"Agile" is NOT a subset of Project Management

BUT

A Stand-Alone Alternate Methodology that is Equal to Project Management1

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Abstract

Given the seemingly never-ending debates about what "Agile" or "agile" is or is not, here is some new thinking on this question that makes a credible case that Agile or "agile" is a methodology that is not only older than project management, dating back over a million years ago to the taming of fire or 6000 years ago to the invention of the wheel, but is actually a stand alone alternative Asset Delivery System that is equal to Project and Operations Management, when viewed from the perspective of "creating, acquiring, expanding, upgrading, maintaining and eventually disposing of organizational assets."

Key Words: Agile, Project, Program, Operations, Asset, Methodology,

Introduction

Back in 2004-2006, research done at the Manchester Universities Business School, led by Professor M.C. Winter, concluded that project management is a methodology "stuck in a 1960s-time warp", and that the "underlying theory of project management is obsolete." This paper revisits these conclusions 15 years on to see if they remain relevant with the growing expansion of "Agile" or "agile" project management.

The Association for the Advancement of Cost Engineering (AACE International) was founded in 1956.² The International Project Management Association (IPMA) was founded in 1964³, and the Project Management Institute was founded in 1969⁴. So why, with all these globally recognized professional societies, are we not seeing measurable improvements in the "successful" delivery of projects? Surely in 60+ years these organizations have existed, IF what these organizations advocated worked, then doesn't it seem reasonable that by now we should be seeing far fewer projects that run "late, over budget not to mention not delivering what was

⁴ About PMI- (n.d.) <u>https://www.pmi.org/about</u>



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² About AACE- (n.d.) <u>http://web.aacei.org/about-aace</u>

³ IPMA History- (n.d.) <u>https://www.ipma.world/about-us/ipma-international/history-of-ipma/</u>

specified or worse yet, not meeting or fulfilling the objectives the project was undertaken to achieve or deliver?

Back around 1905-1906, George Santayana told us "Those who cannot remember the past are condemned to repeat it."⁵ So let us go back and do a quick review of history to see if we can learn anything from history to help us understand why projects as well as the products they were undertaken to produce, still "fail" with such alarming regularity.

Just the facts, Ma'am...

There is no excuse for the continuing high rate of project "failures" we read about almost every day.⁶, ⁷, ⁸, There is clear evidence that the processes of project management have been used by humankind for at least 5,000 years, validated by the Great Pyramids of Giza and many other wonders of the ancient world. As a matter of fact, the "trial and error" method which came to be known around the 12th century as the "Scientific Method"⁹ and is now being called "Agile" dates back even further, 1 million years ago to the taming of fire¹⁰ and 6,000 years ago to the invention of the wheel¹¹. SURELY in the past 6000+ years humankind could have and should have figured out how to "initiate, plan, execute, control and close" projects in a way that enables us to finish them on time, within budget, in substantial compliance with the requirements and specifications while substantially fulfilling the purpose for which they were intended?

Back around the early to mid-1950s either Esso or Diamond Shamrock Oil developed a model that integrated portfolios of assets and projects, with operations (programs) and project management into a single all-inclusive methodology designed to "create, acquire expand, develop, maintain, repair and eventually dispose of" organizational assets. Attesting to the fact this model works, it is still in use after 65 years by all the major international and nearly all national oil companies today.

This is what this "tested and proven" model looks like.

