A Demonstration of The Use of Expanded Power Point Tool for Teaching a Computer Technology Concept: Case Study of Information System

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Abstract

Background and Context: *Despite the contrary advocacy levelled against the usage of PowerPoint Presentation for learning purposes, its popularity is on the rise. However, its potentialities and features are still under-utilized.*

Objective: *demonstrate how to use some of the expanded tools that exist in PowerPoint*

Method: *We created a slides showing the step-by-step procedure of using specific expanded PowerPoint Tools, giving detailed explanation of the intents, benefit and possible setbacks that may arise if not properly implemented in the right context.*

Findings: *The expanded tools in PowerPoint application makes the creation of learner-centric presentation easy with limited setbacks for those that may not be technology friendly.*

Introduction

The Computer Technology module is a Computer Science foundational course that prepares students for the 100Level degree programme. It introduces students to computing concepts and principles such as; Information System, Networking Fundamentals, Programming Concepts, Database Management System, and Systems Administration.

Information System (IS) has changed drastically over the last few years with the advent of the cloud computing which advocate for an off-sit hosting of all computing resources – network, software, the

web and others. In an enterprising situation, the decisions made in respect to Information System give both cause and effect in the organizational transformation (Bryjolfsson and Mendelson, 1993). This is because the location of an enterprising information system and the internal workings could be decided internally or externally. The virtualization of information system is cost effective to some, while to others it is burdensome due to the unsecured cyberspace (Burton, 2016).

The Lucas, Clowes and Kaplan (2016) information system framework reviewed highlighted the relevance of it in an organization, however, the rapid development and increased usage of the web might have made some of the propended frameworks irrelevant. This is not to say that it cannot be implemented but an organization makes the decision of extreme cloud computing of its information system, there is almost zero framework application except it is a hybrid information system.

PowerPoint Application

PowerPoint is a presentation application that enables researchers, trainers, tutors and students to create visually inspired presentation. It is the transformation of ideas and concepts from mere words and thoughts into visuals, giving it life and making it realistic. It support for multimedia technology makes it readily and easily acceptable by presenters. The Multimedia Learning Theory of Mayer (Grech, 2017) which is widely used stated the visual and auditory as the channels for information process which PowerPoint support with its various tools. The visual and auditory tools in PowerPoint makes interactive (Henkel, 2014) sessions possible between the presentation and the listeners or users.

However, the usage of other tools what will be termed as the Expanded PowerPoint Tools (EPT) is grossly under utilised. This is seen in most presentations that uses imported or inserted puzzles, pictures and images instead of using the available EPTs to create them (Nicholson, 2002). This sometimes creates misunderstanding of concepts especially when the image used do not effectively communicate or convey the accurate thoughts of the presenter or the idea.

Method

The approach used for demonstrating the use of PowerPoint Tools is the direct usage concept (DUC) in which simple algorithm is developed, and translated into definite actions taken to create the desired slide.

Algorithm 1 (Using the Object Tool to Create a Bitmap Image)

Step 1: Start

Step 2: Click on the Insert button on the menu bar

Step 3: Click on the object tool

Step 4: Select Bitmap image from the menu box

Step 5: Click on ok

Step 6: Opens the Paint Tool

Step 7: Create your objects

Step 8: End

The above algorithm will create an object directly on a slide while working on the object referenced application.

Algorithm 2 (Crop and Crop to Shape)

Step 1: Start

Step 2: Click on file button on the menu bar

Step 3: Click on options from the file dropdown menu

Step 4: Click on Quick Access Toolbar

Step 5: Move cursor to choose commands from and click on the arrow

Step 6: Select the all command from the dropdown menu

Step 7: Locate the crop tool and select

Step 8: move to the add button with >> sign and click

Step 9: Click on Ok

Step 10: Insert or draw an object or image on the current slide

Step 11: Select object or image

Step 12: Click on the crop tool located at the top left side of the screen

Step 13: Click on the crop to shape or crop

Step 14: End

Algorithm 3 (Smart Art)

Step 1: Start

Step 2: Click on the insert button on the menu bar

Step 3: Click on the Smart Art Tool

Step 4: Displays a menu box

Step 5: Select the category choice on the left side bar

Step 6: Move cursor to the various options for the selected category

Step 7: Click on an option

Step 8: Displays a preview of the selected option with summary

Step 9: Read through summary to ascertain your choice

Step 10: Click on Ok

Step 11: Object is inserted on the active slide with editable side bar containing the elements of the object

Step 12: Click on each and edit accordingly

Step 13: End

Results

Figure 1 is the result of implementing algorithm 1 which enables you to use the object tool for creating object using the relevant application that is linked to it and the work appears on the active slide on real time.

