MS Excel Bootcamp

Effectiveness Evaluation Report

About Infocrita

Infocrita is a pioneering data solutions and consultancy company committed to empowering individuals and organizations through advanced data analysis, cutting-edge technology, and comprehensive research support. With expertise spanning over 400 analysis works across fields such as social sciences, management, computer science, and more, Infocrita has established itself as a trusted partner for academic, business, and training solutions. Our team is guided by subject matter experts, doctorate holders in statistics and data science, and skilled professionals dedicated to delivering insights and innovation.

Infocrita Centre for Training and Development

The Infocrita Centre for Training and Development focuses on enhancing the skills and knowledge of individuals and organizations. We specialize in delivering workshops, training sessions, and certifications in various technologies, including Python, R, Power BI, Excel, Tableau, SPSS, and machine learning. Our mission is to equip learners with practical skills that drive career advancement and organizational success. By creating a dynamic learning environment, we aim to bridge the gap between theoretical knowledge and practical application.

> *Upskill 2025 is Infocrita's flagship initiative designed to equip individuals and organizations with the skills needed to excel in the digital era. It promotes lifelong learning and focuses on mastering essential tools and technologies like Excel, Power BI, Python, and AI-driven solutions.*
>
> *Aligned with the demands of digital transformation, Upskill 2025 fosters a culture of growth, innovation, and readiness to tackle future challenges, empowering participants to stay competitive and thrive in a rapidly evolving world.*

Table of Content

Introduction

The **MS Excel Bootcamp**, conducted on the 11th and 12th of January 2025, was an intensive 10-hour live session designed to empower participants with advanced Excel skills. Led by **Mr. Roshan Ravi**, an Assistant Professor at Rajagiri College of Social Sciences, the bootcamp provided in-depth training on a wide range of Excel functionalities. Mr. Roshan, possessing extensive industry experience with renowned organizations like **Saint Gobain, Amazon India, and AVT Consumer Products**, brought a wealth of practical knowledge to the session. This comprehensive program aimed to enhance participants' proficiency in Excel, a crucial skillset in today's data-driven world.
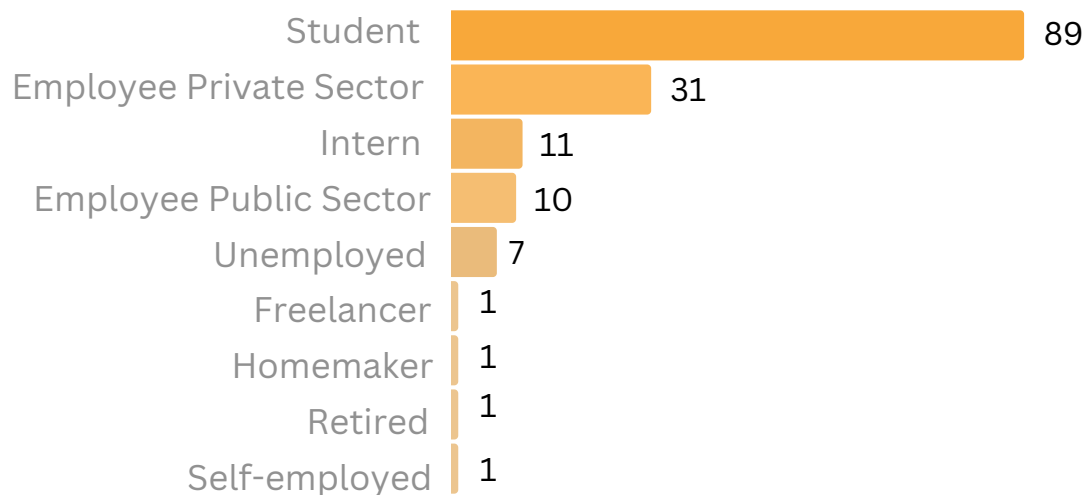
The MS Excel Bootcamp provided a comprehensive package of benefits including certificates, recorded sessions, and follow-up support as outlined in the brochure. Participants also received valuable Excel templates to streamline their work processes. Despite offering this comprehensive package, the bootcamp was made accessible to a wide audience with an affordable fee of ₹189. This attractive pricing, combined with the program's high-quality instruction and valuable resources, contributed to its significant popularity, attracting a diverse group of **152 participants** from various professional and geographical backgrounds.

