

# Driving Global Success | Advanced Analytics & Change Management Strategies

Amanda Thomas

Indorama Ventures

# Company snapshot



Presence in

**32**

countries

\*update as of Apr 2025



**114**

manufacturing locations

\*update as of Apr 2025



about

**25,000**

employees



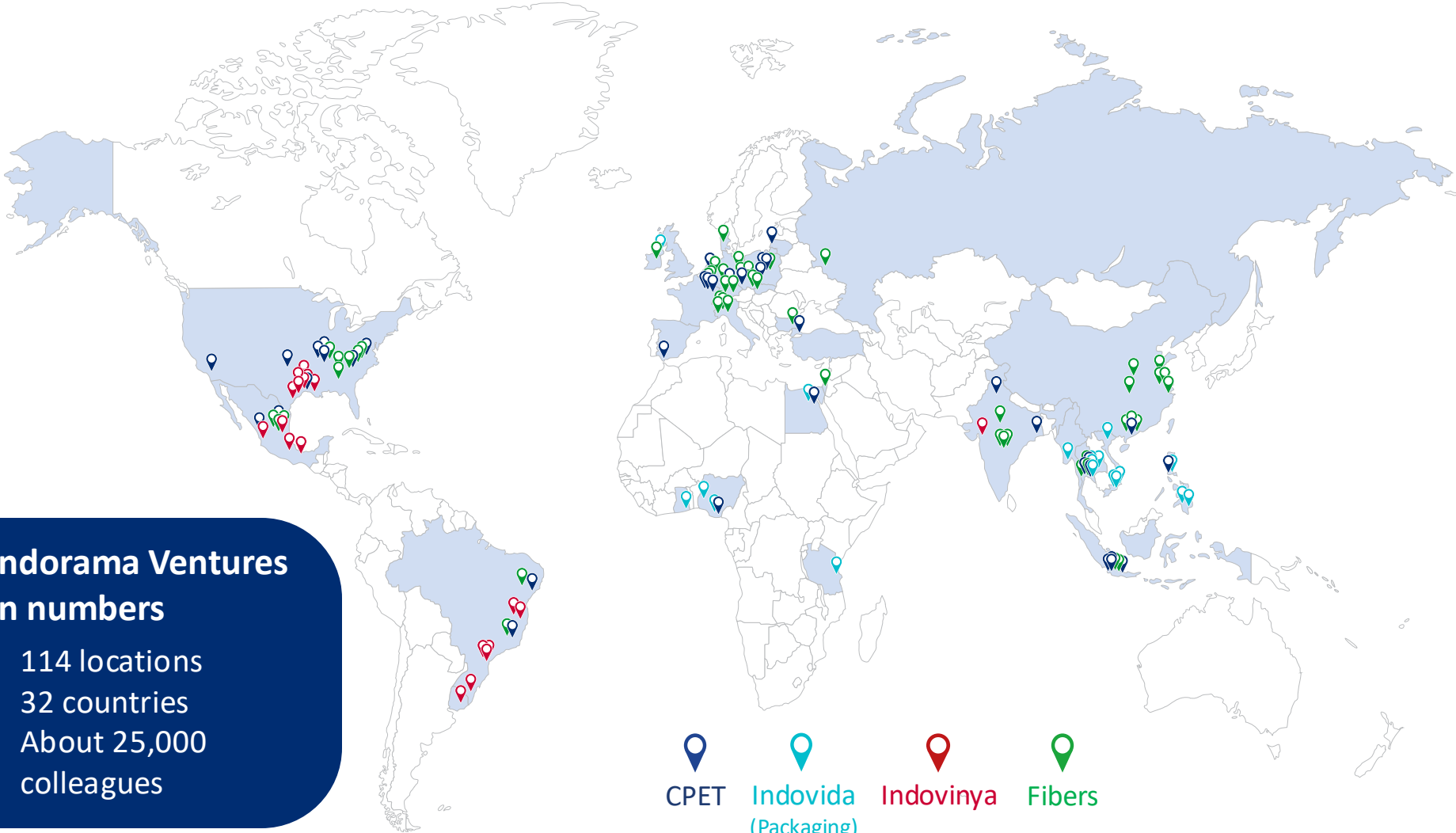
Consolidated revenues of

**\$15.4B**

(FY2024)



# Our global manufacturing footprint



## Indorama Ventures in numbers

- 114 locations
- 32 countries
- About 25,000 colleagues

\*update as of Apr 2025

Indispensable Chemistry



## Americas

Brazil  
Mexico  
Uruguay  
USA

## EMEA

Bulgaria  
Czech Republic  
Denmark  
Egypt  
France  
Germany  
Ghana  
Ireland  
Italy  
Israel  
Lithuania  
Luxembourg  
Netherlands  
Nigeria  
Poland  
Russia  
Slovakia  
Spain  
Tanzania  
Turkey  
UK

## APAC

China  
India  
Indonesia  
Myanmar  
Philippines  
Thailand  
Vietnam

# Indorama Ventures' purpose, vision, values, and brand promise



## PURPOSE

Reimagining chemistry together to create a better world.



## VISION

To be a world-class sustainable chemical company producing indispensable chemistry that touches billions of lives every day.



## VALUES

- The **customer** is why we exist
- Our **people** make the difference
- We embrace **change** as an opportunity
- **Diversity** is our strength
- We are **responsible**



## BRAND PROMISE

Indispensable chemistry



# Driving Global Success | Advanced Analytics & Change Management Strategies

## Part 1 | The Science & Spirit of Change: From Leadership to Getting Started



Amanda Thomas



*How Neuroscience, Passion, and Leadership Unlock the Impossible!*

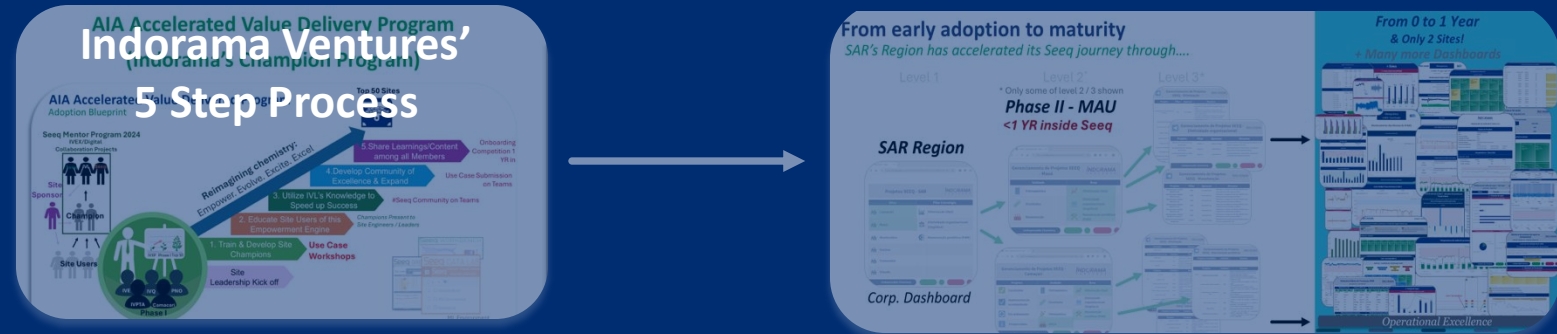


# Driving Global Success | Advanced Analytics & Change Management Strategies

## Part 2 | Empowering Transformation: From Site & Regional Level (The SAR Region)



Juliana Lima Guerhard Fidalgo



*From Champion to Regional Lead: Transforming a Region by Prioritizing People Over Projects*