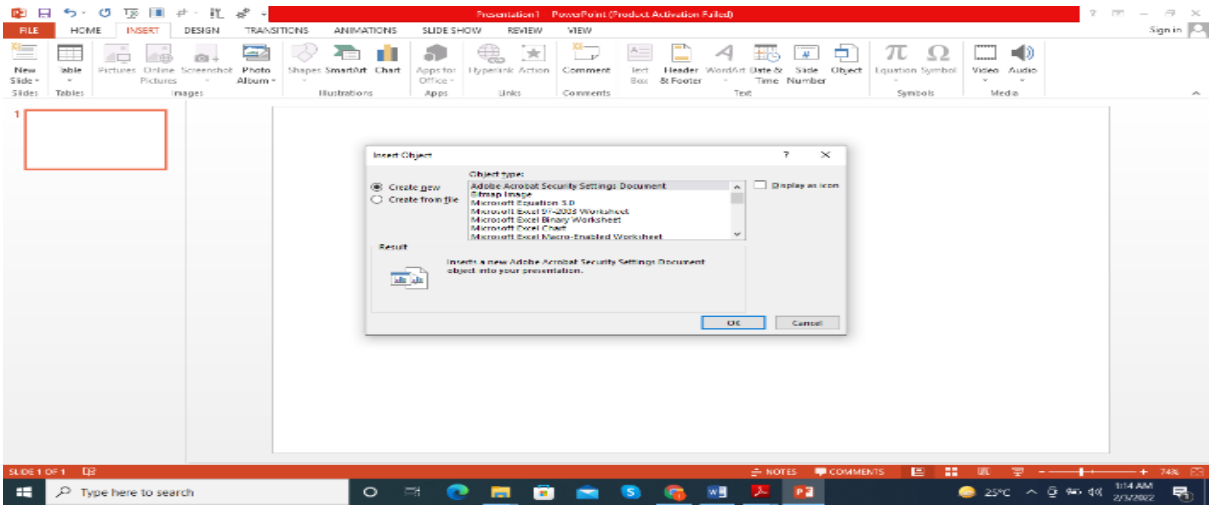

Figure 1: Using the object tool

On selecting the bitmap image option, the paint application is displayed and it is used to create Information System Categorization as seen in figure 2

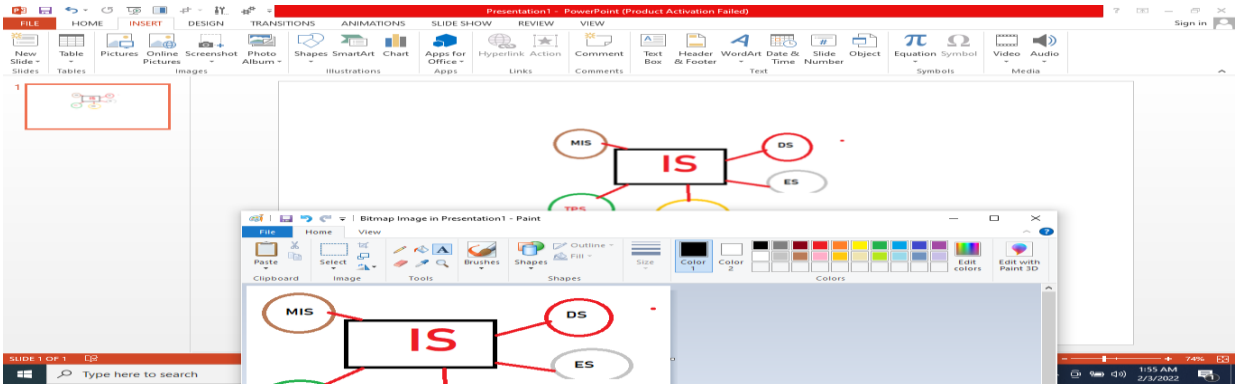

Figure 2: Creating a bitmap object using the object tool

In implementing algorithm 2, create an object or insert an image for cropping, and follow the algorithm steps. Figure 3 shows Step 12 action, This tool can be used to design images

