

[Click to view this email in a browser](#)

Intaver Institute Inc.

February 2016



www.intaver.com

Free Webinar: Mastering risk analysis with RiskyProject

The standards for effective planning and management of projects are increasingly adopting Monte Carlo project risk analysis as an essential tool in an environment that is characterized by increased complexity and lowered risk tolerance. This webinar will show you a step by step process how to:

- Import project plans from other scheduling software
- Add uncertainty and risk events
- Understand how to analyse the results
- Generate key project risk analysis reports

Date: Tuesday, March, 8 2016

Time: 10:00 AM - 11:00 AM MST (UTC-07:00)

[Register for the webinar](#)

Merge Bias in project schedules

It is extremely common to find parallel activities in project schedule. Parallel activities occur where two or more activities must be completed before a subsequent activity can start. An example might be where a company is developing a system that includes the assembly of multiple components. Let's assume that you have only one component. In the figure below, the white bars show the original estimate and the blue bars show the mean results. You can see that on average the task assembly will start on 02/08/16 2:45.

	Task Name	Low Dur	Base Dur	High Dur	Start Mean	Fi	Feb 7,'16			
							Sa	Su	Mo	Tu
1	Design and Fabricate		5 days		02/06/16 08:00	02/0				
2	Component 1	4 days	5 days	7 days	02/06/16 08:00	02/0				
3	Assembly	3 days	3 days	3 days	02/08/16 02:45	02/0				

Here is the example with two components. The average start time for the Assembly tasks is now on 02/08/16 5:37. The addition of another similar Component activity has delayed the average start time by about 8%.

	Task Name	Low Dur	Base Dur	High Dur	Start Mean	Fi	Feb 7,'16			
							Sa	Su	Mo	Tu
1	Design and Fabricate		5 days		02/06/16 08:00	02/0				
2	Component 1	4 days	5 days	7 days	02/06/16 08:00	02/0				
3	Component 2	4 days	5 days	7 days	02/06/16 08:00	02/0				
4	Assembly	3 days	3 days	3 days	02/08/16 05:37	02/0				

Finally here is the example with five components. Average start time for the task Assembly is now 02/08/16 8:53 a delay of about 16% as compared to the original estimate . You can clearly see the gap between start time of activity "Assembly" and finish times of all activities "Component ...".

	Task Name	Low Dur	Base Dur	High Dur	Start Mean	Fi	Feb 7,'16			
							Sa	Su	Mo	Tu
1	Design and Fabricate		5 days		02/06/16 08:00	02/0				
2	Component 1	4 days	5 days	7 days	02/06/16 08:00	02/0				
3	Component 2	4 days	5 days	7 days	02/06/16 08:00	02/0				
4	Component 3	4 days	5 days	7 days	02/06/16 08:00	02/0				
5	Component 4	4 days	5 days	7 days	02/06/16 08:00	02/0				
6	Component 5	4 days	5 days	7 days	02/06/16 08:00	02/0				
7	Assembly	3 days	3 days	3 days	02/08/16 08:53	02/0				

This effect is called Merge Bias. It occurs because duration of the fabrication of individual components is not completed at the same time. These durations are not correlated. For example, fabrication of Component 1 may take longer; but at the same time, fabrication of Component 2 may take shorter period if time. Start time of "Assembly" is calculated based on longer duration of activities "Component ...".

For more information about merge bias please [read our article](#).

Upcoming Webinars

Integrated project risk analysis

Risk in projects can come from two main sources Risk events and uncertainties. Risk events are discrete risks that are commonly captured in risk registers and are characterized by probability and impact. Uncertainties are inherent natural randomness that is found in all processes. Both should be included as part of your project risk analysis model.

Date: Tuesday, May 3, 2016

Time: 10:00 AM - 11:00 AM MST (UTC-07:00)

[Register for the webinar](#)

Partners in Focus

Critical Business Analysis, Inc

For over 30 years, Critical Business Analysis, Inc. has been committed to the advancement of project and program management expertise. CBA's real-world experience offers a wide-range of professional services in a variety of industries including public agencies, utilities, petrochemicals, corporate engineering, construction management and design. CBA, Inc. has distinguished itself as a leader in Primavera P6 and related software implementation and knowledge transfer. Additionally, CBA provides project team extension through staff augmentation of highly qualified project management professionals. We take pride in every service we provide, knowing that even small enhancements can achieve great results. Let CBA's project management related professional services, project staffing, software and training help you reach your project management goals.

922 Daryl Dr.

South Euclid, OH 44124

216-381-5851

216-798.6790

www.cbainc.com

Upcoming Events

EVM World 2016

June 1-3, 2016 at Naples Grande Beach Resort, Naples, FL

AACEI 2016 Annual Meeting

June 26-29, 2016 at Sheraton Centre, Toronto, Ontario, Canada

PMI® Global Congress 2016—North America

25-27 September, 2016 at San Diego Conventional Center, CA

INFORMS 2016 Annual Meeting

November 13 - 16, 2016 at Music City Center & Omni Nashville, TN

SRA 2016 Annual Meeting

December 11 - 15 December, 2016 at Sheraton San Diego, San Diego, CA