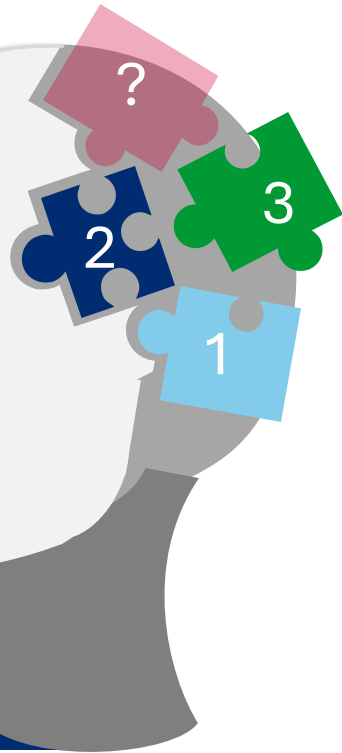
# Indorama Ventures' TRANSFORMATION Effort | Shaping the Future Together

How Passion, Neuroscience and Ultimately Leadership Unlock the Impossible



## Transformation

Developing the Growth  
Mind Set & Transforming  
your industry



**Humble**



**Beginnings**

**Psychology**



**of Change**

**Unlocking**



**the  
Impossible**

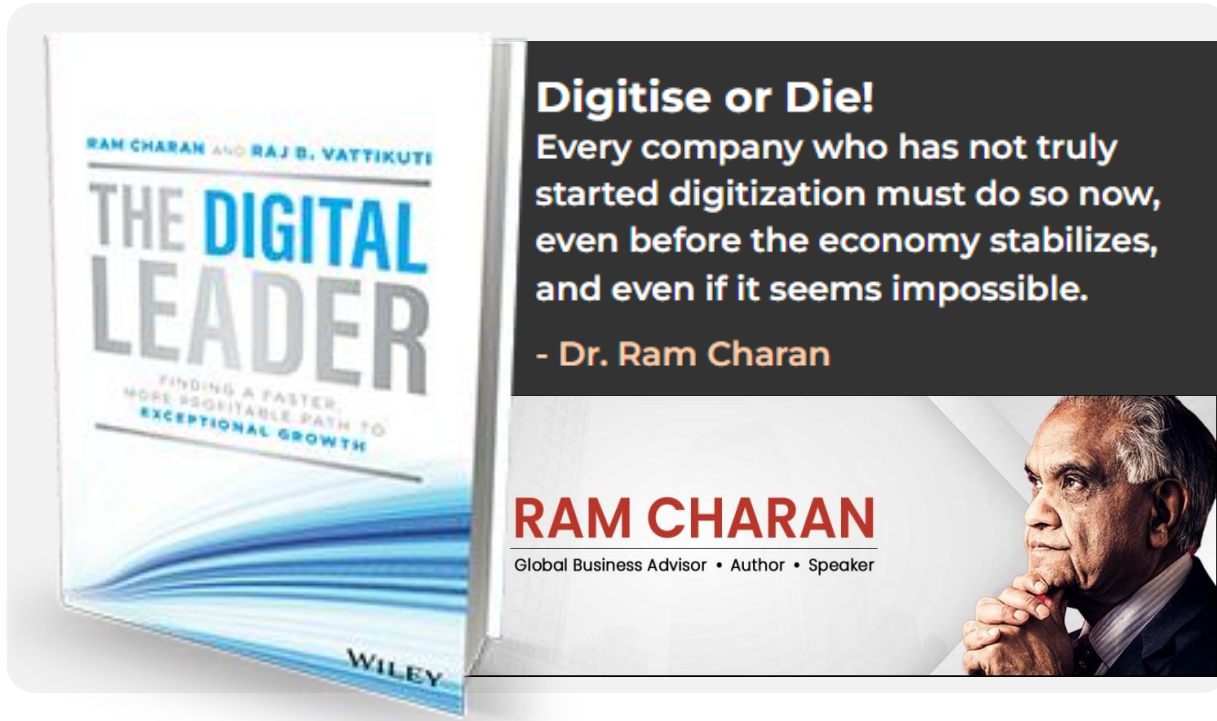
**The Missing**



**Piece**

# Business Case for Change

Call for Action



***Distraction***  
~~***Dis traction***~~  
~~***Distr action***~~

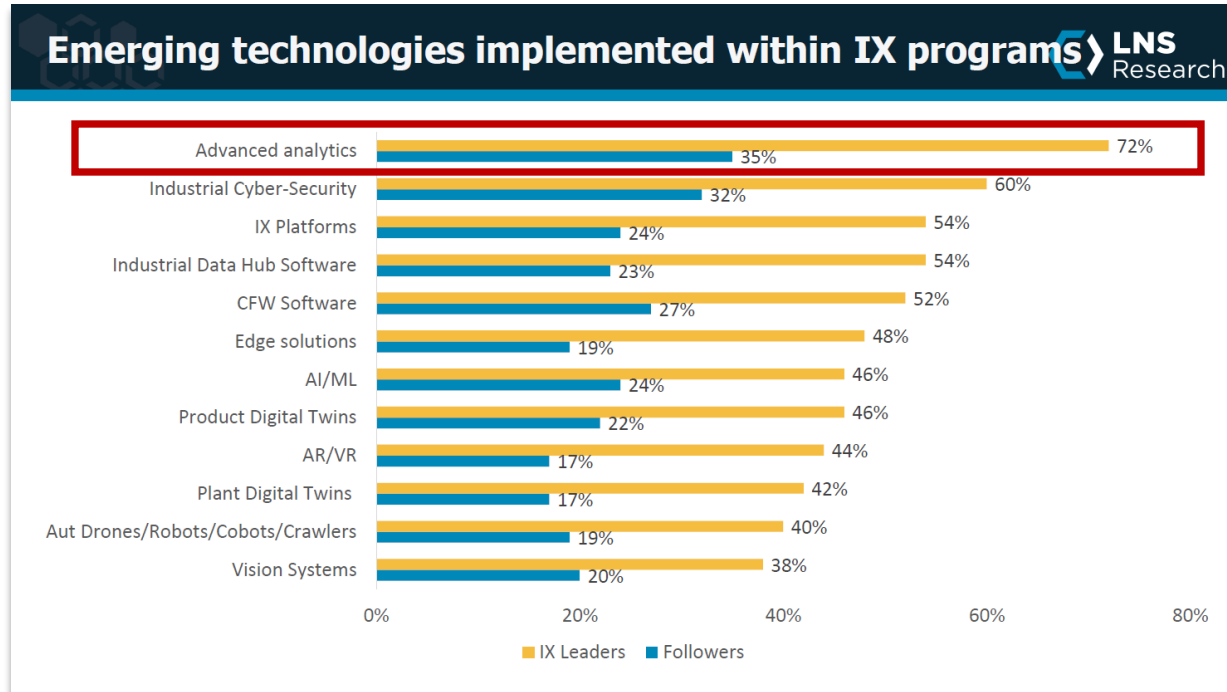
Sometimes we must remove ***some things***,  
to Remain with the ***right thing***

*“The man who chases two rabbits, catches neither” - Confucius*



# Emerging Technologies & Why this?

## Selecting the right Enablement tool



## #1 Successful technology

- Empower our Teams
- Elevate Indorama Ventures to Operational Excellence
- Prep our teams to create Data Driven Decisions & Culture

*Preserving a Future Ready Indorama Ventures PCL*

# The Indorama Ventures & Seeq® Story | *From First Spark to Full Stream*

Humble Beginnings....