⁶ Butts, Glenn, (2010) "Mega Projects Estimates- A History of Denial" <u>http://www.build-project-management-</u> <u>competency.com/wp-content/uploads/2010/09/Glenn.Butts-Mega-Projects-Estimates.pdf</u>

⁷ KPMG Construction Survey (2015) "Climbing the Curve"

https://assets.kpmg/content/dam/kpmg/pdf/2015/04/global-construction-survey-2015.pdf

¹¹ Gambino, Megan (June 2009) Smithsonian <u>https://www.smithsonianmag.com/science-nature/a-salute-to-the-wheel-31805121/</u> last accessed 02/10/2019



⁵ Life of Reason, Reason in Common Sense, Scribner's, 1905, p. 284. <u>https://www.iupui.edu/~santedit/sant/about-santayana/santayana-quotations/</u>

⁸ Flyvbjerg, Bent (2017) "Sue the Forecaster" <u>https://www.linkedin.com/pulse/sue-forecaster-bent-flyvbjerg-%E5%82%85%E4%BB%A5%E6%96%8C-/</u>

⁹ Harris, William, (n.d.) History of the Scientific Method <u>https://science.howstuffworks.com/innovation/scientific-experiments/scientific-method3.htm</u> last accessed 02/10/2019

¹⁰ Cohen, Jennie (April 2012) History Channel <u>https://www.history.com/news/human-ancestors-tamed-fire-earlier-than-thought</u> last accessed 02/10/2019

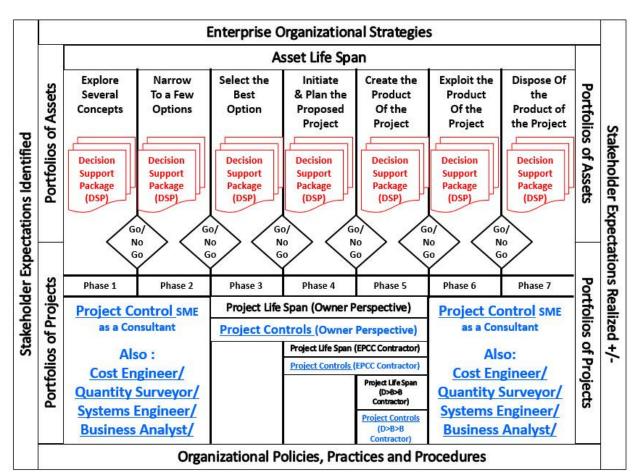


Figure 1 - Integrated Asset, Portfolio, Program (Operations) and Project Life Spans¹²

In this tested and proven approach, there are three "actors," two "starring" actors and one supporting actor.

¹² Guild of Project Controls (n.d.) Module 1, Figure 1 last accessed 02/10/2019

<u>http://www.planningplanet.com/guild/gpccar/introduction-to-managing-project-controls</u> Access is FREE of charge but requires filling in a profile which will take you 15-20 minutes.







Figure 2 - The 3 Actors- Asset and Operations (Program) and Project Manager¹³

The two starring actors are the Asset Manager, responsible primarily for CAPEX funded projects in the role as the project SPONSOR and the Operations Manager, responsible primarily for OPEX funded projects, also in the role as the project SPONSOR. In this role as we can see from Figure 2, it is the project SPONSORS who are responsible for the business case and who make the STRATEGIC decisions. The Asset manager is measured or assessed based on the Return on Assets (ROA) while the Operations Manager is measured or assessed against Return on Investments (ROI). The project manager's role is purely TACTICAL, responsible for delivering the project on time, within budget in substantial compliance with the technical specifications, without getting anyone hurt or killed on the project. In this model, the business case is the responsibility of the Asset/Operations managers and not the project manager. The project manager is assessed or measured primarily by SPI and CPI, along with any safety, health or environmental violations or infractions and is rewarded individually or as a team based on achieving those objectives.

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Figure 2 - Asset, Operations and Project Management in an Owner's Organization Source: Giammalvo, Paul D (2015) Adapted from Wideman, Max. Contributed Under Creative Commons License BY v 4.0

¹³ Guild of Project Controls (n.d.) Module 1, Figure 2 last accessed 02/10/2019

As this is a tested and proven approach, one of the first recommendations is to recognize and accept the wisdom of this approach and start to hold the project SPONSORS accountable for that over which they control and hold the project manager accountable for that over which he/she has reasonable control and formal authority to act.

What is an Asset and How do we manage them?

