

# Bits & Bytes

S&amp;C INDIA CAMPUS NEWSLETTER



## From the Desk of Editor

**Nandini Raisinghani**  
Director, Software Engineering

## Inside

### RA India Hackathon 2023

*Covered Idea 4 - Security code for accessing building / secured areas and Idea 5 - Common communication service for all customer communication*

### Team Visit

*Venkata Brahma Somanchi's visit with FTDS Team, Pune – Team Integration & Foster Collaboration.*

### Know Your Colleague

*Know more about Swathi Lakhani and her successful journey as Sr. Manager, Software Engineering – Plex.*

### Trivia Corner

*Explore the exciting Brainteaser Quiz on Rockwell Automation, Agile, and AI.*

This edition brings you the latest events, innovations, product features, and more. The cover story starts with the journey of FT Design Studio Engg efforts. As the teams gets ramped up on process, technology, and the product domain, it was great to have Brahma visiting and spending time with the team. He shared his thoughts on FTDS evolution, vision, and process.

As we wind up with Hackathon innovation efforts from last year, we are ready to share new proof of concepts from Software and Hardware technologies.

New-age digital technologies have enabled more ways to support manufacturing professionals than ever before. Connected worker technologies actively exchanges data in real-time and contextualizes the "Connected Worker" in a broader system. Connected technologies help close the skill gap and with access to information when they need it - this increases productivity and lessens error.

FT Optix is an HMI to enhance the visualization experience at the Edge. FT DataMosaix is at the heart of Data unification and data access from disparate sources. FT Optix – FT DataMosaix connector is key to easy data availability between the two.

It is great to see the InfoDev team challenge themselves with new age technology. Also artistic representation of monsoon using watercolors by Ram Kamisetty – and Piyush Sayani's vacation in Sikkim, a Northeastern state of India known for its stunning landscape.

Delighted to shine Career Spotlight on Swati Lakhani – Senior Manager, Plex, and hear her views on Motivation, Leadership style, Women encouragement and more.

Includes a quiz on valuable facts on Rockwell and AI, with answers embedded in. All this proactive participation is indicative of a positive attitude and willingness to make an impact in various aspects of life.





# FT Design Studio – Team Building

Piyush Sayani

**Synergy**

Venkata Brahma Somanchi - Manager, Engineering, FactoryTalk Design Studio (FTDS), based out of Mayfield Heights office, US, visited the Pune office in June, marking a significant step in fostering global collaboration and team integration.

The primary purpose of his visit was to meet the new teams in Pune and brief them about the ongoing program.



This face-to-face interaction not only provided our teams with a comprehensive understanding of the program but also offered an opportunity to discuss their roles and contributions in detail.

He encouraged open communication, teamwork, and shared a vision for the program's future. His insightful discussions left the teams feeling motivated and well-informed. In addition to meeting the teams, Brahma also visited the vendor Globant, at their Pune office. This meeting aimed to strengthen our partnership and ensure seamless collaboration for the program's execution.

The teams also went out for Lunch with Brahma where he shared some of his personal memories. We believe that such interactions will enhance our understanding, improve communication and ultimately lead to the successful execution of our program.







# RA India Hackathon 2023

Vikas Vyas

## Communiqué

Completed the maiden Hackathon successfully. Amazing Hackers! The moment we have all been waiting for is finally here. The results of the RA-India Hackathon 2023 are out, and let's just say, the energy and innovation you have brought to the table have blown us away!

### HACKATHON 2023 - WINNERS



#### Product Innovation

AI model for Feed accuracy for Batch Process Industries

**Product Owner** - Gaurav Kandhari

**Team Lead** - Girisha Magondi

**Members** - Tapendu Bhowmik, Naveenchandra Patil, & Srihari Andalam.



#### Technical Implementation

AI-Powered Q&A Modernization

**Product Owner** - Brandon Lee

**Team Lead** - Brandon Lee

**Members** - Alex Berman & DongzuoTian.



#### Overall WOW

ChatGPT helper for Rockwell Products

**Product Owner** - Vaibhav Lawand

**Team Lead** - Vaibhav Lawand

**Members** - Pravin Chopade, & Saurabh Dugdhe.

### Ideas

#### Objectives

- 1) Security code for accessing building/secured areas.
- 2) Common communication service for all customer communication
- 3) ChatGPT helper for Rockwell Products
- 4) AI model for Feed accuracy for Batch Process Industries
- 5) AI-Powered Question and Answer Modernization Hackathon

### Evaluation Criteria

Categories	Points to be considered
Product Innovation	Potential impact to current business
	Possibility to productize the idea
	Automation to the current flow
Technical Implementation	Simplification to the process steps
	The architecture framework
	Choice of technology - new age technologies
WOW Team	Complexity addressed
	Well researched POC
	Presented design & constraints
	Team effort

## 1. Security code for accessing building/secured areas.

**Idea Owner:** Pradeep K C.

**Team:** Tejash Rana, Komal Adke, and Anusha.

**Objective:** Mobile app that generates a code that can be used to access secured areas. The code would be valid for the duration of the visit.



