

Team 2J

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Nexus Logistics Solutions(NLS): Program Insights



ANALYTICS

Overview



Goals

Our goal is to gather **insights** on employee engagement in specialized training programs **region** wise, **course** wise and find **trends** or patterns which can help improve this program approach. These combined goals are designed to foster a culture of continuous learning and development, positioning the company for long-term success.

Metrics

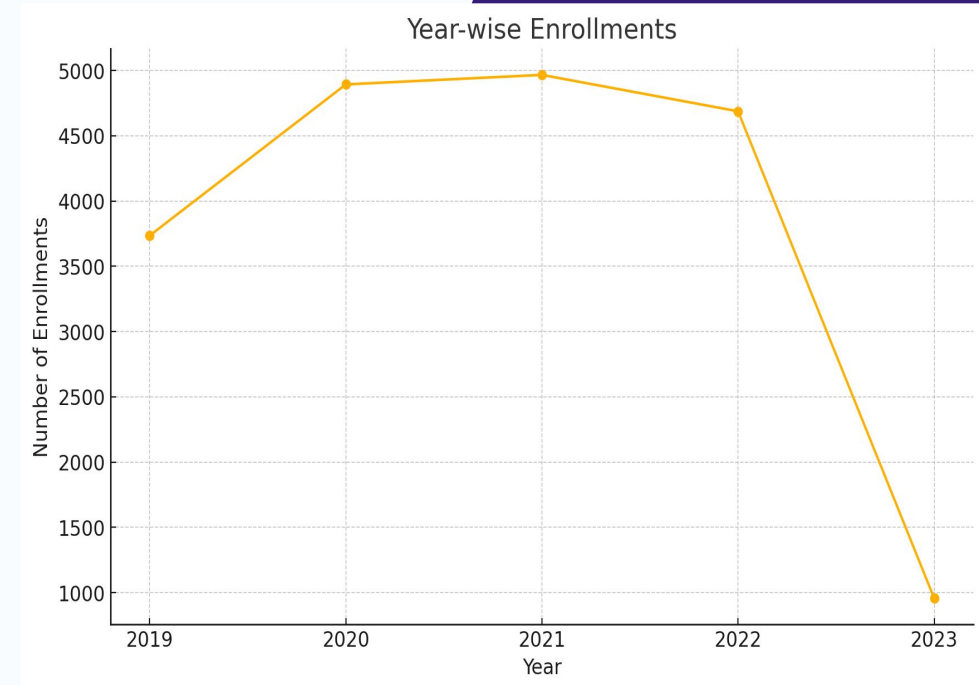
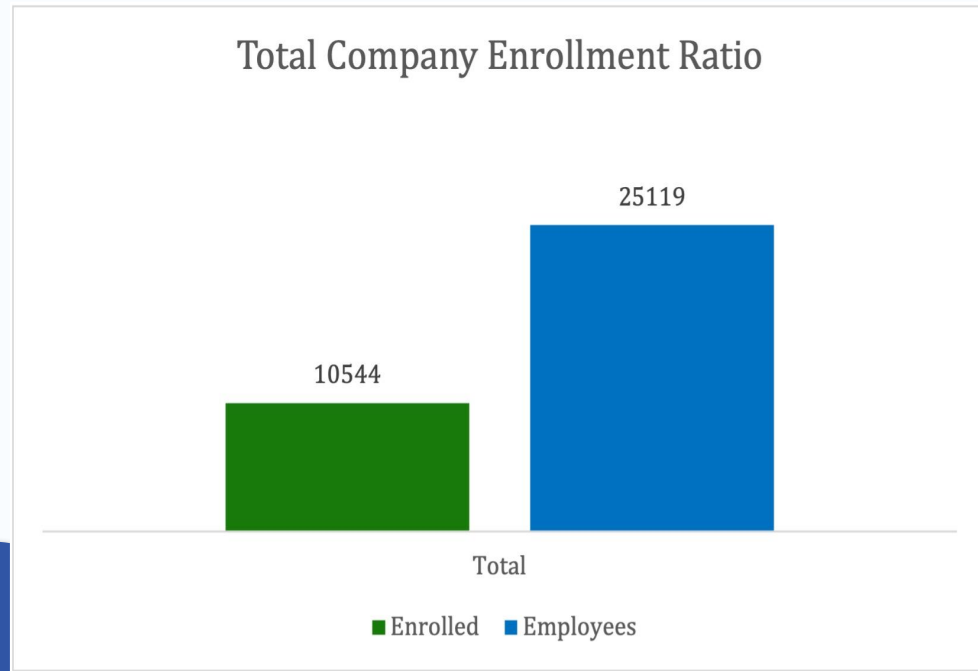
- **Training Enrollment Rate:** Measure the percentage of employees enrolling in at least one training course annually and track progress by department and region to assess gaps in participation.
- **Completion Rates for Key Courses:** Focus on completion rates for high-priority courses, such as Logistics Software Essentials and Intro to NERP, to ensure employees are not only enrolling but also completing essential courses.
- **Proficiency and Application Improvement:** Use post-training assessments to measure improvements in skill proficiency and application scores, as seen in the 29% improvement in proficiency and 32% improvement in application of concepts.
- **Regional Training Engagement:** Track participation rates by location (e.g., Shanghai, Shenzhen, San Francisco) to evaluate whether specific regions are meeting participation goals and assess targeted improvements.
- **Virtual vs. Offline Course Participation:** Compare the percentage of employees engaging in virtual versus offline courses to monitor shifts in preference and inform future offerings.