2018

## IVXP Site Pilot

Indorama Ventures Xylenes & PTA (IVXP), located in Decatur, Alabama. With production of PTA, PX, NDC and has experienced several expansions in the last 6 years. PIA Production in 2018 and PNDA 2021. Becoming the worlds largest producer 2,6 - Naphthalenedicarboxylic Acid (PNDA).

2022

## Digital Recognized Scalability

Seeq's functionality & support for major product startups exceeding \$50M+ in value—positioned it as a key enabler within the organization. Its versatility and scalability bridged the gap between data science tools, engineering teams, and frontline operations.

2023

## Leadership Update: Seeq Present to TreKUpDate

At Indorama Ventures' Transformation TREK 2.0 (Seattle, Sept. 2023), the Seeq CEO presented the vision that led to agreement on the initial pilot scale. To enable success, Indorama invested in a dedicated Anchor Hire to support the pilot's expansion from 1 to 5 sites—with a clear execution goal: drive 10x ROI by equipping and guiding teams to cross the transformation chasm.

2024 & beyond

## Avoiding “Digital Fatigue”

New digital initiatives are under pressure to demonstrate clear value within 6–12 months—or risk being dismissed as another failed investment. With strong collaboration between Seeq Leads, Digital Manufacturing Leaders, and Onboarding Support, the initial pilot scaled from 5 sites to 24 sites within the second year—using the same structured rollout approach.

## Our Strategic Commitment to Transformation

*The Vision*

*The Software*

*& The Resource Focus*

# Lead the Operational Excellence Transformation with Advanced Analytics



**Amanda Thomas**

Global Digital Applications &  
Advanced Analytics Leader

Driving success for Seeq  
Proof Of Value at IVXP in  
2018-2022

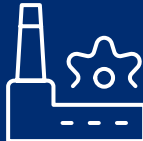
## Highlights



Chemical  
Engineering



Industrial  
Analytics



Process  
Engineer



Industrial  
analytics early  
adopter

## Experience – 12 Years

Global Digital Applications & Advanced Analytics Leader (1 yr)  
IVXP Sr. Process Engineer (3 yrs)  
IVXP Process Engineer (3 yrs)  
Carbon Fiber Process Engineer (6 yrs)  
Chemical Engineering



## Visionary leaders & Change Enablers (Mentors)



Global Head – MTC



Global MFG Digital  
Head



Global MFG  
PMO

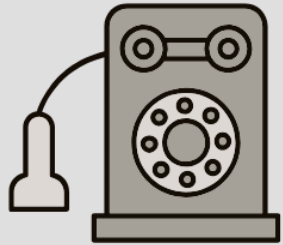


Indorama Ventures  
Group Head of IVEX

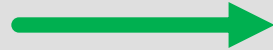
# What is Transformation?

It's not a tool. It's not a training. It's not a trend

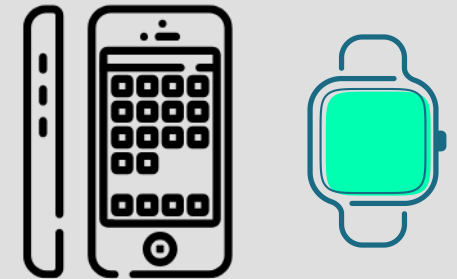
*Transformation is a bold reimagination of what's possible—*