**Description:** Many RA facilities like Pune-Hinjewadi require a security badge to enter the building and an access code to access secured areas. If a mobile app (similar to MS-Authenticator) can be developed at the RA-India level, an employee can raise a request for access to a specific building and floor and the same can be granted for the duration of the visit. This will help save paper and time taken while the security prints the temporary card and also help employees move around freely. The app can also be used to raise requests for visitors by an RA employee who is coordinating the visit.

### Use Case:

#### Identity & Access Issues

- Registration of non-RA employees at the IT Park entrance and RA reception desk.
- RA employees must be dependent on the location employees to be helped with the door access.

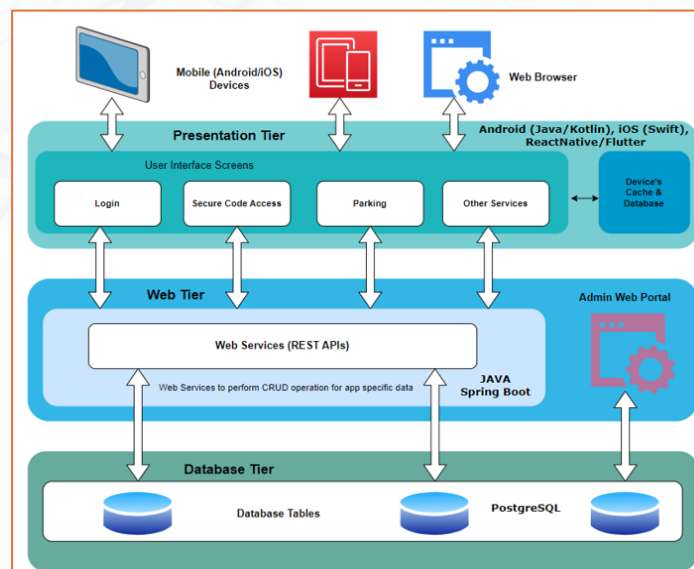
#### Parking & Other Issues

- Most of the employees at all RA locations commute by their own vehicle and with the rising employee count, availability of parking is becoming an issue.
- Other issues related to cabs, meal coupons, ROK events, etc. can also be addressed.

### Solution:

- The RA contact person mentioned in the request approves the request. The local facility management team coordinates with the IT park management and registers the visitor. The visitor gets a response on the app/portal of the various stages. Can generate visitor passes at the reception using the details in the request. Access is removed as soon as the visit timeline expires- unless it is renewed. If the visitor has a vehicle, the app should have the details of the location where visitors can park.
- Raises a request in the system which is approved by the contact person mentioned in the request (the contact person has to be based at the same location in the same facility and floor). Gets access to the floor provisioned for the duration of his/her stay, by notification on the app. If the access requires an access code, the same needs to be available as well. Access is removed as soon as the visit timeline expires unless it is renewed. Employees can check available parking slots at their base location. If a slot is open, they can park. Slot status changes when a vehicle leaves.

**Design:** The diagram illustrates the solution architecture:





## 2. Common communication service for all customer communication

**Idea Owner:** Pallab Ghosh

**Team:** Lathakumari B N, and Rajesh S.

**Objective:** The idea is to create a common event-driven email/SMS communication service, that can be used by multiple products/solutions.

**Description:** The idea is to create a common event-driven email/SMS communication service, that can be used by multiple products/solutions. Service will be hosted in the cloud, for generating communication-related events. Service will be used to publish events in queues. To process those events, the subscriber will be listening to those queues. As per the event details the subscriber will process those communication events.

### Features Required:

- Scan all SMS and emails with communication guidelines and hold communication that contains bad words.
- Count and store communication details as per usage by different products and tenants.
- Common REST API contract, for sending all communication (alerts, notifications, etc.) from different products.

### Advantages:

- All communication to users/customers and communication-related standards can be maintained in one place.
- Security-related standards can be maintained in one place.
- One application/service for the same activity from multiple products.