Recommendations

Through our data analysis and visualizations, we've identified key trends and patterns in course enrollment and employee performance. Based on these insights, we are proposing targeted measures to enhance the current training programs and improve engagement, ensuring greater participation and long-term success.

1.Enrollment Analysis

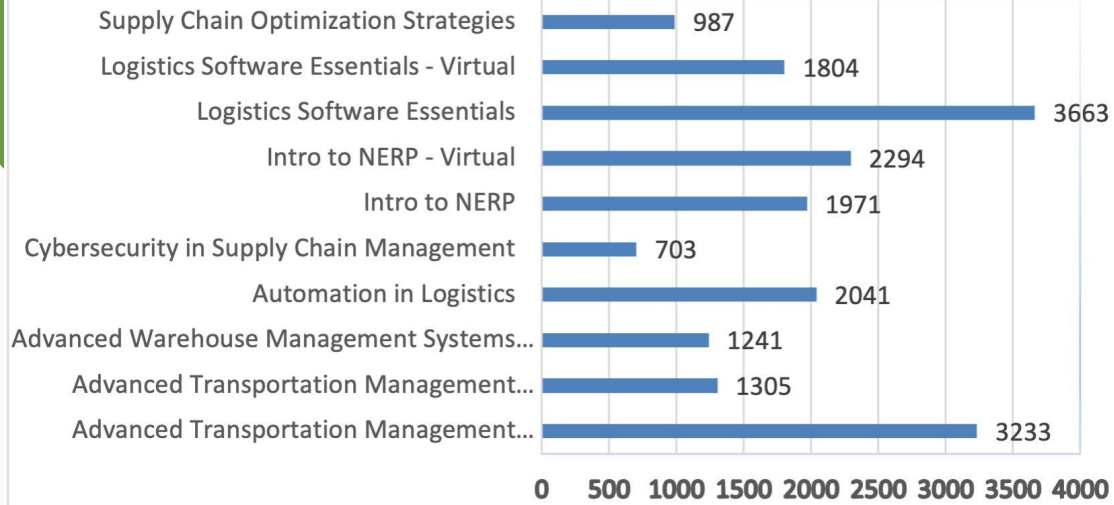
Over the past five years, **more than 58% of employees have not** participated in any training courses. This significant underutilization underscores the need for the company to enhance its efforts in promoting and incentivizing employee engagement in development programs.