Stationary. Voice  
Communication Only



On-the-Go  
Limited Communication

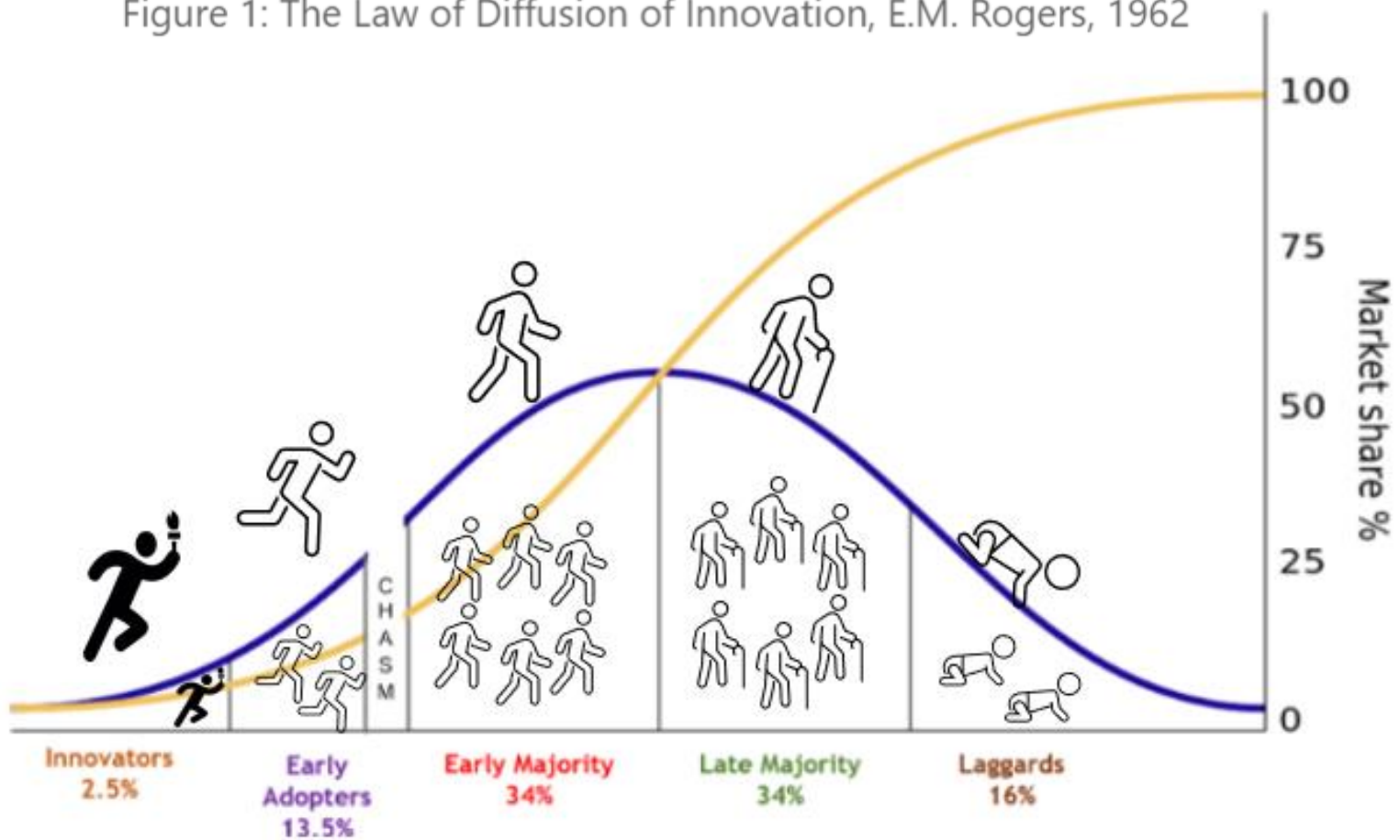


Connected with  
the World

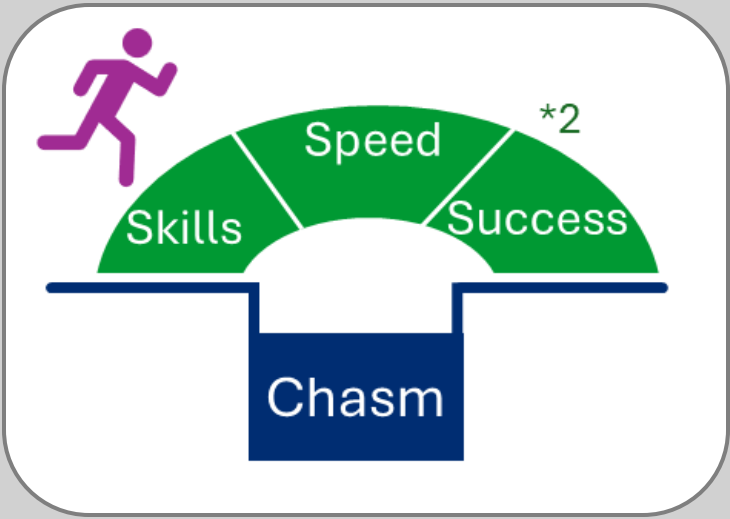
💡 Transformation is what happens when we dare to **rewire**  
**how we think,**  
**how we work,**  
**and how we lead.**

# Law of Diffusion of Innovation & Psychology

Figure 1: The Law of Diffusion of Innovation, E.M. Rogers, 1962



Build “the Bridge” &



Convince the masses  
with Speed & Purpose

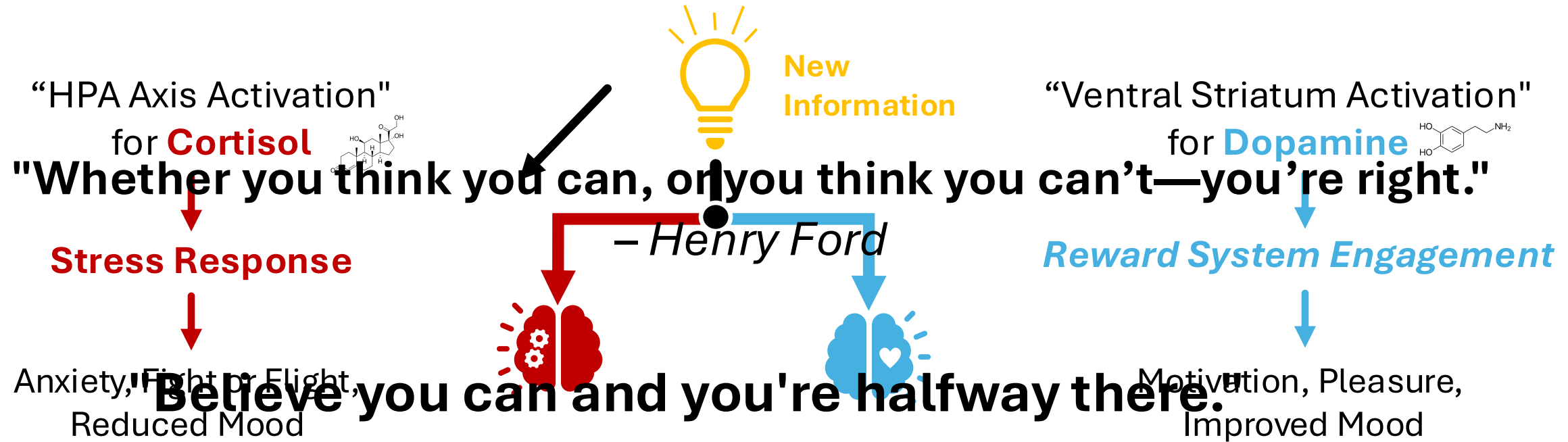
...But How?

1. (11) The Law of the Diffusion of Transformative Change | LinkedIn  
2. Digital Execution Gap: <https://www.konsert.com/insight/closing-the-digital-execution-gap/>



# Crossing the Chasm with Speed – Chemistry of No

The Psychology of Fear vs. the Chemistry of Passion



## The Cortisol Response:

- **Impaired** Memory and Learning (disrupts hippocampus)
- **Reduced** Problem-Solving and Creativity (suppresses prefrontal cortex)
- **Weakened** Attention and Focus
- **Emotional Dysregulation** (increased emotional reactivity)

**“Optimism is the foundation of leadership.”**

– Simon Sinek (author of **Start With Why**)

## The Dopamine Response:

- **Improved** Memory and Learning (increases neural connections btw hippocampus & prefrontal Cortex)
- **Enhanced** Problem-Solving and Creativity (activates prefrontal cortex)
- **Increased** Attention and Focus (improves cognitive performance & more innovative solutions)
- **Boosted** Motivation and Emotional Resilience (building resistance to stressors)

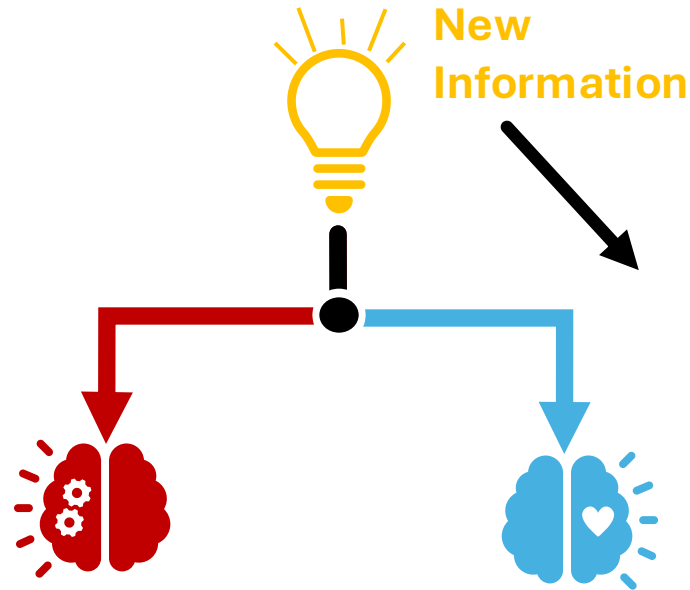
# Crossing the Chasm with Speed – Simplified

The Psychology of Fear vs. the Chemistry of Passion



## The Cortisol Response:

- **Impaired** Memory and Learning
- **Reduced** Problem-Solving and Creativity
- **Weakened** Attention and Focus:
- *Emotional Dysregulation*



## The Dopamine Response:

- **Improved** Memory & Learning<sup>1</sup>
- **Enhanced** Problem-Solving & Creativity
- **Increased** Attention & Focus
- **Boosted** Motivation & Emotional Resilience

## Ignite Passion & Unlock the impossible!

(Dopamine Response)