### Use Case:

- For example, if some service/component has a breakdown in an application then some of the functionalities will not work in an application. There should be an alert or Email/SMS for the system integrator on this breakdown in order to fix the issue immediately without affecting customers.
- Based on the analytics data, notifications/alerts can be sent to the customers automatically. Need to trigger a large number of notifications/alerts automatically with scheduled jobs.

### Solution:

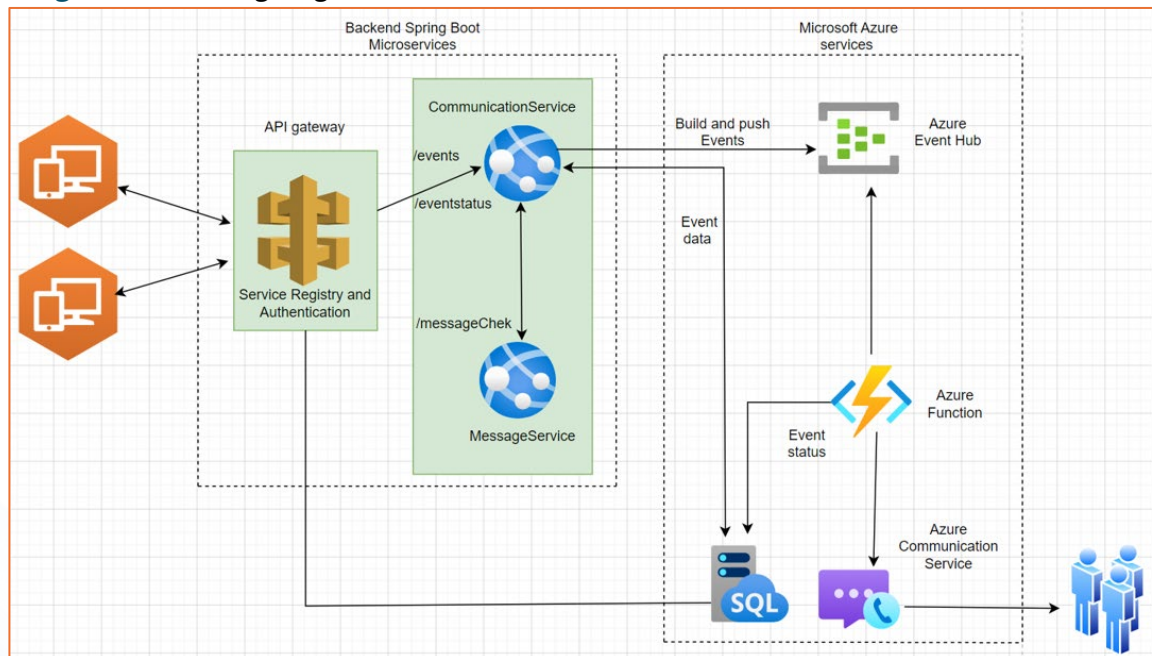
The idea is to create a common event-driven email/SMS communication service, that can be used by multiple products/solutions. Service will be hosted in the cloud, for generating communication-related events. Service will be used to publish events in queues. To process those events, subscriber will be listening to those queues. As per the event details subscribers will process those communication events.

- Created Azure SQL database to store event information.
- Implemented API gateway using Spring boot which includes service registry and authentication using Spring boot oauth2.



- Implemented Rest API to push the events to the Event Hub.
- Implemented Rest API to check the unacceptable words from the event message body which will check the event message body content before pushing events to the EventHub which is supported for multiple languages. For ex- English, German etc.
- Implemented Rest API to check the event status whether the event is delivered or failed.
- Created an Event Hub in the Azure portal to receive the events from an application.
- Created a Function App to process the events from the Event Hub.
- Created an Email communication service and domain to send an email. Created communication service and got a toll-free number from Azure communication service to send SMS.
- Azure function sends an event to the communication service to send an Email/SMS and updates the status of the Email/SMS(successful/failed) in the database.

**Design:** The following diagram illustrates the solution architecture:



*That's it about Hackathon 2023!*



*For 2024 hackathon solutions  
in the next edition!*



2024  
**HACKATHON**



# Enterprise Vision of Connected Worker

Paresh Teredesai

## Industry Focus

### Connected Worker Snapshot

In Manufacturing Execution Systems (MES), "Connected Worker" refers to the integration of workers into the manufacturing process's digital environment. This integration aims to enhance productivity, efficiency, safety, and quality by providing workers with real-time access to relevant information, instructions, and support through digital tools and technologies.

Rockwell Automation's Plex product has always been about connecting the shop floor to the top floor, but with today's labor challenges, there's a need for more connection.

