



## Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified

Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

### Department of Mechanical Engineering

#### A.Y 2024-2025, Even Semester

#### Alumni Guest Lecture Report

In view of alumni activities, Department of Mechanical Engineering conducted an Alumni Guest Lecture with **Mr. P. Ratna Prasad (Y1IP258), Process Development Engineer, AGCO Corp., Batavia, IL State, U.S.A. of Y1-Batch on 28-02-2025**. He gave continuous lecture from 2:00 P.M to 03:00 P.M on the topic **“Optimization and Digital Transformation in Warehousing and Supply Chains”**. In on-line mode, he given presentation in Webex platform in which **99 participants (87 students and 12 faculty)** of ME department was participated in blended mode in room M122 and M215.

#### Webex Link:

<https://kluniversity.webex.com/kluniversity/j.php?MTID=m89340152ae8bff996601938ac4ea7fae>

#### During his interactive lecture, he discussed on:

- What is Supply Chain?
- Supply Chain Structure – participants – Suppliers supplier, Customer's customer, service providers
- Supply chain is same as that of Logistics – Concept
- Warehousing and Storage systems
- Why have a Warehouse, Consolidation and Break-Bulk Services with example
- Cross Docking concept and Value-Added services (VAS) concepts
- Order Fulfilment & E-Commerce Logistics
- Warehousing Supply Chain
- Types of Warehouses and warehouse process
- Digital Transformation and its advantages and challenges in implementation



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Some of the Screen shots / Geo tagged pictures of event attached here

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "Optimization and Digital Transformation in Warehousing and Supply Chains" by Ratna Prasad Paladagu, PDE, AGCO Corp. The slide features a large stylized 'K' logo. The top of the interface shows the meeting title "Alumni Guest Lecture on 28-02-2025" and a list of participants: CR083, 2520 ME Dr.K.V.Durga... (kluniversity.in), A V S Ram Prasad (Unverified), and Ratna Prasad Paladagu (Unverified). The right sidebar shows a list of 16 participants, including CR083 (Host), Ratna Prasad Paladagu (Presenter), and several other attendees. The bottom of the interface shows the Zoom controls: Unmute, Start video, and various icons for chat, share screen, and other functions.

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "What is a Supply Chain?". The slide contains a definition of a supply chain and a diagram illustrating the flow of products, information, and finances. The definition states: "In simplest type of Supply Chains, items and services are sourced from suppliers and converted into products and delivered to the customer or end-user. Both products and information move forward through the chain. In the same way, products and related information move back up the chain." The diagram shows a flow from Supplier to Manufacturer to Distributor to Retailer to Shopper, with arrows indicating the movement of Product, Information, and Finances. The top of the interface shows the meeting title "Alumni Guest Lecture on 28-02-2025" and a list of participants: CR083, 2520 ME Dr.K.V.Durga... (kluniversity.in), A V S Ram Prasad (Unverified), Ratna Prasad Paladagu (Unverified), PVC (Unverified), and sanjay krishna (Unverified). The right sidebar shows a list of 6 participants. The bottom of the interface shows the Zoom controls: Unmute, Start video, and various icons for chat, share screen, and other functions.