Regional Participation Analysis

152
Participants

59
Bihar

18
Karnataka

61
Kerala

6
Tamilnadu
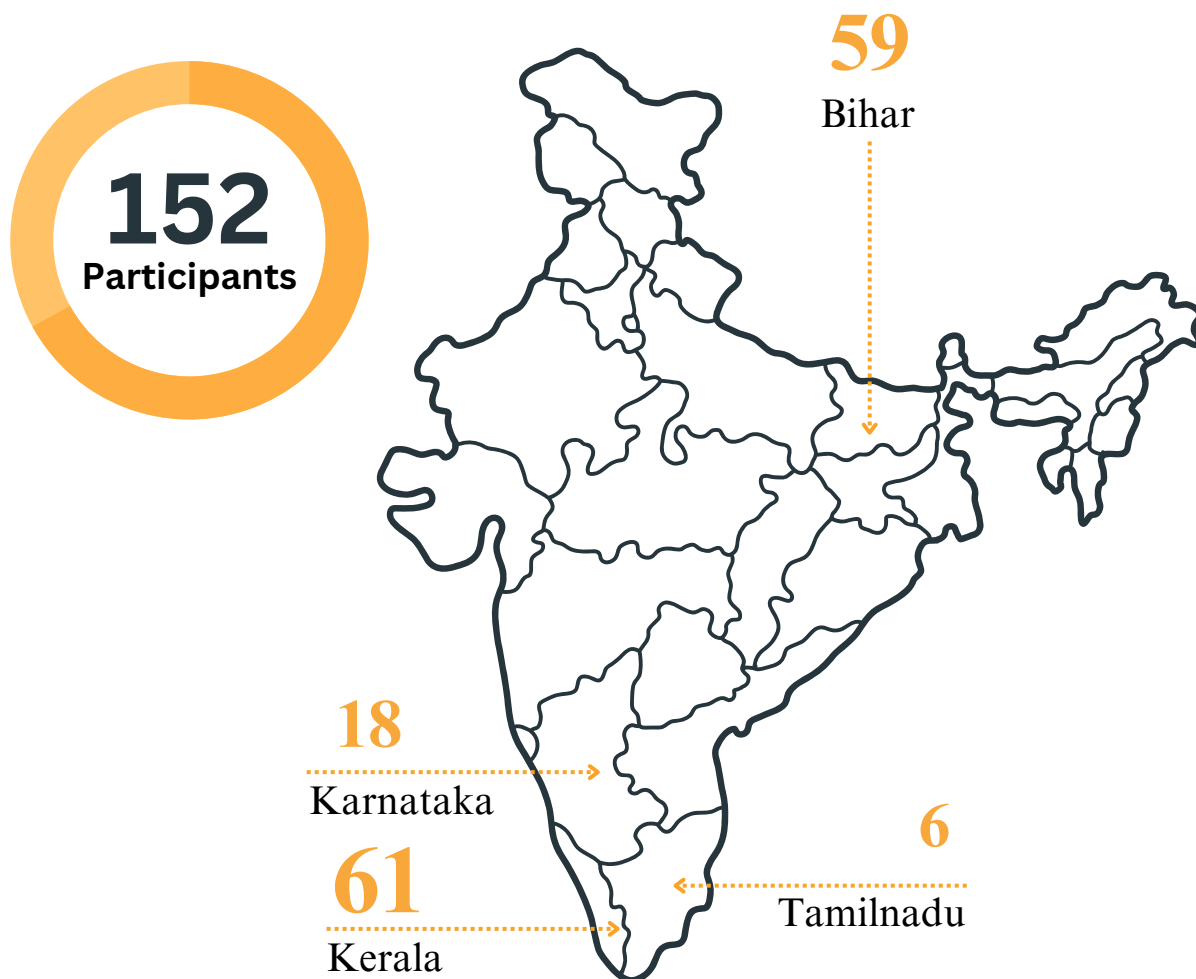
Kerala (61) and Bihar (59) stand out with the highest participation, showcasing strong engagement in the program and forming the core of the dataset with the highest levels of interest. While South India, particularly Kerala, demonstrates significant involvement, other southern states like Karnataka (18) and Tamil Nadu (6) show moderate representation. In North India, Bihar emerges as a notable exception with strong participation, contrasting with minimal contributions from other northern and central states like **Punjab, Delhi, Haryana, Madhya Pradesh, Maharashtra, Uttar Pradesh, and West Bengal**, which each contributed only one participant, highlighting a stark regional disparity.