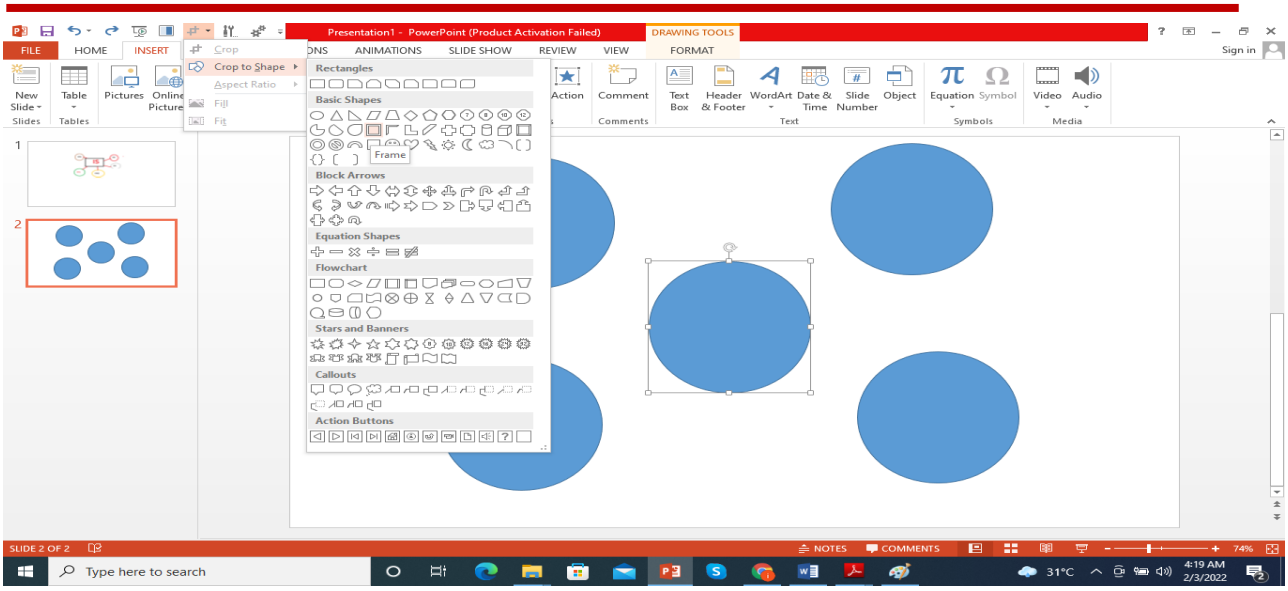

Figure 3: Crop image to selection

On completing Step 13 of the algorithm, figure 4 is displayed. You can double click on the crop image or object that was inserted and continue with the cropping because the edit option tool will be active.

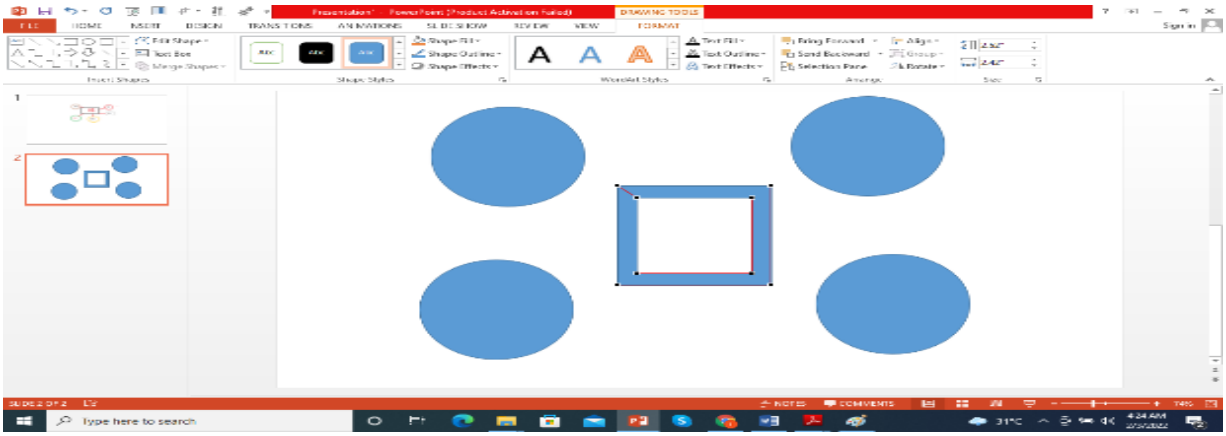

Figure 4 on implementing step 13 of algorithm 2

The SmartArt enables the creation of categorized objects. In completing the step 4 of the algorithm, figure 5 will be displayed.