Mitigations: Suppress Cortisol Response

# We are Ready, to Unlock the Impossible

- ✓ *The Vision*
- ✓ *The Resource Focus*
- ✓ *The Empowerment Engine (SeeQ®)*
- ✓ *The Psychology of Change: **Critical Mass buy in!***

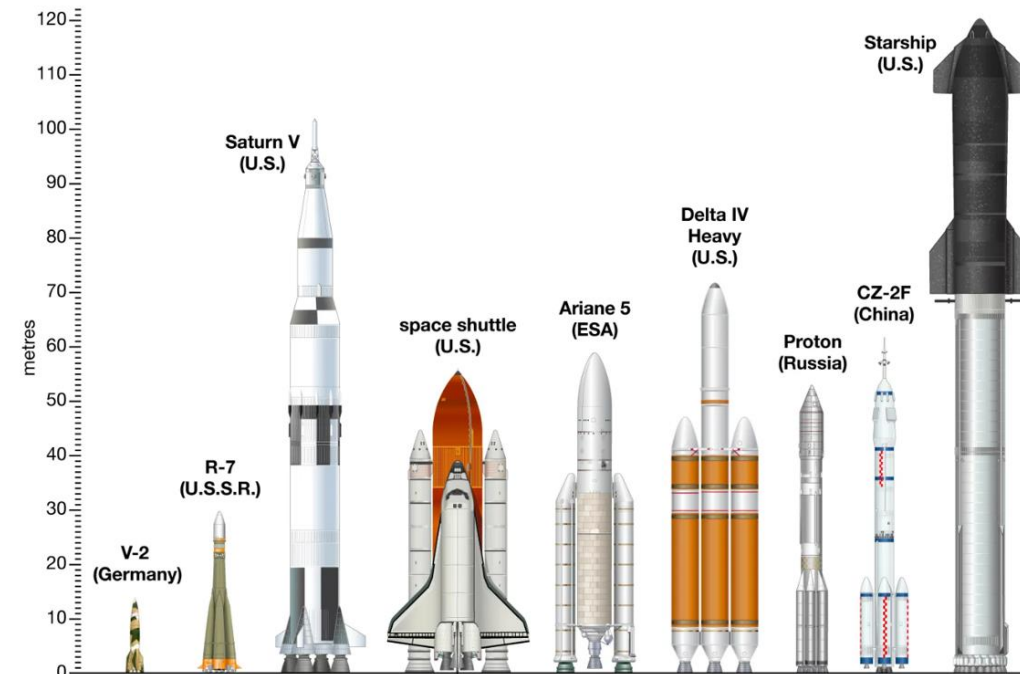
# Unlock the Impossible

From Improbable to Achievable

Spark Passion

Break Barriers

Dream Bigger



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**Vision for Reusability:**  
Musk's focus on creating reusable rockets drastically reduced the cost of space travel. SpaceX's Falcon 9 was the first orbital rocket to be reused successfully<sup>3</sup>

**Elon Musk**  
CEO of Tesla Motors



*Reusability as a Game-Changer: "Falcon 9 is now ~75% reusable and requires several days between flights. Starship is designed to be 100% reusable and ultimately be ready to re fly within an hour of landing."<sup>2</sup>*

Indispensable Chemistry



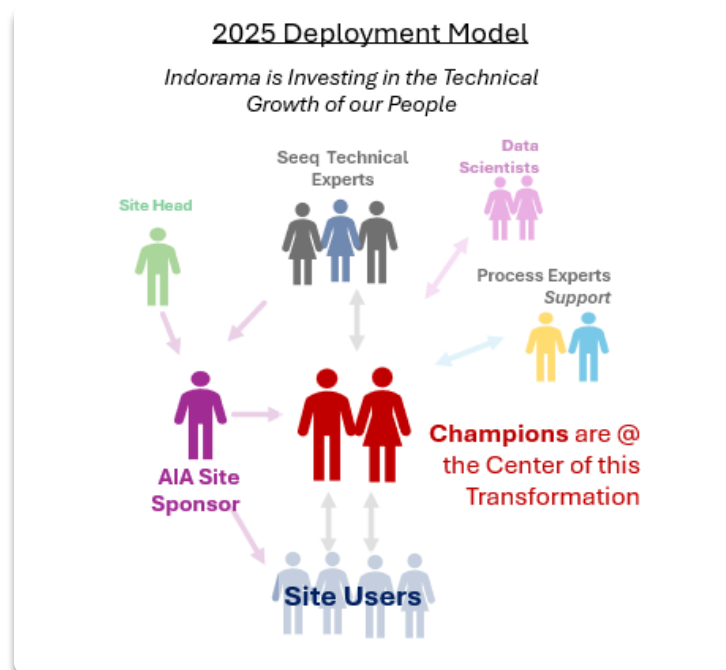
# Fueling that Passion

Speaking to society that needs “Instant Gratification”

A

## Champion Program

Creating Super Users/Initial Wins w/ Champion Program.  
Guided by both Vendor + Indorama Ventures experts. To  
Establish strong Site holds.



Super Charge Support

B

## Global Team's Self-Service Portal

### Case Development

Work steps:

#### A. Monitor OLQ catalyst compaction by reactor pressure delta

Monitor the compaction of the R-8702 hydrogenation catalyst based on a comparison between the reactor pressure Delta, measured in real time, and the pressure Delta estimated by the Ergun equation.

1. Create Formulas to calculate the real pressure delta and Ergun pressure delta



#### Known Things or Watch outs:

- Physicochemical parameters of the catalyst applied to calculate the Ergun Pressure Delta must be updated when the catalyst is changed.
- Conversion of units in the phenomenological equation

### Indorama SOLVED Use Cases w/ Step by Step Guides (Replicating success)

Office hours

Quick tips

Data Scientist Community

Adoption KPI's

LIVE GEN AI inside Seeq!

Safe Learning Empowerment  
for Scaling Success

C

## Showcase Success & Onboarding Competition

Celebrating wins and success globally

**INDORAMA VENTURES**

**20 AUGUST 2024**  
**7PM Onward**  
7.00PM - 9.30PM Bangkok Time

**Digital x IVEX**  
**ADVANCED INDUSTRIAL ANALYTICS**  
**COMPETITION 2024**

**Are you Ready!!!**  
to the Digital x IVEX  
Advanced Industrial Analytics Competition 2024

**Get inspired to solve your Plant Challenges**

**Witness Success Stories**

**Learn about AIA's Journey** Over the Past 9 Months from These Significant Plants

- Indorama Ventures Quimica, Cadiz (IVQS)
- Indorama Ventures Oxides LLC., Texas (PNO)
- Indorama Ventures PTA Montreal L.P., Canada (IVPTA)
- Indorama Ventures Oxides Camacari, Bahia (CAM)

**Velocity of Value @ Scale**

- Lean 6σ** - Accelerated Development of Site CpK across a Site
- Process Optimization** - Golden Batch Optimization U-160
- Indovynox Oxidation Moud**
- PdM** - Site Control Valve (ON/OFF) Predictive Maintenance Dashboard
- Indovynox Oxidation Moud**
- Data Scientist** - Data-Driven Insight Enhancing Industrial Performance & Quality
- Indorama Ventures Polymers Mexico (IVPM)

