



## SHORT-TERMINTERNSHIP



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## Acknowledgements

The Power BI presentation on topic "Empowering Inventory Management" involves optimizing how you track, store, and handle your inventory to improve efficiency, reduce costs, and enhance decision-making. Key strategies include: Implementing Inventory management software: use tools that provide real-time tracking, automate reorder processes, and offer analytics for better forecasting. Adopting best practices for stock control: apply methods like Just-in-Time (JIT) or Economic order quantity (EOQ) to maintain optimal stock levels. We thank our investors for their expertise in funding and growth, which informed our predictive model. We thank our partners for providing data related to investments and contributions to data analysis and visualization and insights. We acknowledge our team members for their organization and support necessary to complete this project. We acknowledge our review in succeeding this Power BI presentation. We acknowledge our peers who contributed to this project. Finally, we thank our team members for their hard work and dedication to this project.

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## CHAPTER 1: EXECUTIVE SUMMARY

Description of the sector of business and intern organization: smart bridge operate in the data analytics sector, providing innovative solutions to enhance the business intelligence. The organization uses ages, Power BI to empower clients with actionable insights, enabling data-driven decision making.

### - Making

Learning objectives and outcomes:

- Data cleaning
- Data pre-processing and manipulation
- Statistical analysis

Summary of Internship Activities:

- Attending live training sessions and project-mentoring sessions.
- Selection of topic - "student performance analysis" and gathering, cleaning and analysing its related dataset in excel
- Team formation and assignment of tasks to team members
- Designing and developing dashboard and report.
- Drafting project video demonstration and preparation of final reports

## CHAPTER 2 : OVERVIEW OF THE ORGANIZATION

Smart Bridge is a platform that offers virtual Internship to the students. The platform's goal is to prepare students for the job market by establishing a cooperative relationship b/w industry and academia. Smart Bridge partners with companies such as Google to offer virtual internships. The internship provide students with hand-on experience with the latest technologies, and enable project based learning. Smart bridges flagship event is the Summer Internship program. The program develops students skills in emerging technologies i.e;

- Artificial Intelligence
- Machine Learning
- Internet of things

Organization objective: Smart Bridge main objective is to bridge the existing gaps b/w prevailing industry standards and what the academics offers to the graduates which passing suitable skill development. Smart Bridge offers development and training to the young talent before on boarding their first job. Their skills demand skills in the industries. The programs are designed considering the present in the line to offer best program that helps the student

Page No.

To give practical knowledge and hands on training to learn skills of the future. Therefore, the main objectives of Smart Bridges is providing internship for every student, promote industry approved professional electives, and becomes a talent factory of India by 2026.

## CHAPTER 3 : INTERNSHIP PART

Description of activities / responsibilities undertaken :

- Registering with APSCHE smart internz and enrolling for "smart bridges" data analytics course i.e., live training sessions as per the pre-scheduled training calendar.
- Participating weekly quiz and completing weekly assignments with respect to data analytics.
- Team formation and selection of project topic "Empowering Inventory management" using Power BI.
- Gathering, cleaning and analyzing the excel data sets of the project.
- Attending project- mentoring sessions and designing and developing interactive dashboard story, Report.
- web integration of above project deliverables with team's web pages using visual studio code, drafting a project video demonstration and preparation of final report.
- Submission of team project via uploading the project files in GitHub repository of the team.

## CHAPTER 6: OUTCOMES DESCRIPTION

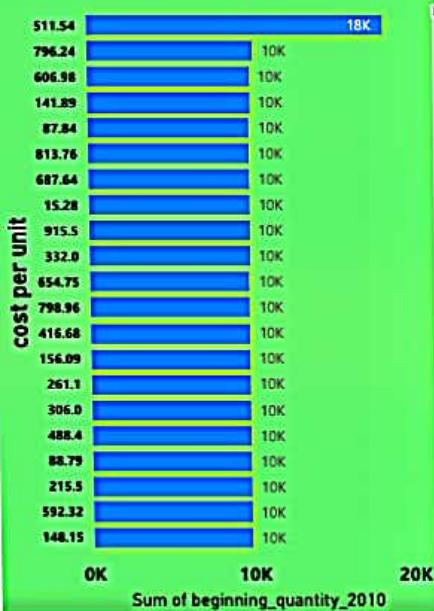
Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

I don't have personal experiences, but I can describe the work environments that people typically encounter. Many workplaces vary widely, from open-plan offices designed to encourage collaboration, to quiet, individuals workspaces ideal for focused tasks.