Participant Profile and Professional Diversity

Category	Value
Student	89
Employee Private Sector	31
Intern	11
Employee Public Sector	10
Unemployed	7
Freelancer	1
Homemaker	1
Retired	1
Self-employed	1

Student Dominance

The barchart reveals a significant dominance of **students** with **89** among participants, followed by **working professionals (31)**, indicating strong academic interest in the program.

Professional Diversity

Other professions include **private-sector employees (31), interns (11), public-sector employees (10)**, and smaller numbers of freelancers, homemakers, retirees, and self-employed individuals.

Youth Appeal

This highlights that the program resonates strongly with **younger audiences, particularly students and early-career working professionals,** emphasizing academic and developmental opportunities.

Age Demographics at a Glance

45+
3.3%

35 - 44
11.2%
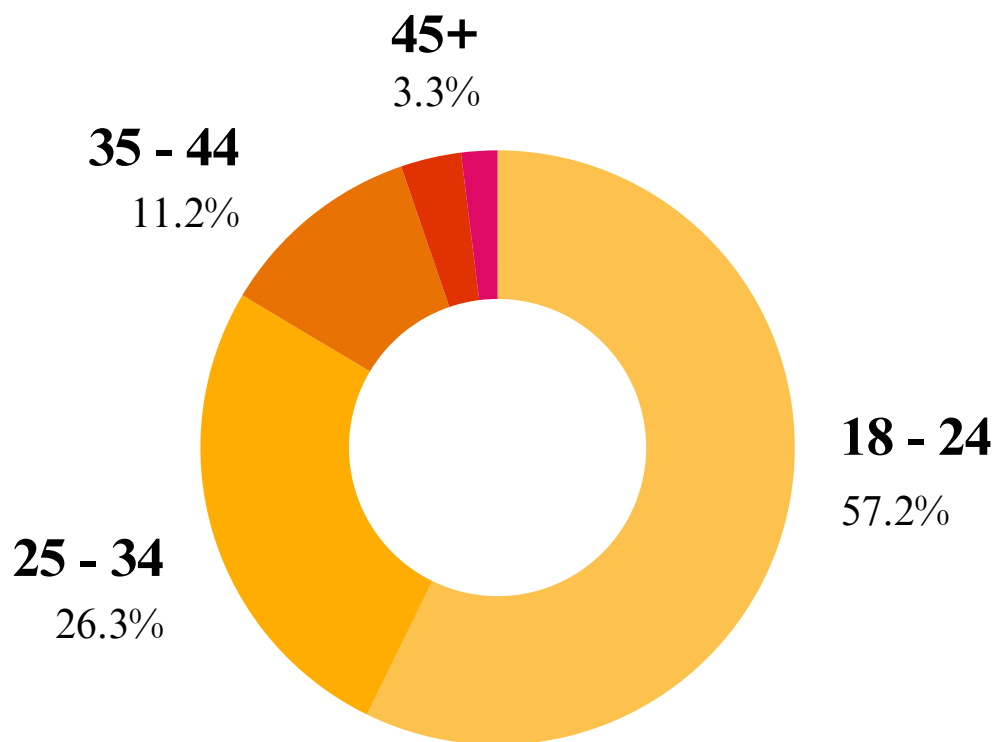
18 - 24
57.2%

25 - 34
26.3%

The majority of participants (57.24%) fall in the 18–24 age group, reflecting a focus on younger, early-career individuals.

Other notable age groups include 25–34 years (26.32%) and 35–44 years (11.18%).

A smaller percentage (3.29%) is above 45 years, and a negligible proportion is under 18.

