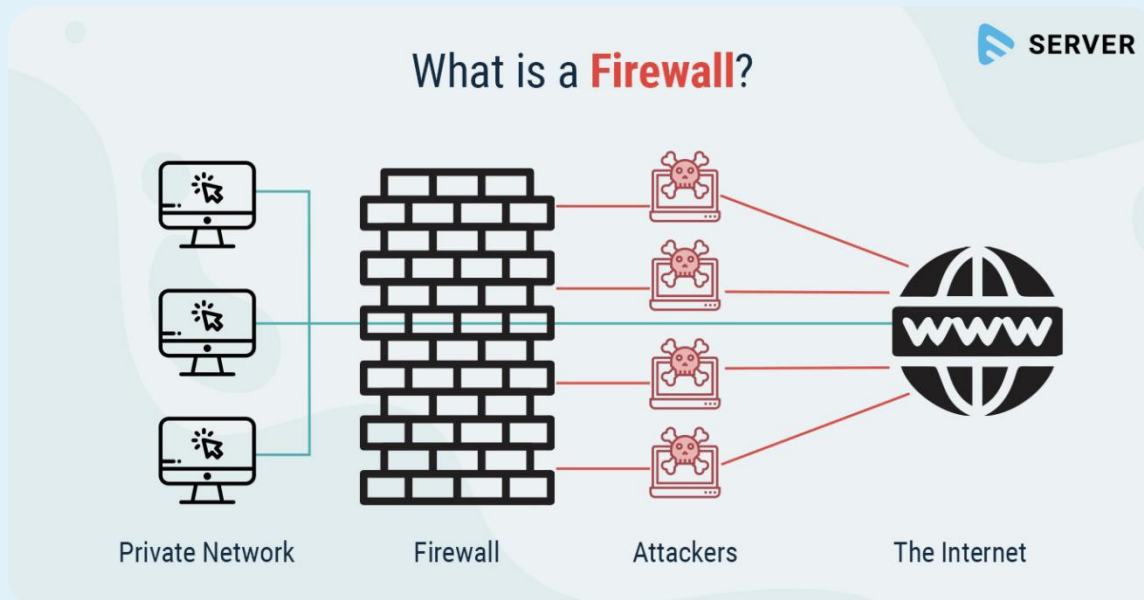
### Website management:



### Redesign:

Kritilabs.com has been redesigned and relaunched in July. Significant contribution on Web redesign by Saravanan.R and Web development by Deepakraj.

Firewall protection:



Firewall Protection has been implemented by Infra team (Gnanapragasam and Aarthar) on all the three networks on all 3 buildings to secure organization assets by integrating Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) to enhance our network security by providing real-time threat detection and proactive response capabilities.

**Device Authentication:** MAC Address Filtering: Allow only devices with specific MAC addresses to connect to the network.

**802.1X Authentication:** Use this network access control protocol to authenticate devices before granting them access. It requires devices to provide credentials, such as usernames and passwords or certificates.

**Virtual Private Network (VPN):** Our organization remote devices to connect through a secure VPN, which encrypts traffic and provides additional authentication layers.

**ADDS**

Introduce and implementation of Active Directory and Domain service ( ADDS ) for all our IT assets in order to provide support any where and any time with data protection.

**Active Directory Domain Services Benefits**

- **Customize** data organization based on company needs
- **Manage** from any computer on the network
- **Provide** built in replication and redundancy
- **Centralize** network access rights managements

### Azure Active Directory Implementation:

**Centralized Management:** Active Directory enables centralized management of user accounts and resources, simplifying administration and ensuring consistent security policies across the organization.

**Group Policies:** Through Group Policies, administrators can enforce settings and restrictions on user and computer environments, such as password policies, software installations, and security configurations, ensuring compliance and streamlined management

### IT Quiz/Puzzle:

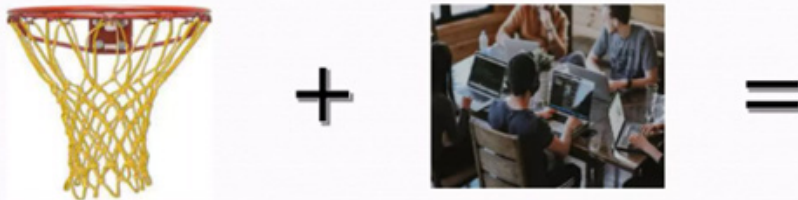
a.



b.



c.



d.



e.