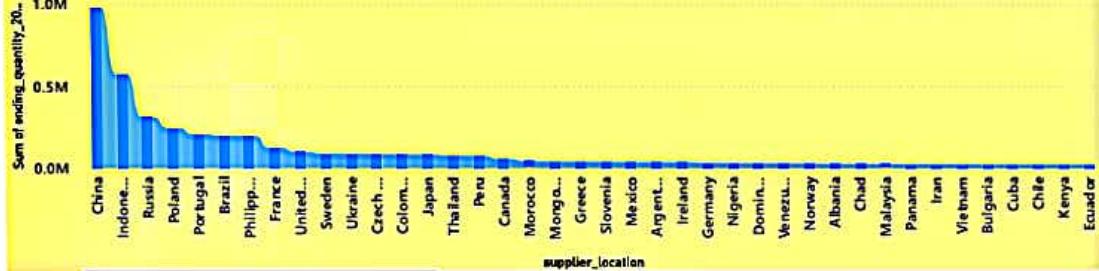
Some environments are dynamic and fast-paced, while others are more structured and predictable. Factors like company culture, team dynamics, and physical space all contribute to the overall work atmosphere.

## **EMPOWERING INVENTORY MANAGEMENT**

### **ANALYSIS OF BEGINNING QUANTITY IN 2021**



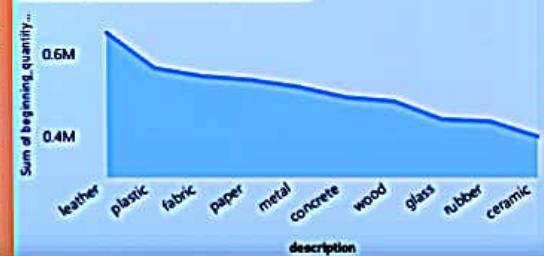
### **ANALYSIS OF ENDING QUANTITY IN 2011**



### **ANALYSIS OF ENDING QUANTITY 2010 TO 2021**



### **ANALYSIS OF BEGINNING QUANTITY IN 2010**



## **EMPOWERING INVENTORY MANAGEMENT ANALYSIS REPORT**

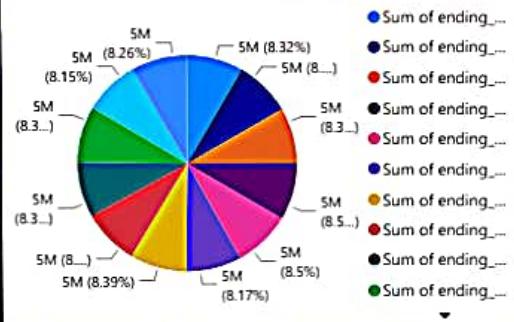
### **ANALYSIS OF ENDING QUANTITY IN 2011**



### **ANALYSIS OF ENDING QUANTITY OF 2020 TO 2021**



### **ANALYSIS OF ENDING QUANTITY 2010 TO 2021**



**MIN BEGINNING QUANTITY OF 2021**

**13**

**TOTAL SUPPLIERS**

**353**

**MAX BEGINNING QUANTITY OF 2010**

**9982**

THE COST OF RAW MATERIAL\_ID BETWEEN ONE DECADE 2010-2020 IS DRAMATICALLY INCREASED DUE TO SUPPLIERS COST, SUPPLY DEMAND DAILY WAGE LABOURS DUE TO THESE MAINTENANCE COST IS INCREASED BY THESE SUPPLIER\_LOCATION AND THESE DAILY USES ALSO INCREASES THE QUANTITY BETWEEN THESE YEARS.  
1) Develop an implementation plan for integrating advanced inventory