Core Domains of Excel Bootcamp

Excel Functions and Formulas

This domain evaluates participants' confidence in foundational and advanced Excel features. Mastering data entry, basic formulas like SUM and COUNT, and advanced functions such as IF and VLOOKUP enhances efficiency. Understanding relative and absolute cell references is vital for accurate formula adjustments and efficient spreadsheet management.
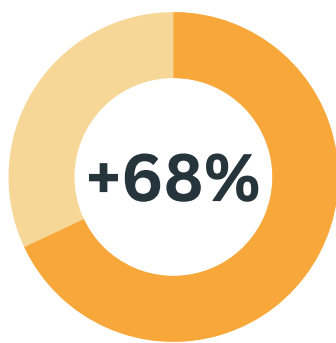
Data Management

Data management ensures effective handling of large datasets. Skills such as applying data validation prevent errors, while defining named ranges improves clarity. Confidence in organizing datasets helps streamline analysis and accessibility. Mastery in these areas ensures participants can manage complex data efficiently and produce reliable, structured outputs.

Data Visualization

Data visualization simplifies raw data into comprehensible insights. This domain covers confidence in creating charts like bar or pie graphs and familiarity with dashboards. Proficiency in visualization tools supports better decision-making. Evaluating frequency of usage helps assess participants' exposure to presenting meaningful insights using Excel's visualization capabilities.

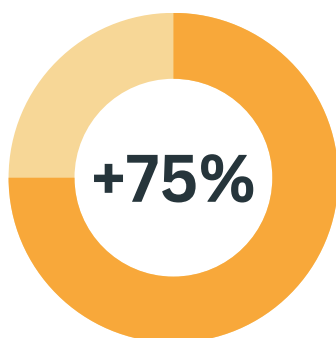# Training Effectiveness Analysis: Measuring Impact and Growth

"Participants demonstrated remarkable improvements in Excel proficiency, showcasing the program's success in enhancing confidence and skills in essential tasks."

+68% — **Handling Excel Functions and Formulas**
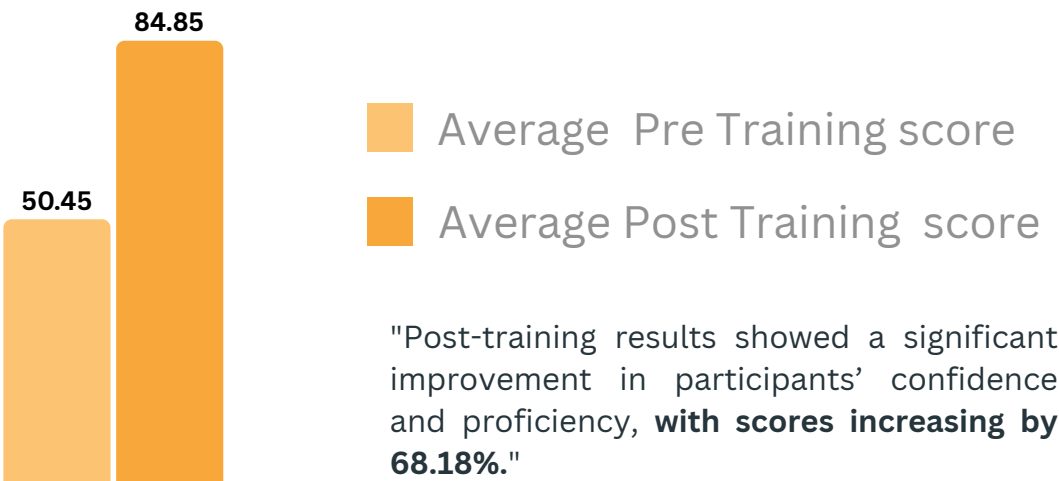
+95% — **Data Management**

+75% — **Data Visualization**

Handling Excel Functions and Formulas

In this domain, we analyzed participants' pre-training and post-training scores to measure their improvement in applying formulas, managing references, and ensuring data accuracy. The results showed a significant boost in proficiency, reflecting the program's success in building confidence and essential Excel skills.

84.85

50.45

- Average Pre Training score
- Average Post Training score

"Post-training results showed a significant improvement in participants' confidence and proficiency, **with scores increasing by 68.18%.**"

Analysis

Participants' pre- and post-training scores were statistically analyzed using a paired t-test to measure improvement in skills.