**What technology is used to create virtual machines?**

A. Docker

B. Kubernetes

C. VMware

D. Hyper-V

**What is the primary function of a router?**

A. Connectivity

B. Storage

C. Processing

D. Output

**What is cloud computing primarily used for?**

A. Gaming

B. Data Storage

C. Web Browsing

D. Networking



## Pioneering AI-Powered Transformation with VAIOT: Sales Team Insights

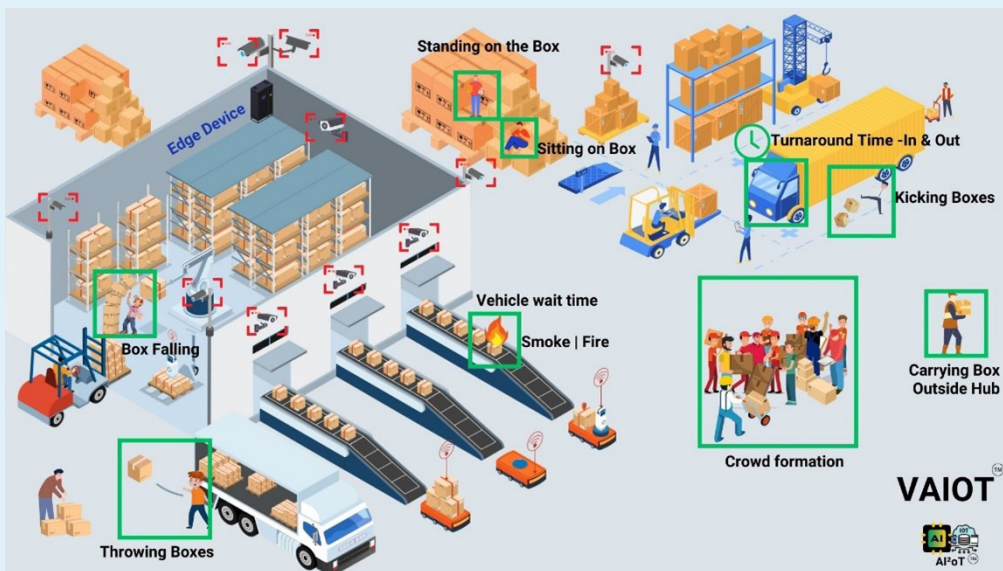
### Surge in AI Solution Requirements

In recent months, the Sales team at Kritilabs has observed a significant and exciting shift in client requirements—there’s an increasing demand for AI-driven solutions across industries. This rising trend highlights how businesses are increasingly recognizing the power of artificial intelligence to revolutionize their operations, improve decision-making, and unlock new efficiencies.

The digital transformation landscape is evolving rapidly, and clients are no longer just looking for simple automation or monitoring solutions. They are seeking comprehensive AI-powered systems that can provide deeper insights, enhance security, and drive intelligent automation. From sectors such as mining and transportation to manufacturing and logistics, AI has emerged as a key driver of innovation.

### VAIOT: Leading the AI Revolution

At Kritilabs, we are at the forefront of this transformation, thanks to our **VAIOT™** solutions, which integrate advanced video analytics and artificial intelligence to deliver high-impact results for clients. The VAIOT suite stands out by offering intelligent monitoring, predictive analysis, and automation features that are not only transforming asset management but also enhancing safety, security, and compliance across industries.

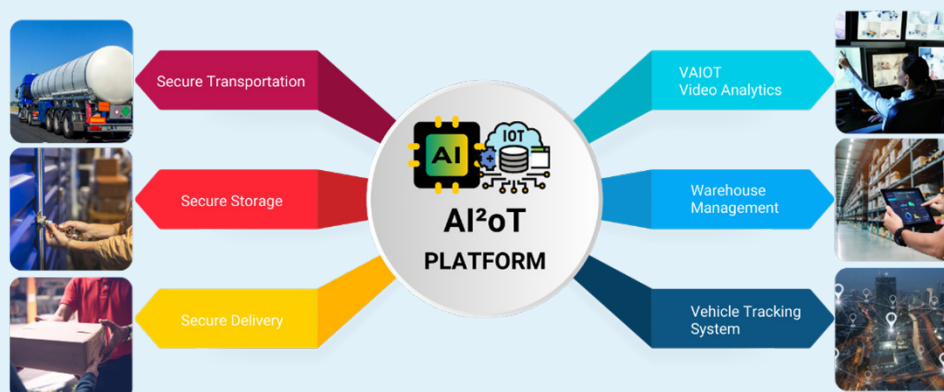


### AI Modules to address challenges in E-commerce & Logistics Companies

What makes VAIOT especially powerful is its ability to analyze visual data in real-time, leveraging AI to detect anomalies, optimize processes, and ensure that human intervention is only required when necessary. Our ongoing AI-powered projects—whether in E-commerce, oil & gas sectors—are already proving to be game-changers, providing clients with tools that significantly improve decision-making and operational efficiency.

## AI<sup>2</sup>oT: Enabling the Future of AI-Powered Solutions

At the core of our VAIOT solutions is our patented AI<sup>2</sup>oT™ platform, which combines **Artificial Intelligence with the Internet of Things (IoT)**. This unique platform allows us to offer solutions that not only monitor and manage assets but also intelligently analyze vast amounts of data collected from IoT sensors. The AI<sup>2</sup>oT platform is built to handle complex workflows, delivering insights in real-time, which enables businesses to anticipate issues, reduce inefficiencies, and stay ahead of the competition.