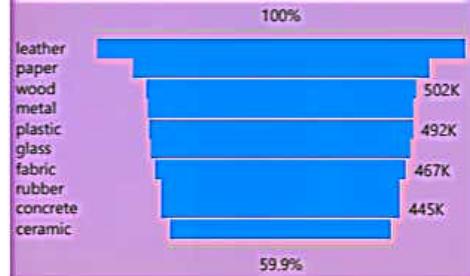
**INVENTORY MANAGEMENT** Effective inventory management is crucial for businesses seeking to optimize operations, reduce costs, and enhance customer satisfaction. Empowering inventory management involves leveraging advanced technologies, data-driven strategies, and best practices to streamline processes and improve decision-making.

- Automated Inventory Systems:** Using automated systems such as RFID and barcode scanning can significantly improve accuracy and efficiency. These technologies reduce manual entry errors and provide real-time data on inventory levels.

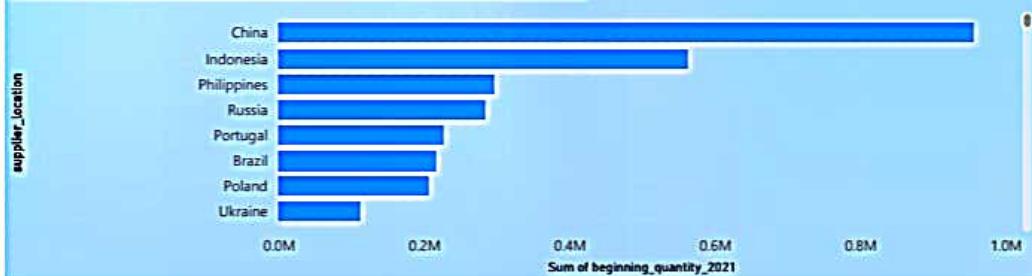
- Inventory Management Software:** Adopting sophisticated software solutions allows businesses to track inventory in real time, forecast

## EMPOWERING INVENTORY MANAGEMENT

**ANALYSIS OF ENDING QUANTITY IN 2012**



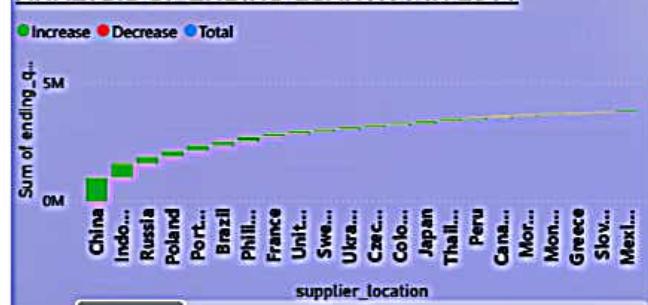
**ANALYSIS OF BEGINNING QUANTITY IN 2021**



**ANALYSIS OF ENDING QUANTITY IN 2019**



**ANALYSIS OF ENDING QUANTITY IN 2011**



## ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 03/07/24	Introduction of data Analysis	Analysis of the topic	
Day - 2 04/07/24	Agenda and understanding customers	clear view of business problem and solution	
Day - 3 05/07/24	Analysing and implementing data.	Putting the data in visual form	
Day - 4 05/07/24	data Analytics tools and technologies	learned about different tools and insights	
Day - 5 05/07/24	Data Analytics Applications	where it is used in different sectors	
Day - 6 06/07/24	Researched the additional information online	additional info - summation about DA.	

## WEEKLY REPORT

WEEK - 1 (From Dt 8-7-24 to Dt 13-7-24....)

Objective of the Activity Done:

What is data Analytics?

Detailed Report:

The process involved in data Analytics in the first learned about the definition, Agenda and steps to understand about data Analytics. Also discussed about the problems and solutions to Analyse the data and Analysed the data based on steps as:

- Comparing the data
- Putting the data in visual
- Breaking the data

also understood the concept of tools in data Analytics, which helps to store the data in efficient and secure manner

- SQL (structured query language)
- No SQL

DA technologies like

- data management
- data visualization
- predictive model

We also learned about where this data Analytics is used on applied in various industries like finance, retail, banking, Agriculture and companies like Uber use DA for growth.

## ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 08/07/24	Data analytics application	Learned about different tools and insight.	
Day - 2 09/07/24	Data analytics application	where it is used in different section	
Day - 3 10/07/24	Data analytics process and steps in DA.	Learned about data clearing and processing	
Day - 4 11/07/24	Data analytics process and steps in DA.	Learn about data clearing and processing	
Day - 5 12/07/24	Types of Analytics	different types in DA in clear way	
Day - 6 13/07/24	Revision on given topics	Revised about DA.	

## WEEKLY REPORT

WEEK - 2 (From Dt.15.-7.-24. to Dt.20.-7.-24.)

Objective of the Activity Done: Data Analytics process and structure in

Detailed Report: the second week learned about the different

process that is required in data Analytics, data cleaning and processing the data in a detailed manner and also the data type of DA into 4 categories like

- Descriptive Analytics
- Diagnostic Analytics
- Predictive Analytics
- Prescriptive Analytics.

Also learned about the challenges faced in the organization with the solutions. with Power BI in Action which gives visible insights and sales force forecasting also about the Architecture of the BI which tells us about the structure of the data Analytics mainly teaches about DWH that is data warehousing and data bases

- collect - integrate - store - Analyse
- distribute and react with ETL tools.

### ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 15/07/24	Business problems and the solutions (practice)	challenges faced in organization	
Day - 2 16/07/24	Business problems and the solutions (practice)	challenges faced in organization - on	
Day - 3 18/07/24	Power BI in action	visible insight sales for cost	
Day - 4 19/07/24	BI Architecture	Learned about structure	
Day - 5 19/07/24	BI Architecture	Learned about structure	
Day - 6 20/07/24	Revision on given topics	Revised about DA	

## WEEKLY REPORT

WEEK - 3 (From Dt 22.7.24. to Dt 27.7.24)

Objective of the Activity Done: Data insights and flow of Power BI

Detailed Report: In the third week Learned about the insights of data flow in Power BI which viewed the Model and data merge and tables in columns and source with joint kind

- Left outer (all from first, matching from second.)
- Right outer (from first to second.)
- Full outer (all rows from both.)
- Inner (only matching rows)
- Left Anti (rows only in first.)
- Right Anti (rows only in second.)

also learned about ETL tools in power query that is extract transform load (ETL). which help in extracting the data and transforming also learned about the data view and the model view for data modelling to generate report and insights. also learned about the overhead ordering in the process of Analysis in BI. researched about as an ETL tool.

## ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 22/07/24	data to insights flow in Power BI	Learned about data and model view	
Day - 2 23/07/24	tables and merges	Learned about the kinds in merge	
Day - 3 24/07/24	tables and merges.	Learned about the kinds in merge	
Day - 4 25/07/24	ETL tools in Power Query	Utilize Power BI data flows	
Day - 5 26/07/24	ETL tools in Power Query	Utilize Power BI data flows	
Day - 6 27/07/24	Researched the additional information online	additional information about BI	

## WEEKLY REPORT

WEEK - 4 (From Dt. 29/3/24.. to Dt. 3/4/24...)

Objective of the Activity Done:

Data Analytics expression (DAX)

Detailed Report: In the fourth week, I learned about the concept of DAX (Data Analysis expression) and filters in DAX.

Different dax functions:

- Aggregate function → is blank, is number, is text
- Text function → min, max, Average, sum...
- Date function → Lower, upper, Replace
- Logical function → Date, date, Add, date-diff,
- Counting function → and, or, not if
- Information function → count, distinct, count.

In the end of fourth week revised all the topics that were taught from the first day of the internship programme which helped me to attend the grand assessment test. After preparing for the assessment test we gave assessment test on all the topics we learned.