Key Results:

Mean Improvement: 6.88
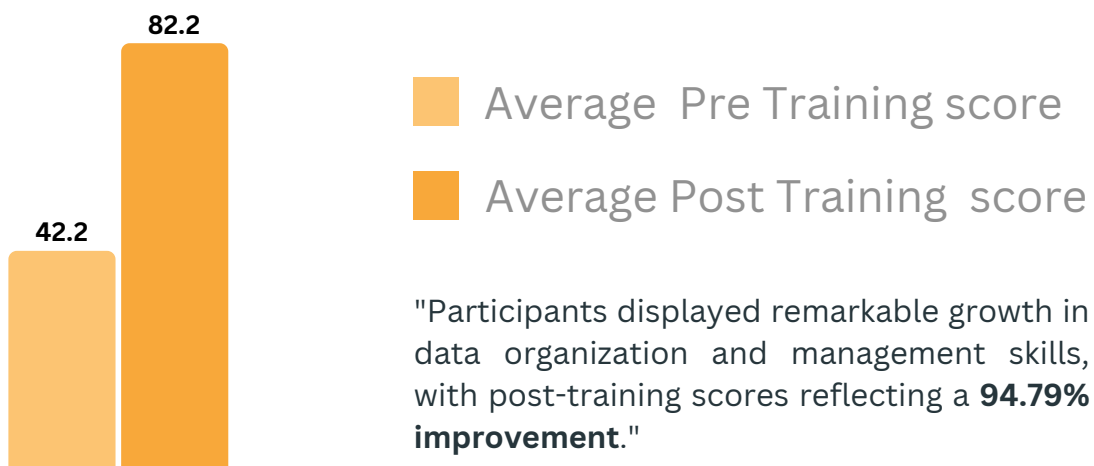p-value: < 0.001 (indicating statistically significant improvement).

Confidence Boost: A significant improvement in participants' confidence using Excel formulas.

Proficiency in Advanced Skills: Growth in understanding complex functions (e.g., IF, VLOOKUP) and cell referencing.

Statistically Significant Growth: The paired t-test confirms that the improvement is reliable and impactful.

Confidence in Data Management

In this domain, we analyzed participants' pre-training and post-training scores to measure their improvement in organizing datasets, applying data validation techniques, and defining named ranges. The results demonstrated a significant boost in confidence and proficiency, showcasing the program's effectiveness in enhancing essential data management skills.

82.2

42.2

Average Pre Training score

Average Post Training score

"Participants displayed remarkable growth in data organization and management skills, with post-training scores reflecting a **94.79% improvement**."

Analysis

Participants' ability to organize, validate, and manage large datasets was evaluated through pre- and post-training scores using a paired t-test.

Key Results:

Mean Improvement: 6.00
p-value: < 0.001 (indicating statistically significant improvement).

Improved Data Management: Significant growth in organizing large datasets for better handling and analysis.

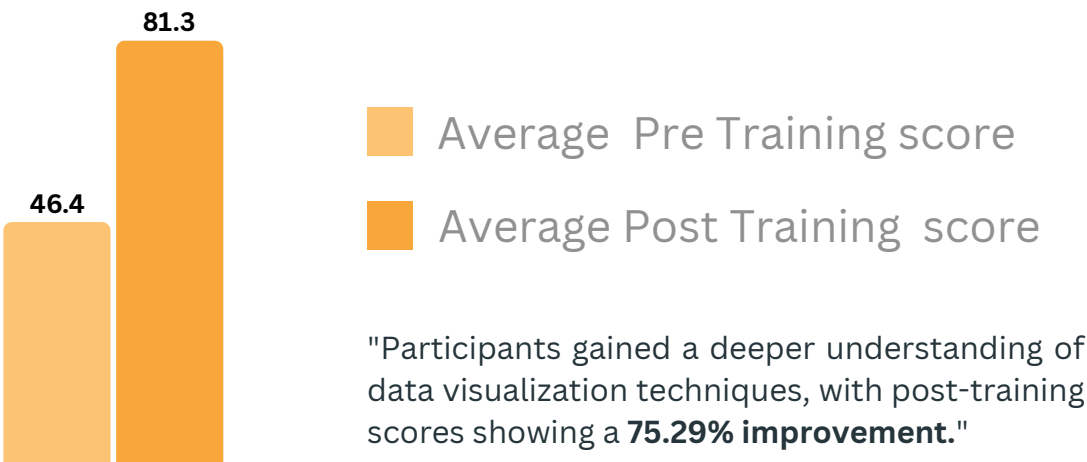**Proficiency in Data Validation:** Participants gained confidence in applying data validation techniques to ensure accuracy.