To try to keep this paper as unbiased as possible, not favoring one professional society over any other, the author is sticking to definitions from the Business Dictionary. The Business Dictionary defines an "Asset" to be:

"1. Something valuable that an entity owns, benefits from, or has use of, in generating income.

2. Accounting: Something that an entity has acquired or purchased, and that has money value (its cost, book value, market value, or residual value). An asset can be (1) something physical, such as cash, machinery, inventory, land, and building, (2) an enforceable claim against others, such as accounts receivable, (3) right, such as copyright, patent, trademark, or (4) an assumption, such as goodwill. Assets shown on their owner's balance sheet are usually classified according to the ease with which they can be converted into cash."¹⁴

And the Business Dictionary further defines "Asset Management" to be:

*"Prudent administration of investable (liquid) assets, aimed at achieving an optimum risk-reward ratio."*¹⁵

Applying these definitions, we can clearly see that within any organization there are 5 asset categories, more clearly shown in Figure 3.

Worth noting is that in most organizations these asset classes are owned, controlled and managed by functional or line managers. This fact becomes critically important when we realize that in any organization "it takes assets to create more assets" and for those organizations who have adopted a matrix management structure, these functional managers are going to be responsible for allocating their scarce or limited pool of assets (resources) to project work while at the same time, being responsible for performing their on-going functional responsibilities.

To be clear, while the functional or line managers control the existing assets, (resources) it is the project SPONSORS, who, once the funding for the project has been approved (Decision Support

¹⁵ Business Dictiionary Definition of Asset Management (n.d.) <u>http://www.businessdictionary.com/definition/asset.html</u> last accessed 02/10/19



¹⁴ Business Dictiionary Definition of Asset (n.d.) <u>http://www.businessdictionary.com/definition/asset.html</u> last accessed 02/10/19

Package) at the end of Phases 2, 3 or 4, and who, having obtained the notice to proceed (NTP) start working with the support of the Project Manager/Project team, responsible to allocate those resources in a manner that produces the deliverables from the project in the most cost-effective manner, while trying to satisfy as many stakeholder needs, wants and expectations as possible within the constraints. This means the "project charter" needs to be a formal delegation of authority.

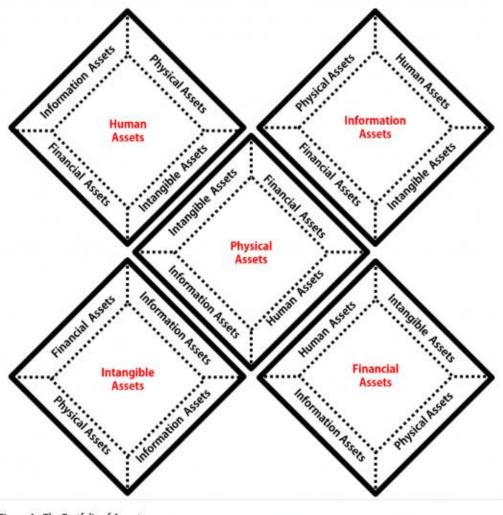


Figure 4 - The Portfolio of Asssets Source: Giammalvo, Paul D (2015) Course Materials, Contributed Under Creative Commons License BY v 4.0

Figure 3 - The Five Asset Classes in any Organization¹⁶

Having established a clear understanding of what an asset is and who is responsible for managing those assets, we can now explore what options we can choose from to use the existing pool of assets (resources) to deliver or produce more assets for the organization. This is what is currently being called "benefits realization" but more accurately or completely should be better

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¹⁶ Guild of Project Controls (n.d.) Module 1, Figure 4, last accessed 02/10/2019

defined to be the "creation, acquisition, expansion, repair, maintenance, upgrading and eventual disposal" of organizational assets. By changing the focus from the delivery SYSTEM itself to which is the 'best" or "better" delivery system to use and what "added value" that the product produced at the end of the delivery system produces will solve many of the problems we see in today's world.