**Advanced Industrial Analytics & The Future**

**Cheer on Your team! Your support makes a difference**

**Partnering with IVEX**

Recognizing our PPL &  
Building Trust

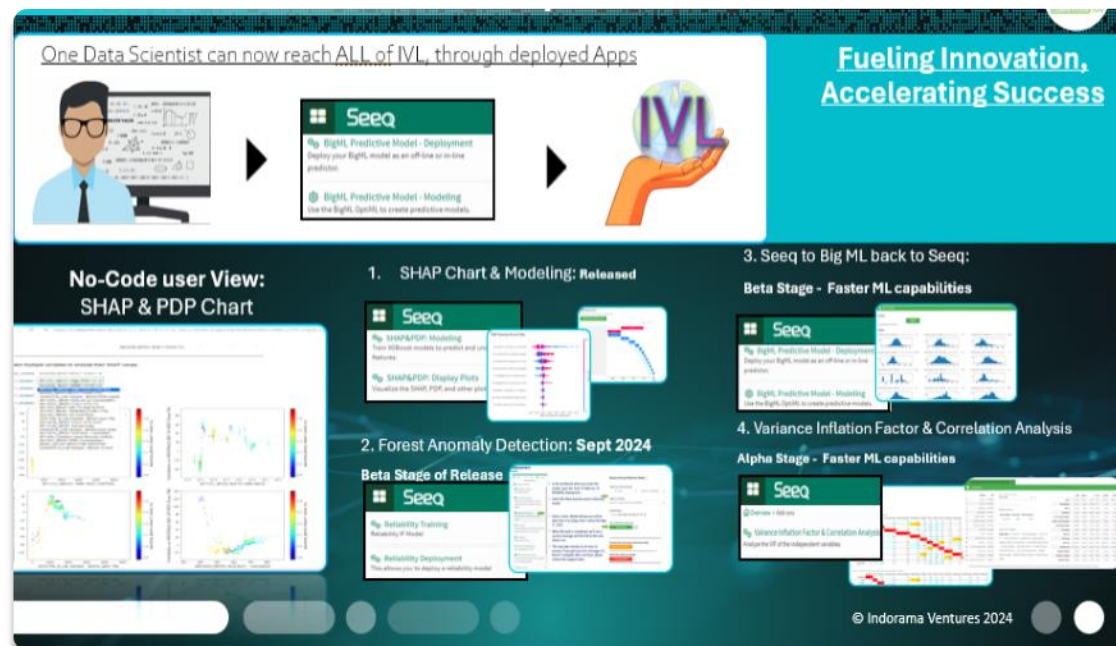


# Unlocking our Elon's | Providing a Space to Innovate

Solve Once & Share with ALL Indorama Ventures - Delivering V2V@Scale through their different talents & passions

## Data Scientist Community:

Driving Value with Advanced solutions w/ Deployed Add-on's



**AMER – Digital**  
Data Scientist using their skills to Scale value across Indorama Ventures



Senior Data Scientist



Data Science Engineer

**Aspiring Data Scientist Members**  
Fueled by their Passion for Data Analytics making Advanced Models



With a Working knowledge of

Phase I Champion

& a Passion for making a bigger change @ Indorama Ventures through Data!



Phase III Champion

## Indovinya Community:

Leading Digital Transformation | Scaling AIA across SAR &



From Champion to SAR Regional AIA Lead

& **Demonstrating Global Cross Sharing** as she provide language support to CPET Site IVPSA & cross sharing to NAR – Golden batch code to expedite the learnings

## LSS Community:

Customizing common 6D calcs for scaling SPC/CPK for future sites.



Site Champion

**Talent Retention:** People should pursue what they're passionate about. That will make them happier than pretty much anything else. -Elon Musk

# The Program Results

Empowering & Connecting our Great Assets >> **Our People**

**Connecting our Teams around the world & building internal Capability!**



**12,560+**  
Hours in Seeq  
(2024)  
Excluding training time

**690+**  
AIA Users  
@ IVL.Seeq.Site

**22**  
Sites  
Deployed

**950+**  
ML Models by  
Non-Data Scientist  
Members & counting

**139**  
Members Training  
in AIA Advanced Analytics  
(+18 hrs.)

**16**  
Months  
of Deployment

**749**  
Members Training  
in AIA Foundations  
(9 hrs.)

**45**  
Super  
Users

**6**  
ML Tools  
being Deployed to  
No Code Users

*And this is **JUST** the beginning!*

# A Journey of a 1000 miles to 2030 Vision


## Cultural Impact Timeline

- 5 Step Program**
- 1. Leadership Align.
  - 2. Training
  - 3. Value Workshop
  - 4. Champion Showcase to CTO's
  - 5. Site Adoption Competition


Q1 2024

### “CTO Update”

Champions Present – Unlock passion



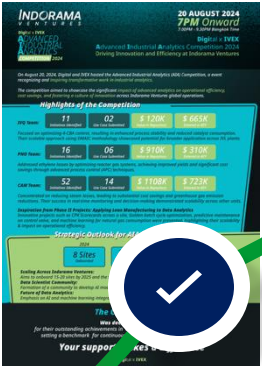
Definitely, this is a tool in the 'game-changer' category. Technology is not the end itself, but when combined with human creativity, intelligence, engagement and dedication, it produces impressive results like these! Let's move forward!


 4

*Ai, inside Seeq (Blank Sheet to Complete)*


2Q 2024

3Q 2024  
“IVEX & Advanced Industrial Analytics Competition”  
MFG Leadership engaged







Very good presentations. Congrats to Camaçari team and others!!!



Congratulations! Camacari



Congrats Camaçari!! Go SAR!!



excellent work by all teams. Eye opener!

Unlocking  
3 the  
Impossible

## Psychology of Motivation

**Judges - Manufacturing Leadership Team**



Chief Manufacturing & Technology Officer



Global Vice President EHS



Global Digital Operations Excellence



Chief Technology Officer - Indovina



IVL Group Head, IVEX  
MFG Excellence & Lean Six Sigma



**Extrinsic Motivation Activated**

IVXP Pilot  
Prove it is valuable



# Elevating Indorama Ventures to New Heights:

Empowering Our Talent w/ Digital Solutions & Strategic Deployment

## AIA x IVEX Competition August 2024 Highlights

Time Savings

Efficient Tool

Highly scalable  
& easily  
Adaptable

Reducing  
rework



Highlighting easily,  
unknown process  
details

Replace manual  
efforts

Fueling Passions &  
Innovation

**Creating Organizational Capacity & Fueling Innovation from Our People!**

# A Journey of a 1000 miles to 2030 Vision

Passion is not enough; Leadership & Processes are required



## GENERATE A MOVEMENT, the Advanced Industrial Analytics Movement

Q1 2024

### “CTO Update”

Champions Present – Unlock passion

Leandro Sacchi 10:09 AM

Definitely, this is a tool in the 'game-changer' category. Technology is not the end itself, but when combined with human creativity, intelligence, engagement and dedication, it produces impressive results like these! Let's move forward!

4

*Ai, inside Seeq (Blank Sheet to Complete)*

2Q 2024

### Change Management required

Value Delivery not documented

### “IVEX & Advanced Industrial Analytics Competition”

3Q 2024

MFG Leadership engaged

Luciano Vieira 8/20/2024 9:12 AM

Very good presentations. Congrats to Camaçari team and others!!!