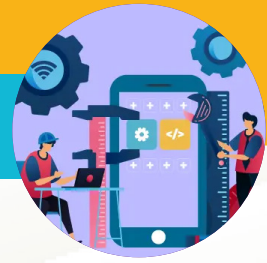
Current projects we're working on involve testing advanced AI modules for predictive maintenance, vision-based behavior analysis, and anomaly detection across various industries. These modules are helping clients move from reactive problem-solving to proactive management of assets and resources.

We can say that the ongoing deployment and testing of our AI modules are showing promising results and our Sales team is excited to see how AI<sup>2</sup>oT will play a key role in shaping the future of Digital Transformation in India.

## Looking Ahead: AI as the Foundation of Digital Transformation

As we look ahead, it is clear that AI, through VAIOT solutions and AI<sup>2</sup>oT platform, will play an essential role in the continued digital transformation of industries in India. The Sales team at Kritilabs is proud to be part of this journey, helping clients understand the immense value AI brings to their operations. We are confident that our AI-powered solutions will not only meet the growing demands of our clients but also set the standard for AI innovation in India.

With the growing momentum in AI solution requirements, we believe Kritilabs is uniquely positioned to pioneer this space, and we are committed to delivering solutions that drive both business growth and technological advancement.



## Article from IT Platforms Team

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### Unlocking Innovation: Harnessing the Power of Design Thinking in IoT

As Kritilabs leads the way in developing smart locks and devices, taking a human-centered approach to innovation is key to making our products widely used. At the core of this approach is Design Thinking, a powerful way of solving problems that will shape our products and improve the user experience. But what exactly is Design Thinking, and how can it help Kritilabs become a market leader?

### Understanding Design Thinking

Design Thinking is more than just a process; it's a way of thinking that puts users first. It encourages us to shift from asking, "What can we make?" to "What do our users really need?" This shift helps us better understand the emotional, social, and mental aspects of how users interact with our products. The best part? Many of our current practices already align with the principles of Design Thinking.

### The Five Stages of Design Thinking

The Design Thinking process happens in five active stages:

1. **Empathize:** Understand users' needs, challenges, and behaviors through research, interviews, and observation.
2. **Define:** Clearly identify the core problems and opportunities, focusing on the challenges we want to solve.
3. **Ideate:** Come up with many innovative ideas through brainstorming, workshops, and creative exercises.
4. **Prototype:** Create testable models that bring our ideas to life, allowing us to see and improve concepts.
5. **Test:** Get feedback from users, refining our solutions until we reach the best outcome.

### The Core of Empathy

Empathy is the foundation of Design Thinking. By truly understanding what motivates our users, what they value, and their limitations, we can create solutions that connect with them on a personal level. Key practices include:

- \* Conducting user research to gain valuable insights
- \* Creating personas to represent different types of users
- \* Mapping out user journeys to identify pain points and opportunities for improvement

### Why Design Thinking Matters

Bringing Design Thinking into our work offers many benefits:



- \* **Better User Satisfaction:** Solutions based on real user needs lead to more loyalty.
- \* **Increased Innovation:** A culture of creativity helps us stay ahead of competitors.
- \* **Efficiency Gains:** Streamlined processes save time and cut costs.
- \* **Improved Collaboration:** Breaking down barriers promotes teamwork across departments.

## Navigating Challenges

While the benefits are clear, using Design Thinking comes with its own challenges:

- \* **Cultural Shift:** Getting everyone on board with a user-focused mindset takes commitment.
- \* **Time Pressures:** Balancing a design process that takes time with meeting deadlines can be difficult.
- \* **Cross-Team Collaboration:** Making sure design, engineering, and business teams work well together is key to success.

## A Case in Point: UPI Payments

A great example of Design Thinking in action is India's UPI Payments system. The technology is simple, but its success comes from solving real user problems, not just advancing the technology.

Consider the challenges it addressed:

- \* Transactions that used to take hours or days were made instant.
- \* The complicated process of transferring funds, which required account numbers and codes, was simplified.
- \* Business transactions were sped up, cutting out delays.
- \* Privacy concerns were handled, enabling safer transactions.

The main goal was to allow anyone to make quick payments using their mobile device, which is now common everywhere. By clearly defining this problem and encouraging collaboration among banks, tech experts, and user experience designers, the UPI system was created.

The results are impressive:

- \* Over 15 billion transactions each month (as of September 2024)
- \* A massive ₹20 lakh crore transferred
- \* Widespread use in many areas, including e-commerce and banking

## Conclusion

Design Thinking is not just for designers; it's a powerful way of thinking that can improve every part of our company. By focusing on empathy, fostering creativity, and encouraging experimentation, we can unlock innovative solutions that drive growth and create outstanding user experiences.

## Recommended Reading

- \* *The Design of Everyday Things* by Don Norman
- \* *Designing for Emotion* by Aarron Walter
- \* *Innovating for People* by Laila Worrell