Exploring the ASSET DELIVERY OPTIONS

IF we step back and are willing to recognize there are three PRIMARY "delivery methods" that any organization can choose from to "acquire, create, produce, repair, update, maintain and eventually dispose of" "organizational assets" and two SECONDARY or TRANSITIONAL methods it helps to provide clarity as to which method is appropriate and under which conditions or circumstances.

When we look at it from an ASSET MANAGEMENT perspective, (which we know from ISO 55000 works) the 5 generic delivery options are:

Asset Delivery Methodology Spectrum Very High Scope /Objectives Definition Very Low/Unknown							
Very High Very Low or Zer	0		Scope /Objectives Definition Tolerance for Changes			Very Low/Unknown Very High/Expected	
Pure Operations	Projectized ions Operations		Pure Project Management		d Project ement	Pure "Agile (a.k.a. "Scientific Method or "Trial and Error	
Objective (Business Case) Defined ~100% Scope Defined >99% Tolerance for Changes Very Low Examples: Oil/Gas Refineries (Mid-Downstream) Food Processing Plants Automobile Manufacturers Telecom Equipment Production		Scope Define Tolerance for Change Examples: Oil/Gas Exploration/Drilli Design-Build or Firm Fixed Any product/service when	Objective (Business Case) Defined =>70-75% Scope Defined >70% - 75% Tolerance for Changes OK within tolerances Examples: Oil/Gas Exploration/Drilling (Upstream) Design-Build or Firm Fixed Price Construction Any product/service where the scope/objectives >75% AND changes within that range are tolerable.		Examples: Pharmace New Softv Biotech Any new p		
Objective (Business Case) Defined 100-75% Scope Defined >99% Tolerance for Changes OK within tolerances			Objective (Business Case) Defined <75% Scope Defined <75% Tolerance for Changes OK within tolerances				
Examples: Underground Mining Operations Commercial Airlines Commercial Transportation (Trucking & Busses) Telecom Cell Site Design & Construction Professional Services Providers (Dentists, Barbers, Lawyers, Architects & Engineers, Auto Mechanics) Farming			Examples: Cost Plus or Cost Reimbursable Contracting Time & Materials Contracting Unit Price Contracting Integrated Project Delivery (IPD) Method "Fast Tracked" or "Hyper Tracked" Projects Copyright Paul D. Giammalvo 2019 Under Creative Commons License BY https://creativecommons.org/licenses/by/4.0/legalcode				

Figure 4 - Asset Delivery Methodology Options¹⁷

¹⁷ Giammalvo, Paul D. (Feb 2019) Posting on a Linked In Discussion <u>https://goo.gl/8omrQC</u> last accessed 02/10/2019

As can be seen in Figure 4, the variables or attributes used to differentiate the primary and transitional delivery options are the degree of scope and/or objective definition combined with the methodology's tolerance for changes and ambiguity.

- 1) Operations This is a well-tested and proven option, appropriate when the SCOPE of work and OBJECTIVES are very well defined AND there is little, or no change expected or tolerated. This option is the more recent development, having been in use successfully since the Industrial Revolution and is now being automated using robots and autonomous machines. Automobile manufacturing is a classic example, but this also applies to the food, pharmaceutical, downstream oil, gas and mining as well as telecom, electrical and other manufacturing applications.
- 2) Projectized Operations This is probably the most common of the Asset Delivery Options as it includes not only operations that are not necessarily purely repetitive but include any operating environments which rely on projects as part of the process. This example coming from Freeport Indonesia is a classic example <u>https://goo.gl/cm8tBT</u> that resulted in documented savings of 6 million USD over a 4-year period and resulted in the project manager being promoted to Vice President.

This model is most prevalent in any professional services firm, where customers or clients either make an appointment or walk in randomly and choose from a set menu of services, each one of which meets the definition of a project and in fact is the core competency. Teachers, Lawyers, Doctors and Dentists, Electricians, Plumbers, Architects, and Engineers, as well as Auto Mechanics along with Commercial Aircraft Pilots and Commercial Truck and Bus Drivers and Farmers, are but a few examples of where projects are part and parcel of the performing organization's ongoing business model.