The highest enrollment occurred in 2021, with 4,967 participants, reflecting strong engagement that remained consistent between 2019 and 2022. However, there was a sharp decline in 2023, with enrollments dropping to 957. This decrease may be attributed to **changes in company priorities, reduced promotional efforts, or external factors such as shifts in the workforce**. Moving forward, it's crucial to investigate the underlying reasons for this drop and explore targeted strategies to reengage employees and sustain participation.

2. Coursewise Enrollment

Enrollment Variations Coursework Wise

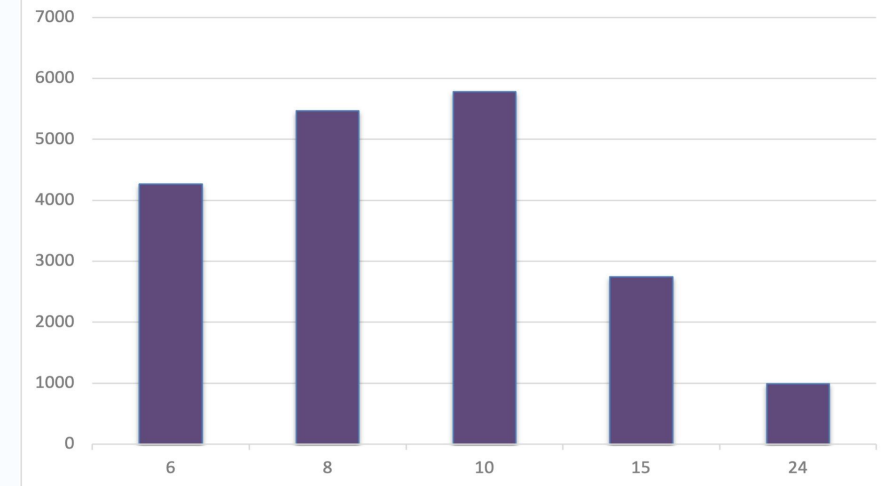


The course-wise enrollment bar chart highlights the dispersion of registrations, with **Logistics-oriented courses showing the highest** enrollments, while **Supply Chain courses have the fewest**. This disparity could be attributed to several factors, such as the perceived relevance of the course to employees' roles, the delivery format (in-person vs. online), or the availability of similar training resources elsewhere. Understanding these underlying reasons can help the company tailor its course offerings, improve accessibility, and better align training programs with employee needs and career growth opportunities.

We analyzed course enrollment in relation to course duration and observed that courses with the longest durations tend to have the lowest participation rates.

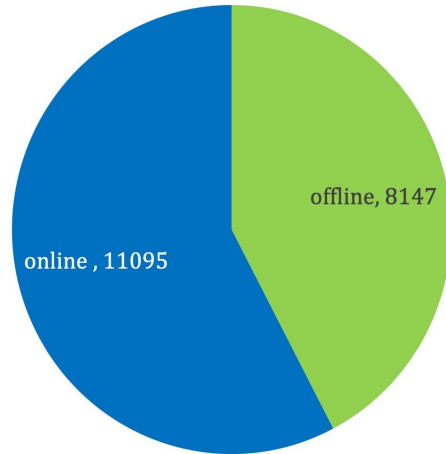
For instance, **SC-Cybersecurity** (15 hours) and **SC-Optimal Strategies** (24 hours) had particularly low enrollments. This suggests that **time constraints** play a significant role in employee engagement with training programs. **Reducing course durations** or offering more flexible learning formats may help alleviate this issue and potentially increase enrollment.