### Problem to be addressed

- 40% employee turnover in manufacturing: up by 10%.
- Retiring workforce: 10,000 per day.
- Manufacturing skilled labour shortage: 2.1 million unfilled jobs by 2030.
- Less available workers: Reduced to 56% by 2050.

### Our Approach

The Connected Worker is not about solving for 'Gen Z'; it's about building resiliency in the manufacturing business, in the approach to employees, automation, and efficiency, so that manufacturing can adapt to whatever generational shifts happen.

The real question is, how do you drive the same level of productivity, quality, and safety with an employee who's been with the company for 30 minutes as an employee who has been with the Company for 30 years?

It's not just about hiring, or onboarding, or doing the work; it's about augmenting the worker and driving retention. People are the DNA of the Company. You get retention by putting the Connected Worker at the heart of your Connected Enterprise.

### Our Four Connects

- People to Purpose – What is the broader impact of your company & how does their work impact?
- People to People – It's easy to quit a task, but it's hard to quit a team, mentoring, training, and collaboration.
- People to Productivity – Ensure it's easy to do the work; driving a Connected Worker; use next-gen technologies like AI to help workers be more productive.
- People to Process – Understand the broader context and the fullness of how their work impacts/is impacted by other areas.



Then, one can connect all of that with insight, instruction, intelligence, and information to fully close the loop.

The connected worker suite of tools will have synergy with and leverage our hardware and software portfolio.

Existing Connected Worker solutions have some or all the top 6 boxes in the following image (next page). By leveraging the existing functionality and adding/improving the below features, Plex can deliver a scalable, comprehensive, enhanced standalone Connected Worker solution that can grow with a customer, scaling into a full MES or ERP without changing provider or reimplementation. A familiar UI with the ability to add functionality when you need it.



MES and ERP customers can also leverage these new features and functionality under the concept of Connected Worker - Connecting their Enterprise.

### Process Steps

Foundation of Operations – guided Work Instructions to drive quality & consistency.

### Chat/Collaboration

Embedded alerting & collaboration application coupled with Teams integration for scale & advanced capabilities.

### Key Measurables

Connect the front line to the progress & purpose of the Company's w/real-time views.

### Activity Manager

Guide the front-line workers to what they need to do and when and where.

More details about these four features will be shared in upcoming newsletters.

Moving ahead, we plan to add “Advanced LMS”, dedicated to Skills and Training areas.



## Releases starting in 2024

### Phase 1 (2024)

#### Process Steps

- Guided Work Instructions
- Interactive Work Instructions
- Advanced Work Instructions

#### Collaboration

- 1-to-1 and Group Chat
- Activity Manager
- Key Measurables

#### Mobile

- Process Steps
- Activity Manager

### Phase 2 (2025)

#### Process Steps

- PLC Automation

#### Collaboration

- Chat AI Assistant
- Advanced Chat Features
- Activity Manager Enhancements
- Key Measurables Enhancements
- Skills and Training Enforcement

#### Mobile

- 1-1 and 1-Many Chat
- Tooling
- Work Requests
- Key Measurables

### Phase 3 (2026)

#### Process Steps

- IOT Device Integration

#### Collaboration

- Predictive AI
- Advanced LMS

#### Mobile

- Quality
- Advanced LMS

#### Employee Health & Safety



# FactoryTalk Optix – DataMosaix Connector

Adrian Dams

## Industry Focus

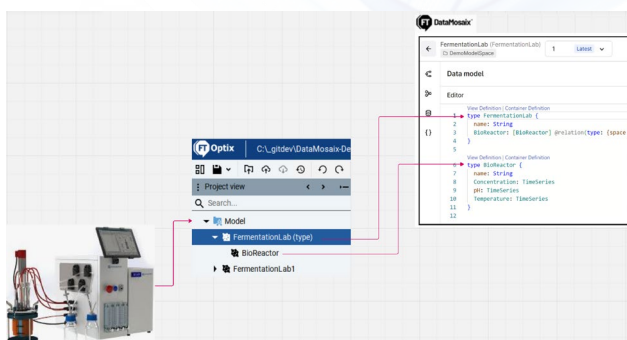
FactoryTalk® Optix™ is an HMI visualization platform. It uses open communication standards like OPC UA and MQTT to collect, contextualize and egress data from across the factory floor, including Rockwell Automation and third-party devices.

FactoryTalk® DataMosaix™ (FTDM) is a SaaS application that streams data from on-prem devices into data models. Once in the cloud, the data can be normalized and enriched by adding connections between resources of different types. This way, the data can be contextualized and analyzed to build powerful business solutions and applications.

