

EPICENTRAL

A Newsletter from Epicenter Development Group highlighting ideas that improve organizations

Welcome to Epicenter Development Group's newsletter, EPICentral. The purpose of this newsletter is to highlight fundamental ideas that have helped organizations develop and maintain great manufacturing and service operations. We hope that you find our EPICentral newsletter helpful, and we would welcome your comments on its content.

Spreadsheets - The Swiss Army Knife for Professionals

Back in 1983, I was working as a co-op at General Motors and was introduced to a new spreadsheet program called Lotus 1-2-3 (version 1). As a young industrial engineer, I was excited to start using this state-of-the-art program which ran on the AS400 mainframe computer system and allowed our department

to easily sort and analyze large tables of numbers. Since then, I have continued to be amazed at the many things that can be done with spreadsheet programs and use spreadsheets on a daily basis to organize, analyze and present data. This month's article reviews some of the more powerful ways that Excel can be used to solve problems and analyze systems.

Most of the manufacturing and service professionals that we work with today use the MS Excel spreadsheet program to some degree. It's a software tool, and like any tool, the value that you get from it varies greatly depending upon your understanding of what it can do and how to use it. The purpose of the following list is to simply introduce some of the powerful things that can be

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done with Excel and encourage you to revisit Excel on a regular basis to see how it can be best used to add value to your organization.

The List:

Pivot Table - A Pivot Table is simply an automatic method for creating a summary table for a large set of data. Although Pivot Tables were once somewhat difficult to create, the newer versions of the software use an interactive "drag and drop" method for creating these tables that is intuitive and easy to use.

Functions - Excel hosts a variety of built-in functions that can be used to organize and analyze data within

the categories of Financial, Logical, Text, Date and Time, Lookup & Reference, Math & Trig, Statistical, Engineering, Cube, and Information. These functions can be mixed and matched to create some powerful ways to filter, organize, display, and analyze information.

Statistical Analysis - Excel includes an "Analysis Toolpak" which includes a set of standard tools for doing statistical analysis on data.

Tables - "Tables" in Excel offer an easy way to manage data. Essentially, any information in Excel can be converted to a "Table." As a "Table," a drop-down filter over each column of data allows the user to quickly find specific information based upon one or more filters.

Considerations:

- 1. A good general approach for using Excel as a tool is to: (1) Determine the outcome that you want what does it look like? (2) Identify the information that you will need which information is most critical? (3) Map out the process for how to get from the information to the outcome what formulas and functions can be used to most easily get to the outcome? (4) Work through the process in steps break the problem or process up into smaller "bite-sized" pieces and work through each piece sequentially.
- 2. There are a variety of books and webinars available to help you gain the knowledge and understanding of Excel. Free webinars are available at Microsoft.com; and our favorite books for reference are, not surprisingly, the "Excel for Dummies" series.
- 3. Epicenter has a significant amount of experience working with professionals to develop customized spreadsheet tools and processes. In addition, we use Excel on a regular basis to complete analyses of client systems from storage analyses to capacity planning to sophisticated modeling applications.

Next Steps

If you would like more information on this topic or other similar types of tools, please contact Bill Proctor with your request at wproctor@epicentergroup.com or 216-702-0952. You can also find previous issues of EPICentral at Newsletters.

Mr. Proctor also speaks on a variety of problem-solving and system design topics that can help companies significantly increase the success and profitability of their businesses. If you are interested in having Bill speak at one of your upcoming meetings/events or would like more information on any of the speaking topics, please visit Speaker Services or you can emailsales@epicentergroup.com.

Epicenter Development Group is a unique consulting firm that seamlessly integrates the disciplines of Systems Engineering and Organizational Analysis & Development to create practical design solutions to your toughest challenges. It is on the cutting edge of problem-solving solutions and the creator of a unique process called GreenRoom Engineering. This process adds greater

value and cost savings for clients as compared to traditional engineering methods.

William Proctor, Epicenter's founder and president, has provided services around the country to more than 100 companies consisting of a variety of organizations; and Epicenter continues to grow as a resource for firms of all sizes.

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