Limones Ayllon, Congratulati

Daniely da Rocha Congrats Camaçari

Sriraman PG 8/20/2024 11:12 AM

excellent work

INDORAMA

20 AUGUST 2024 7PM Online

Workshop

01 02 03 04 05 06 07 08 09 10 11 12

17 18 19 20 21 22 23 24 25 26 27 28

29 30 31

32 33 34 35 36 37 38 39 40 41 42 43

44 45 46 47 48 49 50 51 52 53 54 55 56

57 58 59 60 61 62 63 64 65 66 67 68

69 70 71 72 73 74 75 76 77 78 79 80

81 82 83 84 85 86 87 88 89 90 91 92

93 94 95 96 97 98 99 100

The Competition Results

We achieved the Winner

For your outstanding achievement, we are proud to announce you as the winner of the competition. Your support makes a difference.

4Q 2024

### 1-2-3 Value Delivery Process

Aligning efforts



### Accelerated Scale

Following the hype of Competition.

Change needed to Hit our Goal

### IVXP Pilot

Prove it is valuable

Indispensable Chemistry



# ...but WHY?



## Neuroscience Strategies for Successful Change Management **NEUROSCIENCE STRATEGIES FOR SUCCESSFUL CHANGE MANAGEMENT**

### **NEUROSCIENCE AND L&D: OVERCOMING RESISTANCE TO CHANGE**

[Neuroscience and L&D: Overcoming Resistance to Change](#)

### [Navigating Change: Neuroscience Strategies for Effective Leadership](#) **NAVIGATING CHANGE: NEUROSCIENCE STRATEGIES FOR EFFECTIVE LEADERSHIP**

Why does change feel like pushing a boulder uphill? Because your brain's not built for it—it's built for survival, not reinvention. Leaders driving their teams toward the "next big thing" are up against the ultimate opponent: human nature. Our brains crave routine and predictability. Anything outside the norm? It triggers resistance. But here's the upside: neuroscience is handing us the playbook to flip the script. By understanding how your brain handles change and uncertainty, you can stop fighting it and start leveraging it.

This article breaks down cutting-edge research into simple, actionable strategies so you can lead through change like it's second nature.

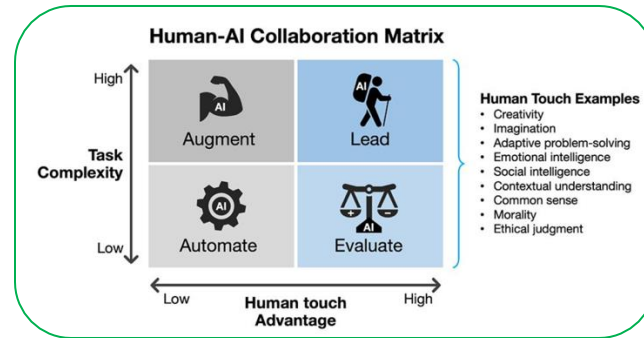
#### **UNDERSTANDING THE NEUROSCIENCE OF CHANGE**

**WHY CHANGE IS HARD FOR THE BRAIN**

# ... And then, The Missing Piece!

Ai Exercise from Professor Bharat Anand, Vice Provost for Advances in Learning at Harvard University

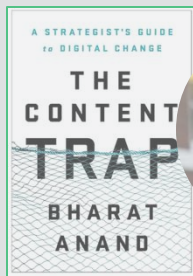
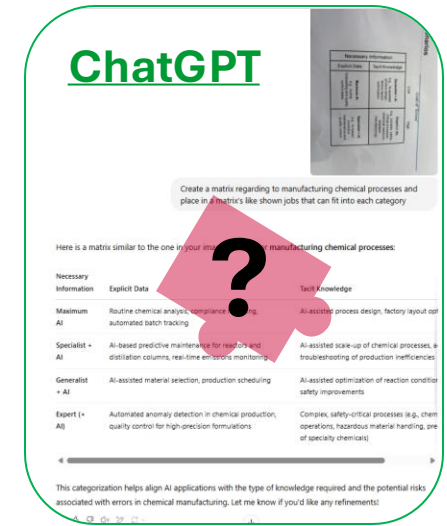
## The Exercise



Getting Familiar  
with Ai



Only Digital Member



Indorama Ventures Champion Program Original Goal: *By fostering connections across teams, tools, and regions, the Champion Program created a multiplier effect far beyond its original scope, focusing on People.*

# Neuroscience's Role in the Transformation

*Transformation is NOT a Passive Process*



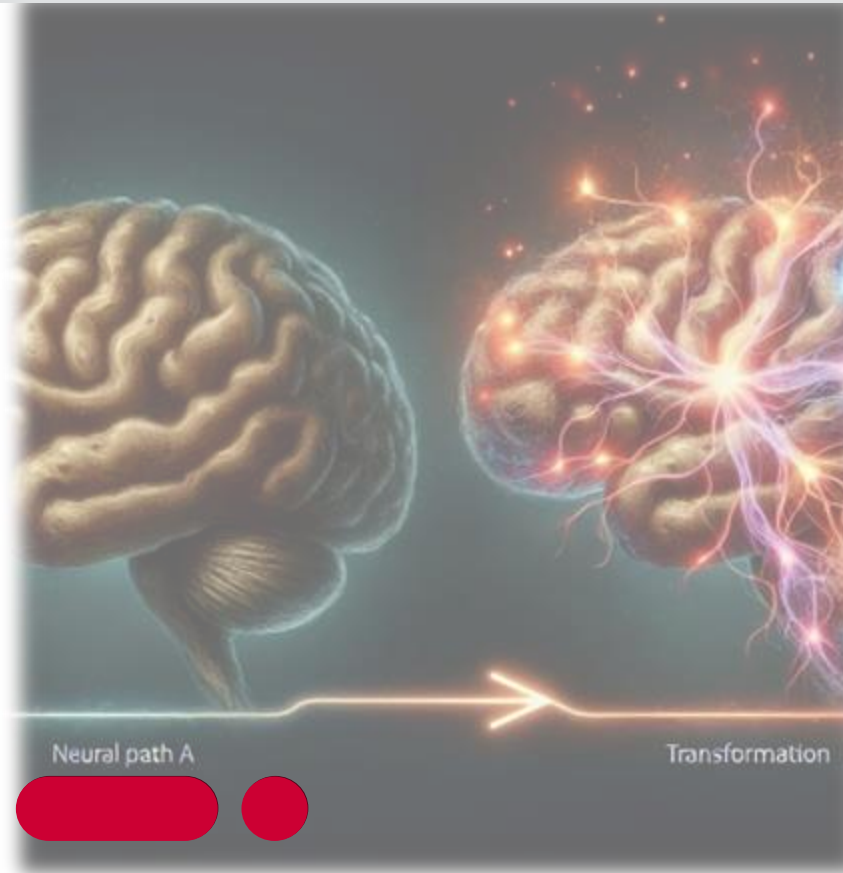
## Why Our Brains Resist Change

The brain **conserves energy** by avoiding deep thought, engaging auto-pilot in the basal ganglia to **bypass effortful** prefrontal cortex activity. The Zeigarnik Effect—where **incomplete tasks** create mental tension—drives this, making it easier to “not think” and resist innovative approaches.