**ACTIVITY LOG FOR THE FIFTH WEEK**

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1 29/07/24	data source dash boards and insights.	Learned how these are used in BJ	
Day - 2 30/07/24	data collections and data cleaning	Learned about the process in DA	
Day - 3 31/07/24	data collection and data cleaning	Learned about the process in DA	
Day - 4 01/08/24	data Analytics expression (DAX).	Learned about the expression and functions	
Day - 5 02/08/24	data Analytics expressions.(DAX)	Learned about the expression and function	
Day - 6 03/08/24	discussion regarding Project	discussed about Project	

## WEEKLY REPORT

WEEK - 5 (From Dt 29/7/24 to Dt 02/8/24)

Objective of the Activity Done:

Power BI service and collaboration

Detailed Report:

The fifth week covered the Power BI service and its collaboration features. We learned how to publish reports to the Power BI service, share dashboards, and collaborate with team members in real-time. The sessions emphasized data security, row-level security (RLS) and managing workspaces. We also explored Power BI's integration with other Microsoft tools like Excel, Teams, and SharePoint, making it easier to collaborate and share insights across the organization.

### ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 05/08/24	Filter function in DAX.	different filters in DAX	
Day - 2 05/08/24	filter function in DAX	different filters in DAX	
Day - 3 06/08/24	Preparation for grand assessment test.	Preparation for assessment test.	
Day - 4 06/08/24	Preparation for grand assessment test.	Preparation for assessment test.	
Day - 5 07/08/24	grand assessment test.	given the grand assessment test.	
Day - 6 09/08/24	Researched the additional information online.	additional information about BJ.	

## WEEKLY REPORT

WEEK - 6 (From Dt..... to Dt.....)

Objective of the Activity Done: Data Analysis and visualization

Detailed Report:

The seventh week marked the beginning of the project phase. We started by defining the project scope, objectives, and deliverables. The project involved analyzing a dataset provided by Smart India, drawing and transforming the data, and building a data model. Our team focused on identifying key metrics, trends, and patterns that could drive business decisions. The initial reports and dashboards were created to visualize these insights using the skills and techniques learned over the past six weeks.

### ACTIVITY LOG FOR THE SEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 2/8/24	Formation of team	clear view on team	
Day - 2 3/8/24	Project scope and objectives	clear view on project assigned	
Day - 3 4/8/24	Aggregation of public datasets	segregation of data analysis	
Day - 4 5/8/24	Configured public dashboards	Reviewed self on dataset.	
Day - 5 6/8/24	Feedback on accessibility with published report.	clear view on outcome of report.	
Day - 6			

WEEKLY REPORT

WEEK-7 (From Dt...19.....08-24..... to Dt....24.....=08-24.....)

**Objective of the Activity Done:**

project work data analysis

**Detailed Report:**

visualization. The seventh week marked the beginning of the project phase. we started by defining the project scope, objective and deliverables.

The project involved analysing a dataset provided by smart analysing a dataset provided by smart Internz. cleaning and transforming the data, and building a data model.

our team focus focused on identifying key matrices, trends and patterns that could drive business decisions.

The initial reports and dashboards were created to visualize these insights using the skills and techniques learned over the past six weeks.

### ACTIVITY LOG FOR THE EIGHTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	presenting actionable insights	clarification on individual assignment	
Day - 2	presenting the dashboard and exports	representing the final output	
Day - 3	collaborations, file uploading	Allotting work to all members in team	
Day - 4	Reviewing on dashboard report	clarification on work done in OA	
Day - 5	Submission of Project	Submitted to mentors	
Day - 6			

**WEEKLY REPORT**

WEEK-8 (From Dt 26-08-24..... to Dt 31-08-24.....)

**Objective of the Activity Done:**

Finalization and presentation

**Detailed Report:**

In this final week, we completed the project by refining our report and dashboards, ensuring the meeting the project requirements. We focused on enhancing the visual appeal and usability of the dashboards by adding interactive elements and ensuring the data was accurately represented. The week culminated with a presentation to the smart interns form, where we showed our findings. Explained the methodologies used, and demonstrated how the insights could be applied to solve real business problems.

The project was well received, marking a successful conclusion to be the internship.

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

As an AI, I don't have personal experiences, but I can describe the types of real-time technical skills that are relevant to my function:

1. Natural Language Processing (NLP): I can understand and generate human language, interpret context, and provide coherent responses in real-time.
2. Machine Learning: I use machine learning algorithms to process and analyze vast amounts of text data, learning from patterns to improve responses.
3. Data Analysis: I can quickly sift through large volumes of text data to find relevant information and provide answers.
4. Contextual understanding: I can maintain context through my training data to provide accurate information or generate appropriate content.