3) **Projects** - This is a well-tested and proven methodology, appropriate when the SCOPE of work and OBJECTIVES are fairly well defined (70%+), AND some percentage of change can be expected and tolerated. As evidenced by the Pyramids of Giza, the Great Wall of China, the Cathedrals of Europe up to today's Burj Khalifa, this method or process has been around for 5,000 years. This is not as technically advanced as operations, but technology is starting to be used, including the use of drones, autonomous machines and facial recognition. As noted previously, there are many examples where operations have been projectized, particularly in the service industries, such as barbers, hairdressers, dentists, automobile mechanics, lawyers, adjunct professors, carpenters, plumbers, and electricians. Their business model is built around "unique projects." This is the essence of today's "gig economy."



- 4) Integrated Project Management has been around for at least 30 years in construction. It evolved (and continues to evolve) because of the high rates of claims, disputes and litigation in construction, caused by owners not being willing to take the time to define scope >70% or more, yet wanting to transfer the risk to the party best positioned to manage or control the risk and for those risks and opportunities that cannot be allocated, then to share them amongst or between the parties. To try to eliminate the inherent conflicts of interest, various experiments in alternate contracting methods have evolved where the contractor and owner are working together to achieve the results the owner needs or wants while at the same time, yielding a fair and reasonable profit to the contractor. This approach has been called "partnering" or "collaborative contracting" and since 2007, has been known as the Integrated Project Delivery Method or IPD.
- 5) "Trial and Error" or the "Scientific Method" or "Agile" This is also a well-tested and proven methodology, appropriate when the SCOPE of work and/or the OBJECTIVES are not well defined and in fact may not even be fully known or knowable when the project has been initiated. This is by far the oldest of the asset delivery options, having been around since humans tamed fire over a million years ago and invented the wheel some 6,000 years ago. The best example of this is the story of how 3M ended up "inventing" or "discovering" Post It Notes. This is NOT a project delivery method and should not be conflated with project management. These 3 options along with their transitional models are alternative choices that any organization can choose from.

Having identified the 3 Primary and 2 Transitional or Intermediate Asset Delivery approaches, let us explore the 3 Primary methods in more detail, starting with the oldest and most mature.

"Agile" or "Trial and Error" or the "Scientific Method" as an Asset Delivery Option

Evidence that our human ancestors used the "trial and error" method as the basis to tame fire date back over a million years ago, and 6,000 years ago to invent the wheel. During the 12th Century, this "trial and error" method became formally known as the "Scientific Method." While this method dates back to Plato and Aristotle, it is generally agreed that the foundation was formed during the Renaissance Period of the 12th Century, with credit for actually defining the "Scientific Method" going to Francis Bacon (1561-1626).

"Bacon was a successful lawyer and influential philosopher who did much to reform scientific thinking. In his "Instauration Magna," Bacon proposed a new approach to scientific inquiry, which he published in 1621 as the "Novum Organum Scientia rum." This new approach



advocated inductive reasoning as the foundation of scientific thinking. Bacon also argued that only a clear system of scientific inquiry would assure man's mastery over the world."¹⁸

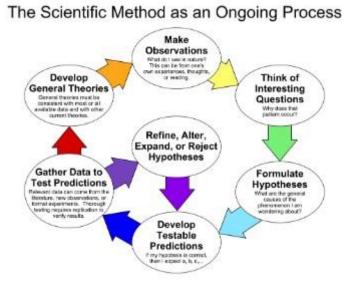


Figure 5 - Scientific Method Illustrated¹⁹

The "Scientific Method" is not technically a PROJECT management methodology or process but a NEW PRODUCT development approach. This "trial and error" method is a valid method that has produced such new products as the telephone (Bell), the light bulb (Edison) and penicillin (Fleming) to name but a few of the many hundreds of thousands of new products created using this iterative process.