Data egress from the factory floor to FTDM is achieved using ‘Extractors’. These are applications that run on-prem to acquire data from devices and to egress that data to FTDM. Depending on the data involved and the context being egressed, however, the configuration of these extractors can become very complex and error prone.

This is where the FTOptix-DataMosaix Connector adds value. FTOptix can easily create models representing the information and context on the factory floor. The difficult part is creating the same contextual model in FTDM. The FTOptix-DataMosaix Connector makes that job much simpler.

The diagram below provides a simplified visualization of the NetLogic object to achieve: Pull a model and its data from the factory floor through FTOptix and push it to FTDM.

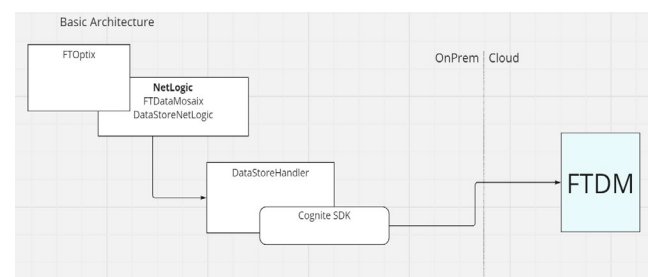


## High-level Architecture

The Optix-FTDM Connector leverages a feature of FTOptix known as NetLogic objects. These are Microsoft .Net (C#) objects that communicate with FTOptix using the NetLogic API.

In turn, the NetLogic object implementation leverages the Cognitive .Net SDK to access the Cognitive Data Fusion (CDF) API. (CDF is another name for the FTDataMosaix SaaS Service).

The basic architecture of the solution is as shown here.



The NetLogic object is an assembly loaded by the FTOptix project. Communication between FTOptix and this NetLogic object is done over the NetLogic API (FTOptix.NetLogic.BaseNetLogic). This assembly then loads and calls a separate assembly (DataStoreHandler) to execute the API Calls against the FTDataMosaix Service (FTDM).

## Authentication

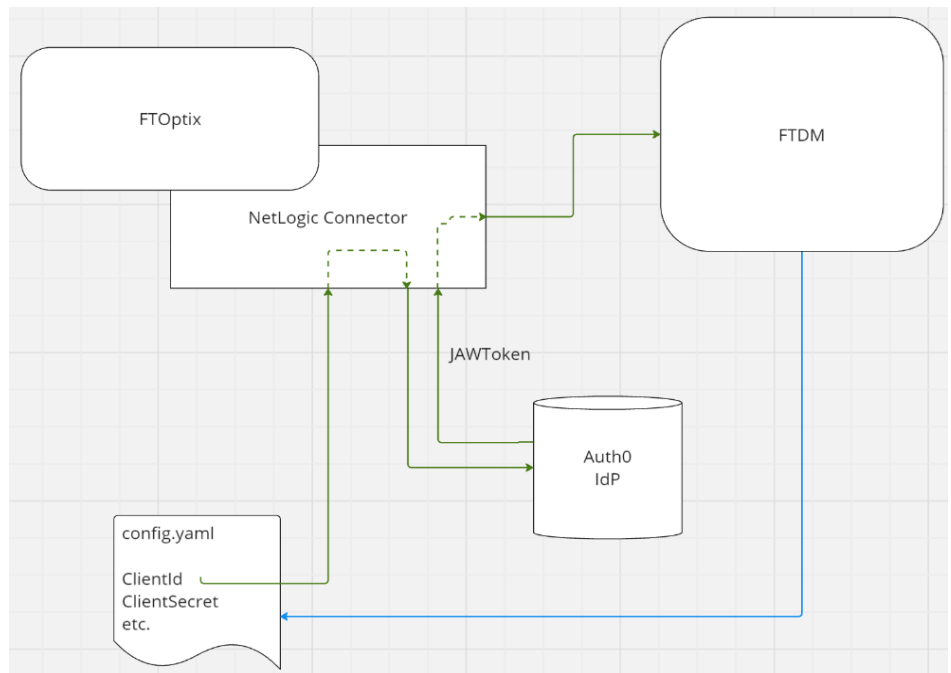
To keep the above diagram simple, aspects associated with authentication have been excluded. The following diagram shows how the Connector authorizes its access to the FTDM API.