Enrollment in relation to Hours



3. Virtual Learning as a Major Platform & Leadership

Enrollment Mode : virtual vs offline



- **Comparison of Virtual vs Offline Courses:**

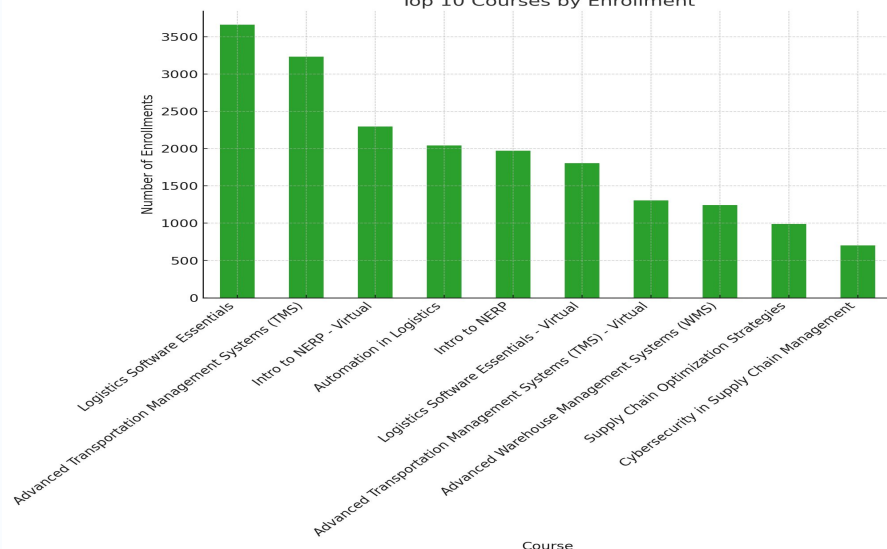
The chart shows that while offline courses have more enrollments, virtual courses still account for a significant portion. This indicates that, although in-person training remains popular, the **flexibility of virtual learning** has attracted a large number of participants, especially employees from various global locations who can access standardized training without time and location constraints.

- **Top 10 Courses by Enrollment:**

In the top 10 courses, virtual courses like **Logistics Software Essentials - Virtual** and **Intro to NERP - Virtual** hold prominent positions, showing that these technology-focused virtual courses are widely embraced by employees. This further supports the idea that virtual learning provides flexible and efficient opportunities for employees, particularly in logistics and technology systems training.