Inexplicably, this very same "trial and error" or "Scientific Method" that has played such a key role in the evolution of humankind, today has been reinvented largely by the IT crowd to become what is known as "agile" or "Agile." To "test" the validity of this hypothesis, all one has to do is review the "Agile Manifesto"²⁰ and one can see a large number of the 12 Principles are consistent with the process shown in figure 05. Exactly the same process but given a new name, with each of the ovals shown being equivalent to a "Scrum" or "Sprint". To put the relative absurdity of this "new name for an old process" into context, with organizations such as PMI, APM and others creating certifications for the "Agile" process, supposing we were to name these certifications more appropriately "Certified Trial and Error Professional" or "Certified Scientific Method

²⁰ Agile Manifesto (n.d.) <u>https://agilemanifesto.org/principles.html</u>



¹⁸ William Harris "How the Scientific Method Works" 14 January 2008.

HowStuffWorks.com. <u>https://science.howstuffworks.com/innovation/scientific-experiments/scientific-method.htm</u> 24 January 2019

¹⁹ Ms. Raeon's Biology Website (n.d.) <u>https://raeonscience.weebly.com/the-scientific-method.html</u>

Professional." Are we SERIOUSLY certifying people in knowing and understanding a process we learned (or should have learned!!) in Middle or High School science classes?

Project Management as an Asset Delivery Option

While the NEW PRODUCT DEVELOPMENT processes have been around for well over 6000 years now (think stone and metal tools and weapons in addition to fire and the wheel) evidence for the project management processes which are different from the "scientific method" in so far as they do not REPEAT, but have a defined start and a defined end, have been around for at least 5000 years. Examples include Stonehenge, the Pyramids of Giza, Great Wall of China, the Cathedrals of Europe, the Suez and Panama Canals and include the Burh Khalifa and Saudi Arabia's Kingdom Tower.

At the very highest level of detail, there is near universal agreement that there are 5 processes for every project:

- 1) Initiation
- 2) Planning
- 3) Executing
- 4) Controlling and;
- 5) Closing

Worth noting is these processes are NOT just unique to Projects- That these same high-level processes apply at each PHASE of the Asset Life span; they apply for each and every PROJECT, and they eventually apply down to the Control Account and even the Work Package and Activity Level. The actual documentation to initiate, plan, execute, control and close at each level changes depending upon the level of granularity, but the processes themselves repeat at all levels.



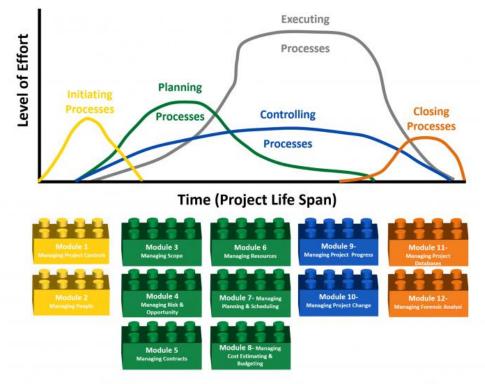


Figure 12 - Guild Process Modules Mapped to the 5 Project Management Process Groups (Applies at the 10,000, 1.000, 100 and 0 Meter or Ground Level) Source: Guild of Project Controls



We also know that not only is there considerable confusion between the PROCESS GROUPINGS and the PHASES of the ASSET LIFE SPAN, but more importantly, at the level where the work is actually EXECUTED, that the processes to "Initiate, Plan, Execute, Control and Close" a control account or work package are very different from one another- that the processes to "initiate, plan, execute, control and close" a commercial flight from City A to City B (which is the classic example of projectized operations) is not even close to the processes to "initiate, plan, execute, control and close" the removal of an inflamed appendix (another example of projectized operations) or the "engineering, procurement and construction (EPC) of a new bridge.