5. Information Retrieval : I can efficiently search over a conversation, allowing for meaningful and relevant exchanges.

These skills enable me to interact effectively and provide useful response in real-time

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

I don't have leadership quo personal experience, but I can share some key managerial skills that are often valued:

1. Leadership : Inspiring and guiding a team towards achieving goals.
2. Communication : clearly conveying ideas and listening to others.
3. Decision-making : Analyzing situations and making informed choices.
4. Problem-solving : Identifying issues and implementing effective solutions.
5. Time Management : prioritizing tasks and managing time efficiently.
6. Conflict resolution : Addressing and resolving disputes effectively
7. Delegation : Assigning tasks appropriately to team members

strategic planning : setting long-term goals and creating actionable plans.

These skills help in managing teams and projects effectively.

Describe how you could improve your communication skills (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.,)

Improving communication skills involves several strategies:

1. Active listening : Focus fully on the speaker, understanding their message before responding. This shows respect and ensures you address their concerns accurately.
2. Clarity and conciseness : Be clear and to the point. Avoid jargon or overly complex language that might confuse your audience.
3. Body language : use appropriate gestures, maintain eye contact, and be mindful of your posture. Non-verbal cues can greatly impact how your message is received.
4. Empathy : understand and acknowledge the feelings and perspectives of others. This helps in building and responding more effectively.

5. Feedback : seek constructive feedback from others about your communication style and be open to making adjustments.
6. Practice : engage in regular practice, whether through conversations, public speaking, or writing. The more you practice, the more confident and skilled you'll become.
7. Adaptability : tailor your communication style to your audience, considering their preferences and needs.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

enhancing abilities in group discussions, team participation, and leadership involves developing a range of skills:

1. Active Listening: Focus on understanding others' view point and respond thoughtfully. Avoid interrupting and ask clarifying questions if needed.
2. Effective Communication: clearly articulate your ideas and provide constructive feedback, use appropriate language and ensure your message is understood.
3. Empathy and Respect: show empathy by acknowledging team members' feelings and perspectives, respect differing opinions and work towards a consensus.
4. Collaboration: contribute your skills and knowledge while valuing others' contributions. Be open to teamwork and share responsibilities.

5. problem solving: Address conflicts and challenges with a solution-oriented mindset. Encourage brainstorming and evaluate options collectively.
6. Organization: Keep discussion focused and on track. Help set clear objectives and deadlines to guide the team's efforts.
7. Delegation: As a leader, delegate tasks based on team member's strength and capabilities. Provide guidance and support to ensure tasks are completed effectively.
8. Feedback and improvement: seek feedback on your performance and actively work on areas of improvement. Encourage a culture of continuous learning within the team.

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

In the field of training and education, several technological advancements have significantly impacted how learning is delivered and experienced:

1. Artificial intelligence and machine learning: AI-driven platforms can now offer personalized learning experiences, adaptively adjusting content based on learner performance. Tools like chatbots and virtual tutors can provide real-time assistance and feedback.
2. Virtual and augmented reality: VR and AR technologies create immersive learning environments that simulate real-world scenarios, enhancing practical training in fields like medicine, engineering, and the arts.
3. Learning Management System (LMS): Modern LMS platforms, such as Moodle, Blackboard, and Canvas, have evolved to offer integrated tools for content delivery, assessments, and analytics, making it easier to track

## progress and tailor instruction

4. online and blended learning: The rise of MOOCs (massive open online courses) and platforms like Coursera and Udemy has expanded access to education, allowing learners to engage in self-paced and blended learning models that combine online and in-person elements.
5. Data Analytics and Learning Analytics: These technologies enable educators to analyze learner data to improve course design, predict student success, and identify areas needing intervention.
6. Mobile Learning (m-Learning): with the proliferation of smartphones and tablets, mobile learning applications provide flexible, on-the-go access to educational resources and training programs.  
These advancements collectively enhance the effectiveness of accessibility and personalization of training and education.