When the FTOptix-DataMosaix connector is registered in FTDM, a config file is generated. It contains information used by the FTDM Connector to authenticate with and connect to the FTDM API. When the FTDM Connector starts up, it reads the ClientID and ClientSecret from the config file and requests an auth token from the Identity



Provider (Auth0). This token is then used by the FTDM SaaS to authorize access to resources. Once authenticated, the NetLogic Connector then uses the NetLogic API to:

- communicate with FTOptix to pull the DataModel
- call the FTDM API to create the model
- subscribe to FTOptix for any data variables that it finds in the model
  - On data changes received from FTOptix, push that data to FTDM.



## Watercolor Paintings



By Ram Kumar Kamisetty



# Technical Writers vs LLMs

Sampath Kumar Pothuru

## Tech Documentation

The main goal of a Technical Writer is to convey complex information in an easily understandable manner and ensure that the information is correct and up to date.

In the rapidly evolving landscape of Artificial Intelligence, one term you may have encountered is "large language models", or LLMs. These sophisticated AI algorithms are at the forefront of numerous breakthroughs.

LLMs are designed to process and understand vast amounts of data, employing advanced machine-learning techniques to generate, summarize, and predict text. Their capabilities extend beyond simple text generation, offering insights and context that were previously unattainable with traditional models.

One notable example of an LLM is ChatGPT, a model that has gained significant attention for its ability to engage in human-like text conversations. It exemplifies how LLMs are pushing the boundaries of what's possible in AI, paving the way for more intuitive and interactive applications.

- Do LLMs think like technical writers?
- Can LLMs think like technical writers?
- Are we giving way too much credit to LLMs?

The technology behind this is fascinating, but the algorithms behind it are number-based. Text is converted into numbers and compared to find which word belongs together. Yes, that's exactly how it works! Can these numbers interpret and imitate the technical writer's behaviour?

LLMs can make mistakes. There is even a disclaimer in ChatGPT, i.e.,

**"ChatGPT can make mistakes. Consider checking important information."**

LLMs need interventions to improve the accuracy of their answers to the questions (nothing but prompts). So, LLM cannot do the same job as technical writers.

From the above, it would seem that the LLM is not all-powerful. No!

When used correctly, LLMs are incredibly valuable in assisting technical writers in creating unique content. It is a valuable tool that can be added to the technical writer's toolbox.

If we give it too much power, we might have erroneous results. While it is tempting to use it to reduce the effort, the content generated must be verified to ensure it is factually correct.



***My takeaway is that LLM is a valuable tool that can assist technical writers in creating user-centric documentation and successful products***



# Path to Success

## An Inspiring Conversation with **Swathi Lakhlani**

**Sanjeev Dhurwey**

### Know Your Colleague

Getting to know our coworkers in our workplace can benefit all of us - as it helps us become more productive by creating a harmonious work environment that caters to individual needs. If we know how our colleagues prefer to work, such as quietly or collaboratively, we are in a much better position to create proper environments.

Taking the time to understand the ideal working conditions for colleagues also boosts their motivation and nurtures trust. Join us for an inspiring conversation with **Swati Lakhlani** - Senior Manager, Software Engineering - Plex.

Hello Swati, it's my pleasure, I am glad to interview you. Let's get started...

*I have had the pleasure of collaborating and coordinating with you during visits & meetings, and I found you to be a very inspiring leader. Could you please describe your leadership style and how you "lead" others?*

I do not subscribe to a one-size-fits-all approach to leadership. Instead, I believe in being flexible and adaptable according to the situation. Every individual and circumstance is unique and requires a different leadership style. Therefore, I adjust my approach to meet the specific needs of each situation and team member.

*Yeah, I must adapt your leadership style 😊 What's the biggest lesson you've learned?*

One of the biggest lessons I've learned is the importance of embracing change and adaptability. In the ever-evolving tech industry, being open to change and continuously adapting to new technologies, methodologies, and challenges is crucial for sustained success.

Additionally, I've learned the value of authenticity and resilience. Leading with authenticity helps build trust and fosters a positive work environment,

while resilience enables me to navigate and overcome obstacles effectively.



*Given your emphasis on adaptability and resilience, did you ever have a woman leader as a mentor or are there specific women who inspired you and how?*

I am deeply inspired by Indra Nooyi. Her strategic vision, resilience, and authenticity as the former CEO of PepsiCo have profoundly influenced my leadership style. Indra Nooyi's ability to balance business success with social responsibility and her commitment to diversity and inclusion resonate with my own values.





Her advocacy for women in leadership roles has motivated me to mentor and support other women in the IT field. In summary, Indra Nooyi's exemplary leadership inspires me to lead with integrity, innovation, and empathy.

