UNIVERSITI TEKNOLOGI MARA

ICT TRENDS THAT MATTER

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PREFACE

Praise be to Allah SWT, with His will, this eBook, ICT Trends that Matter, has been successfully compiled to capture some of the most relevant and transformative discussions in the world of Information and Communication Technology (ICT).

The work is a compilation of various views of the different practitioners, scholars, and professionals who have contributed their ideas and thoughts regarding the emerging technologies and their influence. The chapters provide just a few examples of how cybersecurity, big data harmonisation, artificial intelligence, novel learning tools, and social media analytics demonstrate the extent to which ICT has permeated our everyday worlds, our classrooms, workplaces, and communities.

ICT Trends that Matter offers readers a comprehensive exploration of 14 contemporary ICT themes that are shaping education, industry, and society. The eBook covers a wide spectrum of topics such as Big Data & AI, Digital Learning & Tools, Practical ICT Applications, Social Media & Communication and Smart Campus Initiatives highlighting UiTM Johor's experience in developing a data-driven digital ecosystem.

This eBook is informative and inspirational, with contributions that combine theory, research, and practical work. It makes the readers consider the existing ICT issues and opportunities and provides practical knowledge on personal, educational, and professional development. I would like to say that I am very grateful as the chief editor to all thecontributors whose commitment, professionalism, and innovativeness have added value to the contents of this eBook. I believe ICT Trends that Matter will be useful to academicians and students, as well as any industry professional, policymaker and those who are keen to learn more about the dynamic ICT environment.

Whether you are an academic, student, or industry professional, ICT Trends that Matter provides valuable insights into the technologies that are redefining our world today. May this work inspire further dialogue, innovation, and collaboration toward building a smarter and more sustainable digital future.

Dr. Shamsatun Nahar Ahmad
Chief Editor
Brain Hub: ICT Trends that Matter

SYNOPSIS

ICT Trends that Matter is a compilation of 14 thought-provoking chapters, which discuss the most significant trends in Information and Communication Technology (ICT) and their implications on education, industry, and society.

The elements cut across essential areas of the digital world. Discussions about the harmonisation of big data and artificial intelligence to fight cybersecurity and comparative studies concerning popular AI tools will be available to the readers.The eBook also highlights innovative approaches to teaching and learning, such as Easymath2U and V-CCMPedia, to improve conceptual learning in calculus, and AI-assisted tools to improve student engagement.

The useful experience is presented with the help of the following topics: computer tips and tricks, free e-learning applications used by children, and the successful utilisation of social media analytics tools. The role of contemporary communication mediums such as Telegram and the global presence of TikTok are also discussed in the chapters, as well as reflections on institutional work towards data-driven digital ecosystems, such as the UiTM Johor RSP16 experience.

This eBook contains the work of numerous scholars and researchers and offers both theoretical insights and practical solutions, which is why it can be of interest to academics, students, practitioners in the industry, or policymakers. ICT Trends that Matter is not merely an anthology of articles but rather is a convenient way to learn about the latest trends in ICT and predict what to expect and what to take advantage of in the digital age.

ACKNOWLEDGEMENT

The Editorial Board of ICT Trends that Matter would like to thank everyone whose assistance and commitment enabled us to make this publication possible.

We would like to thank the Department of Linkage Industry and Alumni, UiTM Johor, Segamat Campus, for enabling the acquisition of eISBN and subsequent guidance throughout the publication process.

A special mention of gratitude belongs to all contributors, whose skills, knowledge and dedication have been instrumental in the content of this eBook. Every chapter is an embodiment of how well, creatively, and committed our writers were to delivering substantial discussions on the current issues in ICT.

We also recognise the unwearying efforts on the part of the Editorial Board, which have been tireless from the very beginning of the conception to the final production of this eBook, which makes it and guarantees its success.

We are most thankful to all who have assisted this undertaking either directly or indirectly. May Allah SWT bless this endeavour and enable it to do good for the readers and the community at large.

TEACHING & LEARNING: FROM RUBRICS TO COMPREHENSIVE REPORTS

ZURIATI ISMAIL @ KHORI

Rubric-based assessments such as lab tests and group projects are usually evaluated manually using a printed rubric or one in a spreadsheet table. One of the problems with manual evaluation based on a hardcopy rubric is that an extra step has to be taken to scan the evaluation form for audit purposes that usually take place at least six months to five years after the semester ends. Besides the need to scan the hard copy of the evaluation form, calculations of the marks are also done manually and as such are prone to errors. Transferring the marks to the system or the lecturer's ongoing assessment marks records is prone to error in the recording process. On the other hand, while evaluations that are recorded directly in a spreadsheet table may reduce the calculation and typing errors in the transfer process, they lack the report to be returned to the students, unless a printed copy is used to rewrite the evaluation scores. In the end, we still need a copy of the evaluation report.

