

**Keynote by Fred – 12Jan17 – 20 minutes**

**Welcome again to Construction CPM Conference 2017**

**This is our 7th conference – but first time I have taken the podium to discuss anything more serious than your drink tickets.**

**?Is there anything more serious than drink tickets?**

**Today we will cover three topics**

**The history of our industry – current status – and look at our future**

**I was born in 1952 – CPM was born in 1956**

**In four days I will be 65 – I anticipate many more active years –**

**My consultancy – teaching – textbooks – and running this conference**

**New Orleans – January 2018 at Mardi Gras**

**back here at Disney for January 2019 and**

**San Diego in January 2020 are already set**

**so I anticipate a continued relevancy into the future**

**While I will be 65 in four days,**

**In four years CPM will be 65 years old – but will CPM still be relevant?**

**or will the science & art of CPM time centric scheduling be fully retired?**

**Prior to 1910 the highest form of scheduling was a numbered TODO list.**

**Henry Gantt developed the Gantt chart – or bar-chart – in 1910.**

**James Kelley and Morgan Walker developed the underlying mathematics and with John Mauchly coupled CPM to an electronic computer in 1956.**

**Where are we now? Do we still control or even understand the software upon which we rely to form our projections and analyses?**

**The underlying calculations for forward and backward pass are really quite simple. You all understand the math.**

**Dan Patterson says software to implement that math may be written in 14 lines of code.**

**How many of you have written a software routine for CPM?**

**How many to extend CPM with perhaps your own personal diagnostics?**

**How many have written any software code in the past ten years?**

**The art of writing software “on the fly” is disappearing from our schools.**

**Adding a calendar requires more complexity of the software code.**

**Adding multiple calendars requires a whole different level of complexity.**

**Understanding the proper use of and impact of multiple calendars is another topic and subject of several sessions of this and other forums.**

**If we have a weather calendar must we plan to do no better than permitted by the average weather of the past five years?**

**Do we understand we are no longer targeting the earliest possible start?**

**Does the owner specifying use of a weather calendar care this will likely delay completion of the project?**

**How many of you of our audience can manually do the basic forward and backward calculations of a CPM for ES, EF, LS, LF and TF?**

**How about Free Float? Independent Float?**

**Ask Jim O'Brien about his conversations with Jim Kelley relating to utility of Free Float. Ask Jim about Free Float vs RDM Just-in-Time Float.**

**How many of you can manually do CPM calculations involving multiple calendars?**

**Discuss with Ron Winter the three or more definitions of what may constitute a multiple calendar critical path and necessary calculations.**

**How many of you can manually do CPM calculations involving limited resources?**

**How many understand the calculations relating to a software solution involving limited resources?**

**Do you realize the computed solution is actually somewhere between a best project duration with earliest completion date versus double that project duration? It is in the math as known to Kelley & Walker in 1956.**

**How many regularly use resource leveling for your initial CPM?**

**How many for each update?**

**Do you realize that if you complete *one* activity *one* day earlier than planned in an update, the resource leveling routine may delay the entire project for a month Or more? It is in the math known to Kelley & Walker.**

**In these days of low inflation and escalation of costs, do our clients still care about starting ROI as quickly as possible?**

**Do they understand the importance of being 1st to market?**

**All those who know what is a VCR raise your hands.**

**All those who know of Betamax – a superior product – raise your hand.**

**If Sony had not allowed their factory to be 6 months late, we would know Betamax and not VCR.**

**The point of all of this is that WE are the cream of our industry and not even WE understand how the software tools of our trade work.**

**The same data fed into the old P3 software routine may yield a result showing the project finishing weeks or months earlier than if fed into P6.**

**Do we understand how this can happen and adjust accordingly?**

**Do we have a diagnostic that warns us of this easily fixed anomaly?**

**This is the reason I created Construction CPM Conference.**

**We are Users of software solutions which require greater knowledge of the software than found from casual reading of the manual – oops – the help screens provided by the vendor.**

**We have Users of a variety of software products who may raise and discuss issues created by use of software beyond the plain vanilla implementation of the online tutorial.**

**We are the cream of the industry and can share amongst ourselves the work-arounds and solutions each of us have struggled to discover and implement.**

**Perhaps we can even suggest some of these to the software vendors.**

**If enough of us note an issue and easy solution it will be put on a list. If enough more join in it may move up the list.**

**Of course, since we professionals are a tiny minority of Users of the mass marketed software, our input may be less effective than a non-user who wants all her 10,000 employee licenses to open with a screen having a picture of a butterfly. But we can try.**

**We can only hope vendors know WE are the real Users of the software. We can only try to regain control and understanding of our tools.**

**Now let us shift to another topic. Where are we going?**

**Our conference and those of AACE, PMI, and forums of Planning Planet and others all help make us the best schedulers we can be.**

**Yet it is hard to do your best work when those who hire you do not know – do not ask – do not fund – that best work.**

**Other organizations address such issues on behalf of their memberships. My wife is a Landscape Architect.**

**She is a member of the American Society of Landscape Architects.**

**Their “Mission is to advance Landscape Architecture through Advocacy, Communication, Education and Fellowship.”**

**We have education & fellowship in our classes & networking receptions.**

**What we do not have is their lobbying apparatus.**

**DBIA (Design Build Industry Association) also makes a vast effort towards advocacy, communications and education beyond their membership. They charge more – a lot more – to their members to attend their conference than we do of ours – on top of hefty membership fees & corporate sponsorships.**

**Then they provide “scholarships” (often including housing and airfare) to the staff of governmental agencies and others to attend and learn how a design-build arrangement can benefit those agencies. Their conference becomes in effect an infomercial to end users, including receptions and meals paid for by the member contractors.**

**ASLA, DBIA, ASCE and many other technical associations have immense lobbying efforts to teach the non-technical end users of their endeavors as to the value of their work.**

**Who do we – as a group – teach the value of our trade?**

**Fred Plotnick was asked to create this Conference by fellow members of AACE, PMI-COS, attendees of several software product User Conferences and even many employees of those software product developers. Only with YOUR help have we succeeded.**

**BUT NOW I again need all of you to help us help our industry. We need an organization, not just a conference, to promote the industry.**

**Perhaps we can go back to our technical societies to push to take this on. Or perhaps we once again must create what others do not care to do.**

**You all have my email and phone number  
Perhaps we can set up a discussion board – but we need more than talk  
Like me you all have limited time to devote to this problem  
We all have clients (internal or external) and customers and students  
We all have family friends and extended community**

**Jim O’Brien convinced the world of constructors of the benefits of CPM in 1964. Who will convince the world of those who hire those who hire those constructors of the need of CPM in this 21st century?**

**Will CPM still be relevant in four years?  
Only we can make our industry grow and thrive.  
The torch has been passed to us – Let us take it and run forward.**

-- deep breath -- -- deep breath -- -- deep breath -- -- deep breath -- -- deep breath -- -- deep breath -- -- deep breath --  
**Classes start at 9:45 to 4:50. Then immediately our Happy Hour by Deltek until 6:30. Then time to run to your room – put aside your badge – grab your armband  
Walk or boat to Early Entry to EPCOT at 7 – enjoy one or more attractions  
Dessert Party at the Italian Waterfront at 8, Fireworks at 9, Dolphin bar at 11**

**Now go to our coffee break – chat it up with our exhibitors & each other  
Learn more about how their products can help you be the best  
Teach them what you need of their products to help them be the best.**