*I know you always stay motivated and persevere through challenges. Let me move on... you are undoubtedly busy; how do you take care of yourself and maintain a good mental health?*

Even with a busy schedule, I make sure to take care of my mental health. I love meditating—it helps me stay calm and focused. Breathwork exercises are also a big part of my routine; they really help me manage stress. And of course, I can't forget music! Listening to my favourite tunes is a great way to relax and recharge. These practices keep me balanced and ready to tackle whatever comes my way.

*Great! How do you encourage women to not give up?*

Here are few points based on what I learned in my journey:

Believe in yourself and your abilities. Set realistic goals and seek support from friends, family, and colleagues. Be adaptable and learn from setbacks. Prioritize self-care with meditation, breathwork, and music. Stay connected with a strong network of supportive women. Keep learning and growing. Celebrate your achievements, no matter how small. Stay resilient and keep pushing forward. Be true to yourself and lead with integrity.

*You are right! We need to keep learning and growing. Why do you think companies would benefit from having more women at the top?*

Companies benefit from having women leaders because they bring diverse perspectives and experiences, which can lead to more innovative solutions and better decision-making. Women leaders often excel in fostering collaboration and teamwork, creating a more cohesive and motivated workforce. Women leaders like Mary Barra: CEO of General Motors, and Indra Nooyi: Former CEO of PepsiCO are some such examples.

*Awesome! In a nutshell, your leadership style is characterized by flexibility, adaptability, authenticity, and resilience. You believe in tailoring an approach to meet the unique needs of individuals and*

*situations, drawing inspiration from the visionary leadership of Indra Nooyi. 😊 I am glad that I got a chance to talk to you and learn about you. 😊 Thank you so much for speaking to us and inspiring us.*



**Conclusion:** Leadership style is characterized by flexibility, adaptability, authenticity, and resilience. Believe in tailoring approach to meet the unique needs of individuals and situations, drawing inspiration from the visionary leadership of Indra Nooyi. Embrace change, foster a positive work environment, and navigate challenges with resilience, strive to contribute to the sustained success of team and organization.

We would love to hear your thoughts and learnings from this interview. Let us know via email:

**Sanjeev Dhurwey:**

[SDhurwe@ra.rockwell.com](mailto:SDhurwe@ra.rockwell.com)

**Swati Lakhani:**

[swati.lakhani@rockwellautomation.com](mailto:swati.lakhani@rockwellautomation.com)



# Brainteaser Quiz-Toughie

InfoDev Team

Trivia Corner

## Quiz – on Rockwell Automation

**RA Q1.** What is the name of Rockwell Automation's global program that focuses on STEM education?

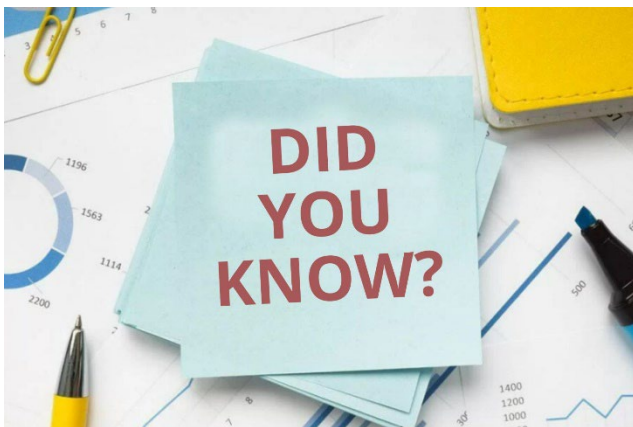
- a) STEM Forward
- b) FIRST Robotics
- c) STEM Innovators
- d) TechEd

Click on the grey area to view the answer: **b) First Robotics**

**RA Q2.** Where is the headquarters of Rockwell Automation located?

- a) Bengaluru
- b) Dallian
- c) Milwaukee
- d) New York

Click on the grey area to view the answer: **c) Milwaukee**



**RA Q3.** How does Rockwell Automation's FactoryTalk software suite benefit manufacturing operations?

- a) Enhances social media presence
- b) Improves supply chain logistics
- c) Provides real-time data analytics
- d) Manages employee payroll

Click on the grey area to view the answer:

**c) Provides real-time data analytics**

**RA Q4.** How often is the "Bits & Bytes" newsletter released by S&C India?

- a) Monthly
- b) Quarterly
- c) Annually
- d) Bi-annually

Click on the grey area to view the answer: **b) Quarterly**

**RA Q5.** What is the significance of the "Connected Enterprise" concept promoted by Rockwell Automation?

- a) Integrates IT and OT systems
- b) Enhances customer service
- c) Expands global market reach
- d) Improves employee training