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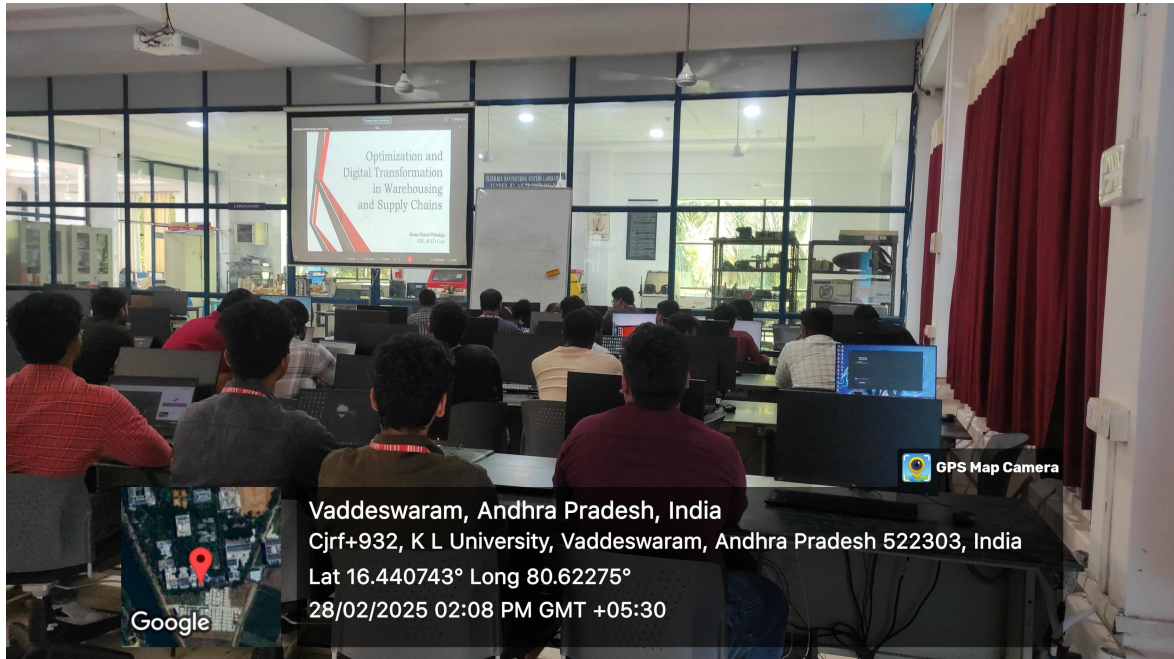
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Mail - k.v. durga rajesh - x KL University ERP You are signed in as 2520 Alumni Guest Lecture on 28-02-2025 (47) WhatsApp

Alumni Guest Lecture on 28-02-2025 Meeting Info

CR083 2520 ME Dr.K.V.Durga... kluniversity.in sanjay krishna Unverified Ratna Prasad Paladagu Unverified

Viewing Ratna Prasad Paladagu's applications 100% + Annotate

## Why have a Warehouse?

### Storage & Inventory Management

- Warehouses serve as **storage hubs** for raw materials, work-in-progress (WIP) items, and finished goods.
- They help maintain **buffer stock** to manage demand fluctuations.
- Advanced **Warehouse Management Systems (WMS)** track inventory levels, locations, and movement.
- Example: Amazon uses **AI-driven inventory tracking** to optimize warehouse space and minimize overstocking.

Participants (18)

Invite and remind

Participants (18)

- CR083 Host, me
- Ratna Prasad Paladagu Presenter • Unverified
- 2200070018 Unverified
- 2520 ME Dr.K.V.Durga Rajesh kluniversity.in
- Ayush Unverified
- BB Bharath Bharath gmail.com
- DIWAKAR Unverified
- Dr K V Narasimha Rao Unverified
- Dr PNV BALASUBRAMANYAM Unverified

Mute all Unmute all

Unmute Start video

14:18 28-02-2025





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Alumni Guest Lecture on 28-02-2025 Meeting Info 33:14 Layout

CR083 Ratna Prasad Paladugu Unverified PVC Unverified sanjay krishna Unverified DIWAKAR Unverified S.Ramesh kumar Unverified

Viewing Ratna Prasad Paladagu's applications 100% + Annotate

## Warehouse Process

```
graph LR; R[Receive 10%] --> PA[Put Away 15%]; PA --> S[Store]; S --> P[Pick 55%]; P --> PS[Pack, Ship 20%];
```

**Inbound**

- Warehouse controls the operation
- Unit of measure is larger
- Pace is slower

**Outbound**

- Customer drives the operation
- Most labor-intensive
- Unit of measure is smaller (usually)
- Pace is decided by customer and truck departures
- Urgency to get order to customer ASAP
- Customer satisfaction depends on delivery time