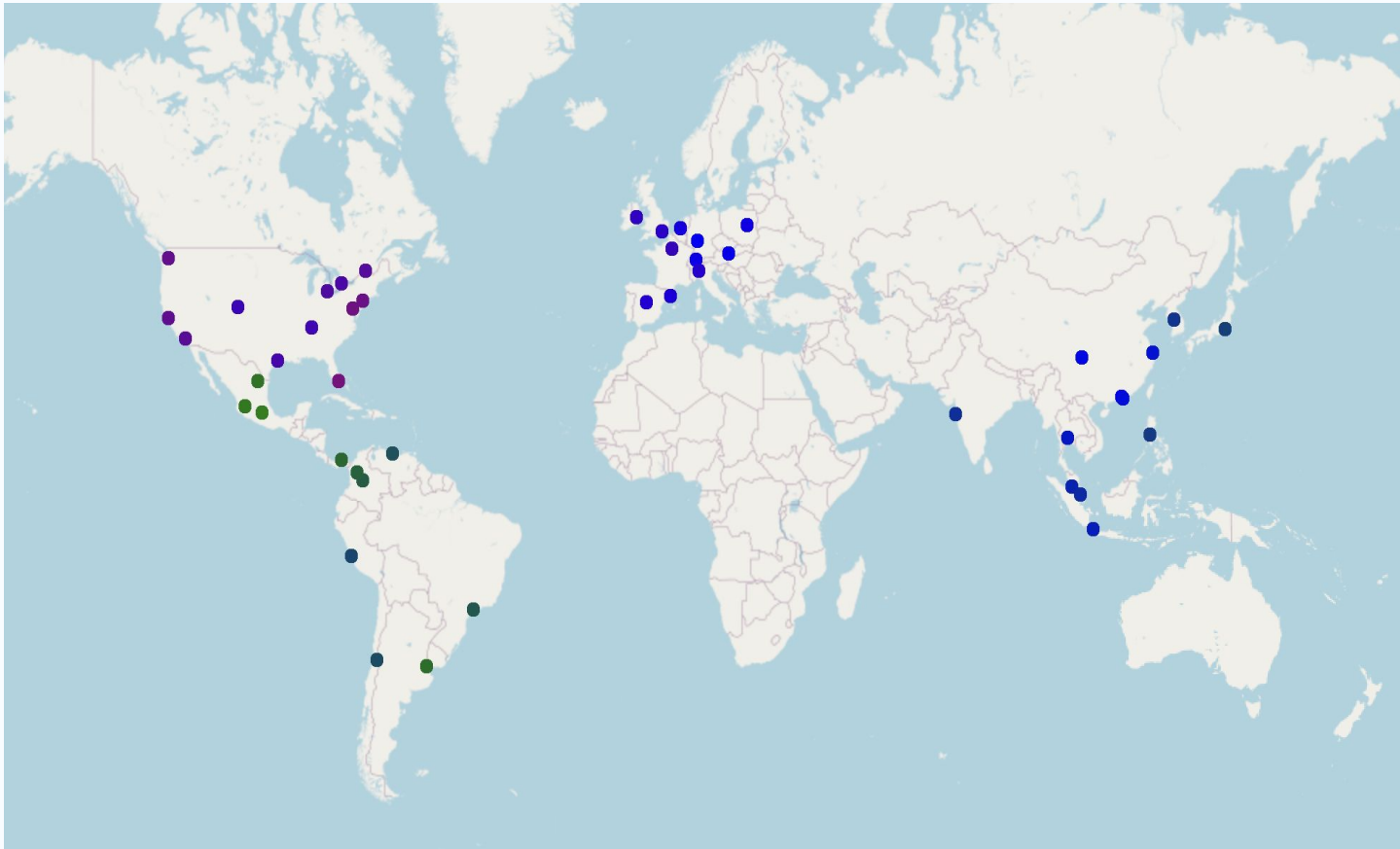
These two charts demonstrate the critical role virtual learning plays in boosting training participation, not only by increasing global employee engagement but also by supporting leadership development and succession planning for the company.

Top 10 Courses by Enrollment



4. Enrollment Trends by Location

Top 5 Enrollment Numbers by Location	
Shenzhen Local	688
Shanghai Local	685
Panama City Local	670
Hong Kong Local	668
San Francisco Local	643



Shenzhen and Shanghai have the highest enrollment numbers, indicating strong engagement in these regions. Locations in Asia, such as Hong Kong, also show high participation, suggesting a focus on skill development in this area. Panama City and San Francisco are notable for their engagement as well, highlighting the importance of training across both Asia and the Americas. These findings suggest that training initiatives are more successful in certain global offices, indicating potential opportunities to replicate these successful strategies in regions with lower participation.

5. Global Patterns in Training at Nexus Logistics

The **popularity of the virtual versions** of these courses (e.g., Logistics Software Essentials - Virtual) offers flexibility with employees from multiple locations, especially in Bangkok, Madrid, and Sao Paulo, participating in these virtual programs.