### System 1 – Auto Pilot

(Lazy Brain)

- Fast, automatic, emotional, habitual
- Used for routine tasks and quick decisions
- Saves energy, but can be biased or shallow



### System 2 – Forced Control

(Deep Thinking)

- Slow, effortful, logical, deliberate
- Used for complex, new, or high-stakes problems
- Requires focus and energy

# Commitment to Transformation | Driving the AIA Movement

### Introducing the AIA Deployment Team for the Champion Program | Year 1

**Leadership Team**









**AIA Program Lead**



**APM Advisor**



**Digitization Team**



**Visualization Support**

- Training Dashboard,
- Seeq (AIA) KPI's,
- Savings Dashboard
- SeeqAthon Dashboard (Coming soon)

**Power Apps**



**Investing in the Technical Growth of our People**

By empowering them w/ easy access to our data scientist's tools & expertise




**Data Scientist Team**

- Hosting 2-4 hours of Office hours a week for ML Add-on's and data scientist support
- Add-on Development
- Asset Tree Development (to quickly copy solved cases to other sites)
- Problem solving guidance when Advanced Data scientist knowledge needed
- Starting Evaluation of AI Integration

Indispensable Chemistry

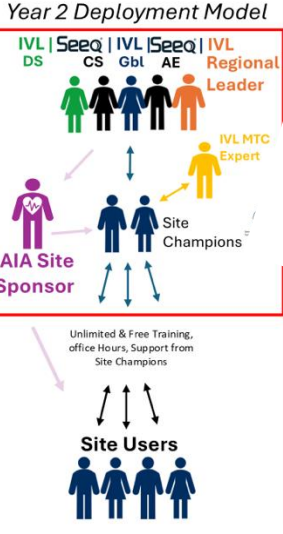
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If you don't **sacrifice** for your (Business) goals,




Your (Business) goals become the **sacrifice**.

### AIA Deployment Team Additions | Boosting Momentum for Year 2


**Year 2 Deployment Model**




**Deployment Team:**







**Regional AIA Transformation Leads:**


**CPET:** 

**Indovinya:** 

**Investing in the Technical Growth of our People**

**Digital 2H 2025**

**(MTC)** 

**MTC PTA Expert**

**MTC PET Expert**

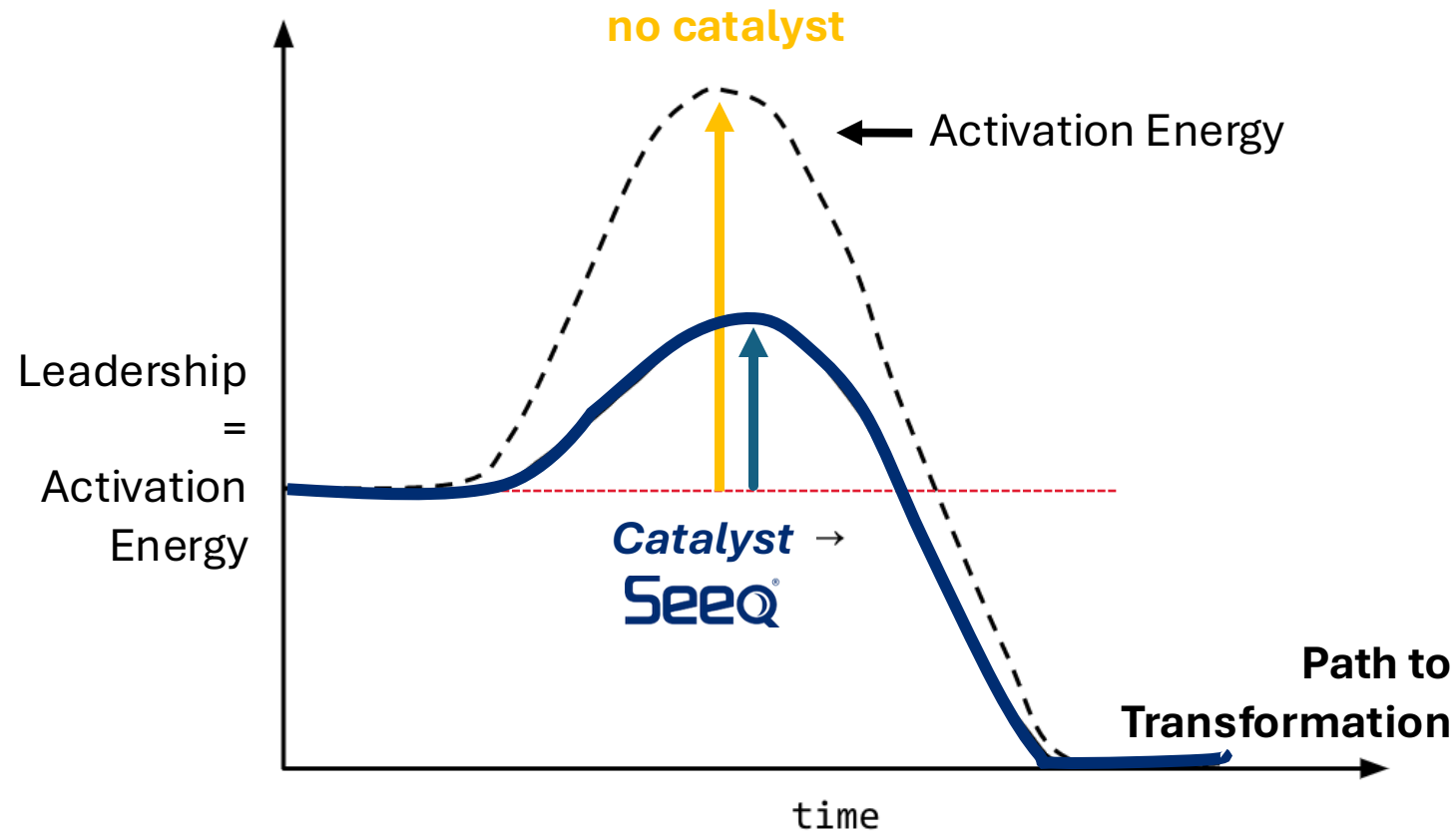
**Transformation Guides Supporting the Re-wiring the way we Think! Through Hebb's law & Neuroplasticity**

Indispensable Chemistry

© Indorama Ventures 2025

# Summary

*Transformation isn't something that happens TO companies—it happens **within** people. In the hearts and minds of our teams.*



## 1 We're Locking in Focus...

### ...on Our Path

Reimagining Chemistry to create a better world

## 2 Our PPL Make the Difference

Ignite Passion & Mitigate the Stress Response:  
**Achieve "The Impossible"**

## 3 Leadership is the Activation Energy

Communication, Leadership Incentives & Strong Support System & Celebrations



# Empower your Teams & Join the A/A Movement!

*“ ... Seeq is an empowerment engine—the catalyst for change—but it’s our leaders who serve as the activation energy to start that reaction of transformation. ”*

*- A. Thomas*

*To get something you never  
had, you have to do  
something you never did.*

*– D. Washington*

## Are you ready to go #allin?

*“ ... Your **Distraction**, is your  
**Decision** ...*

*You look for, what you Long for!  
“*

*– Pastor Andy John*

*If you Stay in your **Comfort Zone**. You will **Fail** in your comfort zone.*

*Success is not a comfortable procedure. Get Comfortable with being **uncomfortable**  
if you’re going to be Successful.*

*- Anonymous*