Unmute Start video

ENG IN 14:33 28-02-2025





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Guntur, Andhra Pradesh, India

Tadepalle, Guntur, 522302, Andhra Pradesh, India

Lat 16.440774, Long 80.622764

02/28/2025 02:28 PM GMT+05:30

Note : Captured by GPS Map Camera

Alumni Guest Lecture on 28-02-2025

Meeting Info

43:44

Layout

CR083

Ratna Prasad Paladagu  
Unverified

PVC  
Unverified

sanjay krishna  
Unverified

Viewing Ratna Prasad Paladagu's applications

100%

Annotate

## Successful Case Studies

The Orion System From UPS

One of the most prominent package delivery firms in the world, UPS, used the Orion system for on-road integrated optimization and navigation. Orion optimizes UPS drivers' delivery routes using AI and machine learning. UPS has significantly cut fuel consumption and greenhouse gas emissions by lowering idle time, unwanted left turns, and distance. Additionally, the method improves customer service by offering more precise delivery windows.

TradeLens From Maersk

Global container shipping business Maersk and IBM worked together to develop TradeLens, a blockchain-based platform for international commerce. TradeLens offers complete supply chain visibility, which decreases paperwork, boosts transparency, and guards against fraud. The platform has been used by several shipping lines and logistical firms, improving the effectiveness of global commerce.

Participants (16)

Invite and remind

Participants (16)

CR083  
Host, me

Ratna Prasad Paladagu  
Presenter • Unverified

2200070018  
Unverified

2520 ME Dr.K.V.Durga Rajesh  
kluniversity.in

Ayush  
Unverified

Bharath Bharath  
gmail.com

DIWAKAR  
Unverified

Dr K V Narasimha Rao  
Unverified

Dr. G.Yedukondalu  
Unverified

Mute all Unmute all

Unmute

Start video

ENG IN

14:43 28-02-2025



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The screenshot shows a Zoom meeting in progress. The main window displays a presentation slide titled "Successful Case Studies". The slide content includes:

- The Orion System From UPS**  
One of the most prominent package delivery firms in the world, UPS, used the Orion system for on-road integrated optimization and navigation. Orion optimizes UPS drivers' delivery routes using AI and machine learning. UPS has significantly cut fuel consumption and greenhouse gas emissions by lowering idle time, unwanted left turns, and distance. Additionally, the method improves customer service by offering more precise delivery windows.
- TradeLens From Maersk**  
Global container shipping business Maersk and IBM worked together to develop TradeLens, a blockchain-based platform for international commerce. TradeLens offers complete supply chain visibility, which decreases paperwork, boosts transparency, and guards against fraud. The platform has been used by several shipping lines and logistical firms, improving the effectiveness of global commerce.

The right sidebar shows a list of 16 participants, including Dr. K V Narasimha Rao, Dr. G.Yedukondalu, hareeswar, Karimulla Syed, pratap, PVC, Ratna Prasad Paladagu, S.Ramesh kumar, and sanjay krishna. The bottom toolbar shows controls for Unmute, Start video, and other meeting functions.

The screenshot shows a Zoom meeting in progress. The main window displays a video feed of a speaker, a man with a beard wearing a grey jacket. The top toolbar shows controls for Unmute, Start video, and other meeting functions. The right sidebar shows a list of participants, including CR083, S.Ramesh kumar, sanjay krishna, Dr K V Narasimha Rao, 2200070018, and DIWAKAR. The bottom toolbar shows controls for Unmute, Start video, and other meeting functions.

Few students asked questions and interacted with speaker and then Dr. K. V. Durga Rajesh delivered Vote of Thanks to the speaker.

Prepared by  
(Dr. A.V.S Ram Prasad)

Approved by  
(Dr. T. Vijaya Kumar)