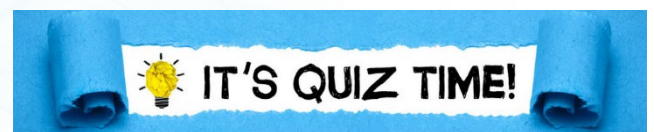
Click on the grey area to view the answer:

**a) Integrates IT and OT systems**

**RA Q6.** In which year did Rockwell Automation acquire the company Anorad Corporation?

- a) 1995
- b) 1998
- c) 2001
- d) 2004

Click on the grey area to view the answer: **b) 1998**



## Quiz – on Agile Framework

**AF Q1.** What is the iterative development approach called in Agile?

Click on the grey area to view the answer: **Sprint**

**AF Q2.** The daily stand-up meeting in Scrum is also known as?

Click on the grey area to view the answer: **Daily Scrum**







**AF Q3.** Who is responsible for the product backlog in Scrum?

Click on the grey area to view the answer: **Product Owner**

**AF Q4.** What is the role of the Scrum Master?

Click on the grey area to view the answer:

**A facilitator or coach who helps the scrum team**

**AF Q5.** The Scrum team is typically made up of how many people?

Click on the grey area to view the answer:

**Includes five to eleven people**

**AF Q6.** What is the document that outlines the desired features and functionality of a product?

Click on the grey area to view the answer:

**Product Requirements Document (PRD)**

**AF Q7.** In Agile Manifesto the first principle states that individuals and interactions are \_\_\_ processes and tools.

Click on the grey area to view the answer:

**More Important than**

**AF Q8.** In Scrum, the way to represent the work remaining on a project is called \_\_\_\_\_.

Click on the grey area to view the answer: **The Product Backlog**

**AF Q9.** When is a Sprint Retrospective ceremony performed?

Click on the grey area to view the answer: **End of each sprint**

**AF Q10.** Who should necessarily attend the Daily Standup meeting?

Click on the grey area to view the answer: **Development Team**

## Quiz – on Artificial Intelligence

**AI Q1.** \_\_\_\_\_ is the mechanism that allows the model to weigh the importance of different words in a sentence in transformer models.

Click on the grey area to view the answer: **Self-Attention**

**AI Q2.** The phenomenon where a model generates plausible but incorrect or nonsensical information is commonly referred to as \_\_\_\_\_.

Click on the grey area to view the answer: **Model Hallucination**

**AI Q3.** The process of fine-tuning a pre-trained language model on a specific dataset to improve its performance on a particular task is called \_\_\_\_\_.

Click on the grey area to view the answer: **Transfer Learning**

**AI Q4.** In the context of GANs, the process of updating the generator and discriminator in alternating steps is referred to as \_\_\_\_\_.

Click on the grey area to view the answer: **Adversarial Training**

**AI Q5.** The technique used in text generation models to ensure that the same context is not repeated endlessly by penalizing previously generated tokens is known as \_\_\_\_\_.

Click on the grey area to view the answer: **Nucleus Sampling**



**DID YOU KNOW?**

The first AI-powered chatbot, ELIZA, first appeared in 1966. ELIZA made its debut 48 years before Amazon's Alexa. ELIZA, named after the fictional Eliza Doolittle, would essentially rephrase the user's input in the form of a question.





# Unveiling the Beauty of Sikkim -Where Nature Smiles!

Piyush Sayani

Personal Space



*Embarking on a mesmerizing journey through Sikkim, we were captivated by the region's scenic beauty. The tranquil monasteries offered a serene retreat, while the shimmering lakes were a sight to behold, their calm waters echoing the region's serenity. A walk through the lush tea gardens was akin to stepping into a green paradise, the aroma of fresh tea leaves lingering in the air.*





***We wish to hear back!***

*Do you wish to share your stories and content or have feedback, suggestions, or comments regarding the newsletter? Please feel free to contact the Newsletter Team.*

***Thanks to:***

- Nandini Raisinghani
- Sudha Krishnamurthy
- Bhartesh Doshi
- Sarat Shankar
- Tanul Karkare
- Ninad Kulkarni
- Piyush Sayani
- Vibhas Mokashi
- Paresh Teredesai
- Subodh Budhkar
- and all SPOCs.

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EDITORIAL  
TEAM***Sanjeev Dhurwey**Ram Kumar Kamisetty**Satarupa Mukherjee**Sampath Kumar Pothuru**Vishnu Das*



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