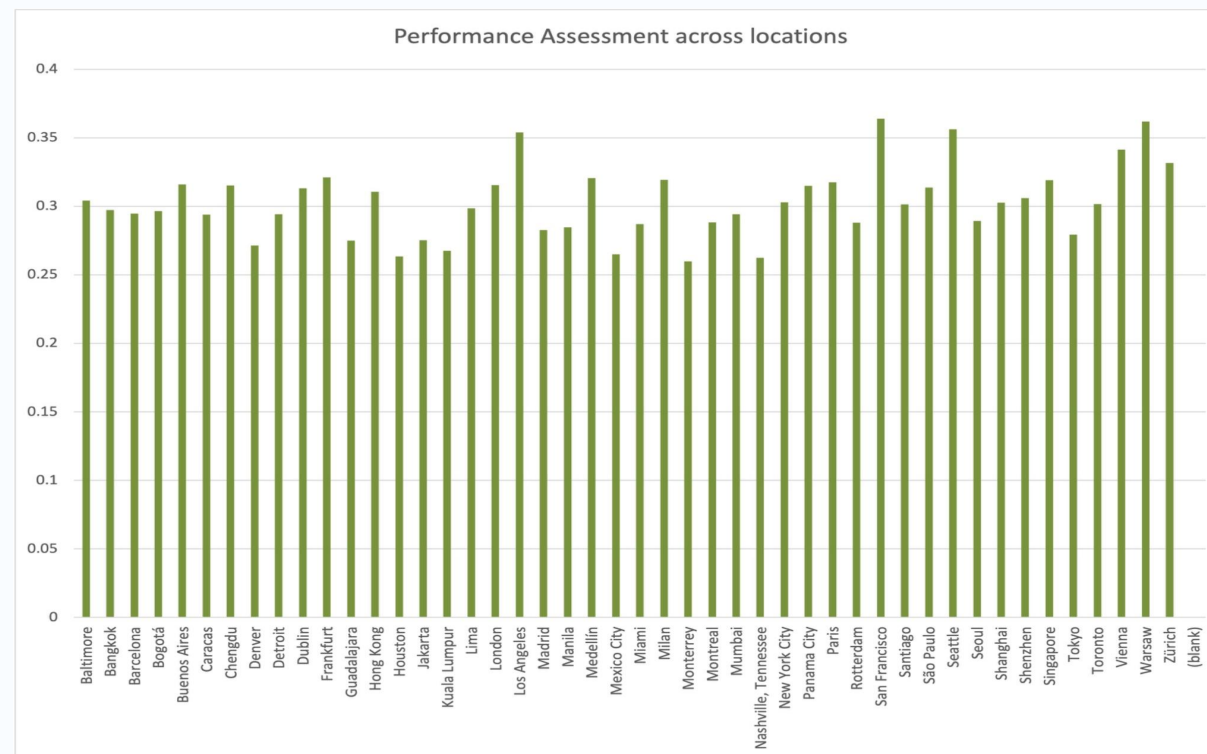
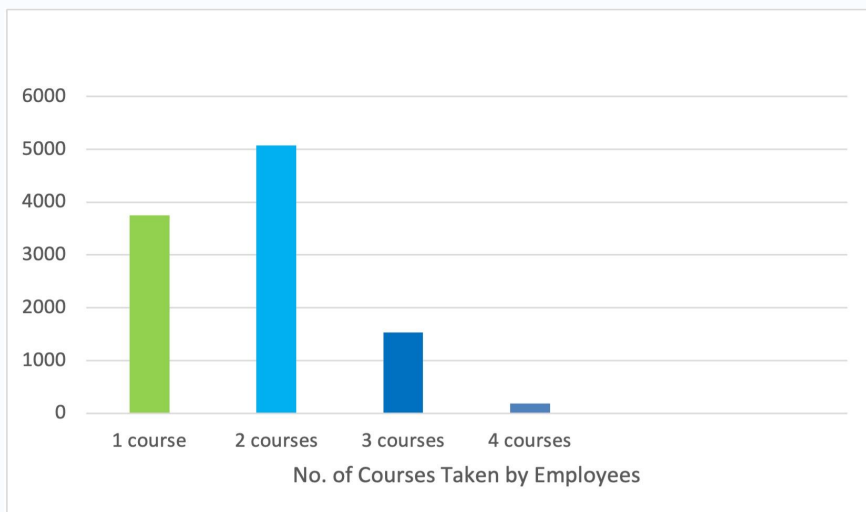
Offices in **North America** (New York, Los Angeles) and **Asia** (Shanghai, Tokyo, Singapore) show high participation across range of courses, showing that these regions **prioritize skill development in logistics, technology, and supply chain management.**