Statistically Significant Growth: Paired t-test results confirm reliable and impactful improvement in skills.

Knowledge in Data Visualization

In this domain, we analyzed participants' pre-training and post-training scores to evaluate their growth in creating charts, dashboards, and data summaries. The results showed a significant increase in their knowledge and proficiency, demonstrating the program's success in building essential data visualization skills.

81.3

46.4

■ Average Pre Training score

■ Average Post Training score

"Participants gained a deeper understanding of data visualization techniques, with post-training scores showing a **75.29% improvement.**"

Analysis

Participants' ability to create compelling charts, dashboards, and data summaries was assessed through pre- and post-training scores using a paired t-test.

Key Results:

Mean Improvement: +5.25 points.
p-value: < 0.001 (indicating statistically significant improvement).

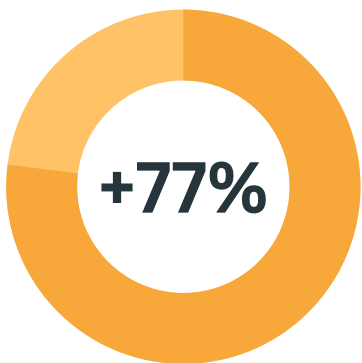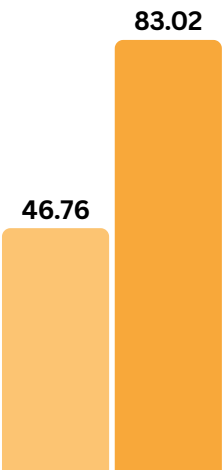**Enhanced Chart Creation:** Significant growth in creating bar, pie, and line charts for data visualization.

Dashboard Knowledge: Improved understanding of building summarized views for actionable insights.

Statistically Significant Growth: Paired t-test results confirm reliable and impactful improvement in visualization skills.

Overall Effectiveness

To assess the overall effectiveness of the training program, we analyzed cumulative pre- and post-training scores across all domains. The results revealed a significant improvement, with participants demonstrating enhanced proficiency and confidence in Excel skills. The analysis confirmed the program's success in fostering growth and readiness for professional applications.

■ Average Pre Training score
■ Average Post Training score

83.02
46.76

"The training program resulted in a remarkable overall improvement, with participants achieving a **77.54% increase** in their proficiency across all key areas of excel."

Analysis

The cumulative pre- and post-training scores for all domains were analyzed to measure the overall effectiveness of the program.

Key Results:

Mean Improvement: +5.25 points.
p-value: < 0.001 (indicating statistically significant improvement).

+77%

Increased Overall Effectiveness

Paired t-test results confirm the reliability and impact of the training program.

Comprehensive Skill Development: Participants showed improvement across all domains, including Excel Functions, Data Management, and Data Visualization.

Confidence and Proficiency: A significant boost in confidence and technical skills was observed, enabling participants to apply learning in professional settings.

Conclusion

The analysis of the MS Excel Bootcamp highlights significant improvements in participants' skills and confidence across all domains, showcasing the program's ability to address key learning gaps effectively. Each domain revealed unique insights into the participants' growth:

- In Excel Functions and Formulas, participants demonstrated a notable enhancement in applying advanced formulas and managing references, laying a strong foundation for professional data handling.
- In Data Management, the training effectively boosted participants' ability to organize and validate datasets, showcasing their readiness for more structured and efficient workflows.
- For Data Visualization, participants gained critical knowledge in creating impactful charts and dashboards, enabling them to turn raw data into actionable insights.

The **overall improvement of 77.54%** reflects the comprehensive nature of the program, not just in imparting technical knowledge but also in building confidence and proficiency, essential for real-world applications. The paired t-test results validated the reliability of these findings, reinforcing the program's success in delivering measurable impact.

Looking ahead, Infocrita is excited to continue this momentum with the upcoming Advanced Excel Bootcamp, designed to further refine participants' skills and mastery of complex Excel functionalities. Stay tuned for updates on other courses under the Upskill 2025 initiative, as we remain committed to empowering individuals and organizations to excel in the ever-evolving digital landscape

Kochi, India

training@infocrita.com

+91 9037769234

www.infocrita.com