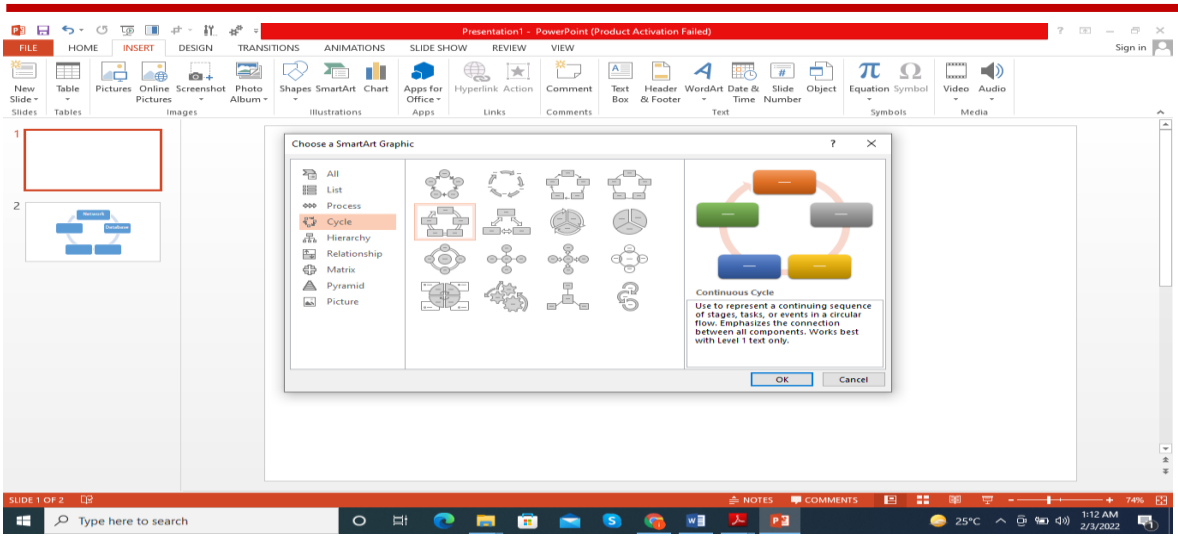

Figure 5 SmartArt Tool Menu

On completion of the algorithm 3 steps, figure 6 is displayed.

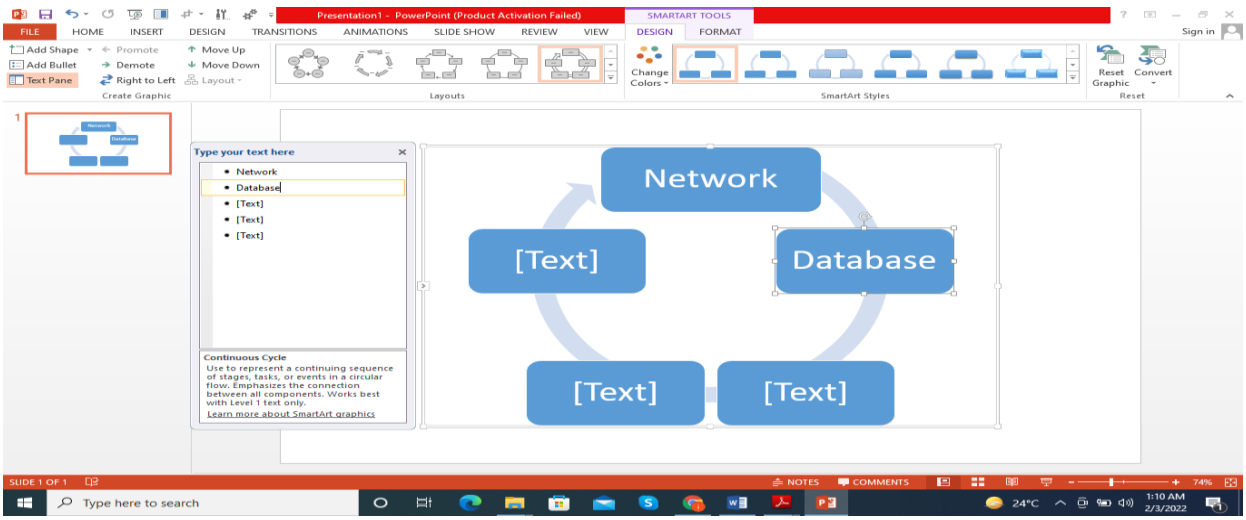

Figure 6 SmartArt editing screen

Discussion

Using the Expanded Tools for creating a learning presentation is an effective and efficient means to shorten the length of time usually spent on creating a presentation. In using the Object Tool, it is easy to incorporate objects supported by other applications. It removes the conventional copy and paste or attach file technique. Objects whether from Excel, PDF, Image or even another PowerPoint can be

initiated and directly seen on the active slide. In the case of errors, same object can be double clicked on and displayed on the application use for creating it and correction made. This tool gives the user control and it can be used to manipulate objects to suit the purpose. The traditional insertion of objects from the internet is no longer that effective in the learning process for lack of uniqueness and precision to the subject matter. Also, student seems to hold teachers who are capable of producing and using unique techniques in high esteem. The act enables students to build high level of confidence and knowledge base on the teacher.

The SmartArt Tool enables you to create and edit different categories of images. The selection is made easy with the summarized view of each selection giving you an overview of what the selected object it capable of prior to usage. This options serves as a tool assistant for the less computer privy users.

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