Whereas, locations in **Latin America** (Buenos Aires, Sao Paulo, and Mexico City) and **Europe** (Paris, Zurich) focus more on technical skills than topics like **leadership or strategic management.**

- The most popular course across multiple years remains Logistics Software Essentials, which was the highest enrolled course in 2019, 2021, and 2022.
- In 2020, the Advanced Transportation Management Systems (TMS) course topped enrollments, showing a shift toward system optimization during that year.
- In 2023, Advanced Warehouse Management Systems (WMS) was the most popular, suggesting a growing focus on warehouse efficiency.

6. Improvement in Skill Proficiency

This graph illustrates the variation in input and output scores across different office locations. Notably, we can observe significant disparities between some offices, indicating potential differences in resource allocation, employee engagement, or training effectiveness. But one accretion is that **Post-training, employees exhibited notable improvements in both proficiency and application of skills.** On average, proficiency scores increased by **29%, rising** from a baseline of 0.43 to 0.72. Similarly, application scores saw a **32% boost**, improving from 0.36 to 0.68. These results clearly indicate that employees are not only grasping new concepts but are also effectively applying them in their daily tasks, contributing to enhanced job performance and greater operational efficiency.



Consistency in enrollment is essential, as maintaining employee participation over time is crucial for ongoing development. While re-enrollment in other courses is occurring, there is a noticeable gap: despite re-enrollment, the total number of enrollments is declining. This indicates a challenge in attracting new participants and sustaining overall engagement

Key Findings and Recommendations

58%

Of employees did not opt for training

The enrollment numbers for courses point to the importance of offering flexible, online learning options. This trend aligns with the broader shift towards remote and self-paced learning, which accommodates the varying schedules and locations of employees.



- Expand Virtual Offerings
- Provide variety of courses
- Utilize learnings in different projects

62%

employees enrolled in mainly logistics related courses

The significant enrollments in courses focused on logistics software, warehouse management, and transportation management indicate a clear organizational push toward enhancing technological proficiency.



- New courses can be customized by offering tailored programs
- More feedback can be recorded

27%

of employees have enrolled in more than one course

This shows that more than a quarter almost is engaged in professional training and continual learning.



More project oriented courses can be developed
Courses can be refreshed every semester to observe learning patterns

Targeted Engagement for Specialized Courses: The significant enrollments in courses focused on logistics software, warehouse management, and transportation management indicate a clear push towards improving technological proficiency. Employees are being trained to work with advanced systems that help streamline operations and boost efficiency. To increase enrollment in courses like Supply Chain Optimization Strategies and Cybersecurity in Supply Chain Management, Nexus can **identify offices** where these skills are less prevalent and **promote** specialization in these areas.

Expand Virtual Offerings: The enrollment numbers for virtual courses show the importance of offering flexible, online learning. This trend aligns with the broader shift towards remote and self-paced learning, which accommodates varying schedules and geographic locations of employees. The popularity of these courses across locations show that employees appreciate flexible e-learning. Nexus can expand virtual courses portfolio, particularly for advanced topics, to accommodate employees in locations with lower in-person training participation.

Regional Training Customization: Offices with lower enrollment numbers in specialized courses may benefit from tailored training programs that align with their local operational needs. By providing region-specific courses or promotional efforts, Nexus can ensure that all employees have access to relevant learning opportunities that impact their roles.

Appendix

- **Data Analysis tools** - Python, Excel - pivot tables, graphs , worldmap
- **Data Visualisation** - Tableau, Python , Excel Powerpoint
- Use of **Generative AI** as a supporting tool