This problem can be resolved by using the Mail Merge feature in Microsoft Word. It is used to generate personalised documents—such as letters, emails, labels, or envelopes—by combining a template with a data source. It is often utilised by companies and organisations to transmit mass messages with a human touch. Using this feature together with a Microsoft Excel spreadsheet helps to automate the creation of the evaluation report. The following are the steps in using the Mail Merge tool to produce a comprehensive report:

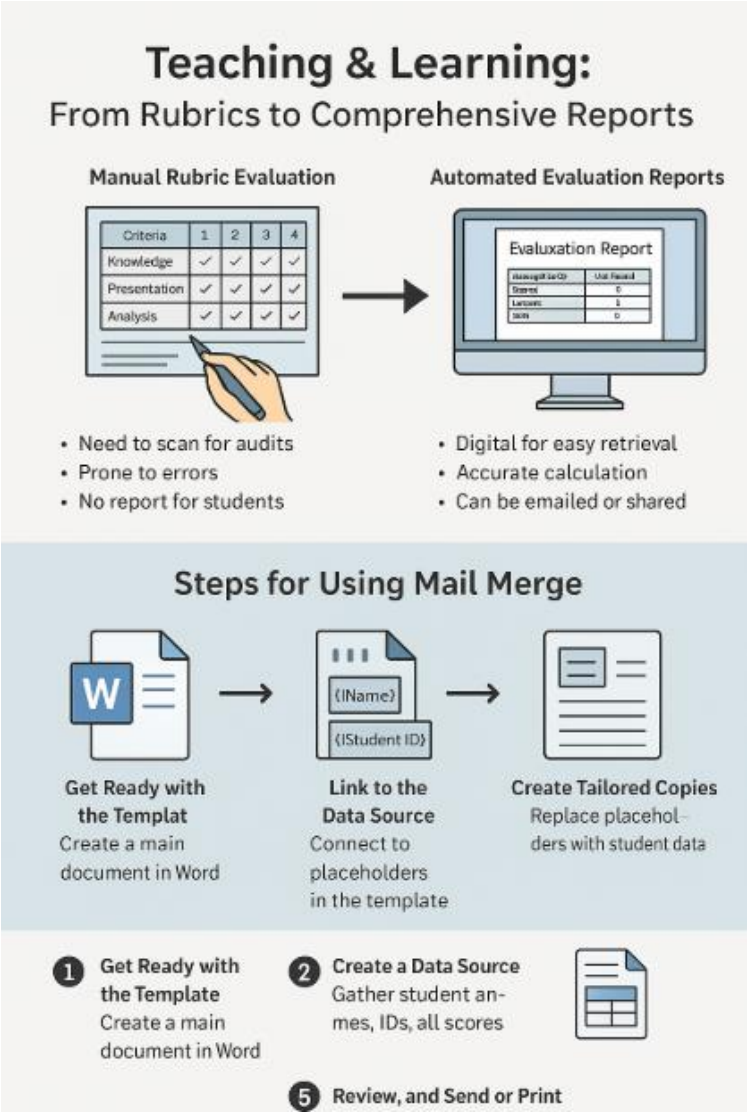
1. Get ready with the template by creating a main document in Microsoft Word. This is the process that translates the rubric into a report template.

2. Create a data source by methodically gathering recipient data from an Excel file. They include the students' names, their identification numbers, and all the scores for each evaluation criteria. Prepare the formula to get the final score. This is tedious and must be done carefully to prevent mistakes.

3. Link the template document to the data source and placeholders (e.g., {{Name}}, {{Student ID}}) where tailored details will be entered.

4. Create several tailored copies of the document by means of the Mail Merge feature, which pulls data from the source (students' names, identification numbers, all the evaluation scores, and the final score) and substitutes matching values for placeholders.

5. Review, and send or print the comprehensive report of the evaluation. It might be emailed to students or shared with them through Learning Management Systems platforms such as Google Classroom or UFUTURE.



Recommendation: A short conclusion should be added to wrap up the ideas.

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