As the processes at the level where the work happens are also "unique" for a given application or context means that project management is NOT a transferable skill set- that the processes to design, procure and construct a bridge are not going to help the pilot in command conduct his/her preflight requirements, take off and navigate the plane to the destination then close out the flight plan upon arrival.

Another important point this brings up is that given the project management processes are already embedded into the training to become a doctor, lawyer, engineer, teacher, carpenter,

http://www.planningplanet.com/guild/gpccar/introduction-to-managing-project-controls Access is FREE of charge but requires filling in a profile which will take you 15-20 minutes.



²¹ Guild of Project Controls (n.d.) Module 1, Figure 12, last accessed 02/10/2019

electrician, plumber, butcher, baker or candlestick maker, what sense does it make to provide training ONLY in project management UNLESS that training is application or context specific? Asked another way, who in their right mind would believe that just because an individual was a great IT project manager that he/she could become the project manager to engineer, procure and construct a bridge? Surely the absurdity of that should be self-evident? Or to drive home the point, would you hire an IT project manager to build your dream home because he/she was successful in the world of IT, or would you seek out a contractor or construction project manager, with a track record of building the kind of homes you were looking for? At some point, we need to forget the marketing hype and promises from the various professional societies and apply some "common sense".

To summarize while the tools and techniques may be similar, the processes telling us when and how to use the tools and techniques are application or context specific, which means that project management cannot and should not be viewed as a generic skill set and project management training, competency development, assessment and certification, licensing or credentialing should be viewed in that context.

Operations Management as an Asset Delivery Option

This brings us to the third primary delivery option, which is "operations" or product management. Relatively speaking this is the more recent set of processes, which developed during the Industrial Revolution.

"The Industrial Revolution, which took place from the 18th to 19th centuries, was a period during which predominantly agrarian, rural societies in Europe and America became industrial and urban. Prior to the Industrial Revolution, which began in Britain in the late 1700s, manufacturing was often done in people's homes, using hand tools or basic machines. Industrialization marked a shift to powered, special-purpose machinery, factories and mass production. The iron and textile industries, along with the development of the steam engine, played central roles in the Industrial Revolution, which also saw improved systems of transportation, communication, and banking."²²

²² Industrial Revolution Author <u>History.com Editors</u>, <u>https://www.history.com/topics/industrial-revolution/industrial-revolution</u> Last Accessed January 25, 2019 Publisher A&E Television Networks Last Updated January 10, 2019 Original Published Date October 29, 2009





Figure 7 - Image of Assembly Line Workers²³

What is important about the Industrial Revolution for us to learn from is that many of the tools and techniques we associate with what has come to be known as "modern project management," while having originated with construction or event project management hundreds if not thousands of years ago, were further developed and refined for use in an operational environment. This cross-pollination and adaption of tools and techniques is important as it continues today, as evidenced by the increasing use of modularization in construction²⁴, standardization of contract documents (i.e. FIDIC, AIA, EJCDC and Consensus Docs) and the standardization of WBS and CBS structures (i.e. Construction Specifications Institute's "Masterformat" and "Uniformat" which has now grown into "Omniclass")

²⁴ See "56 Story Building Constructed in 19 Days" https://www.youtube.com/watch?v=acLSbNxUP3s

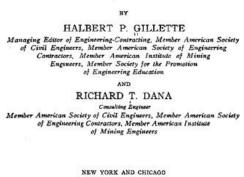


²³ Labor Behind the Label (n.d.) <u>http://labourbehindthelabel.org/who-we-are/</u> last accessed 02/10/2019

Leading practitioners and researchers from the mid to late 1800's into the early 1900's such as Henry Fayol, Henry Gantt, Frank and Lillian Gilbreath as well as the work of Halbert Gillette and Richard Dana who in 1909 wrote "Cost Keeping and Management Engineering: A Treatise for Engineers, Contractors and Superintendents Engaged in the Management of Engineering Construction". (Image 08 to the right) The work of Gillette and Dana is important as it shows clearly how Earned Value Management evolved and how clearly earned value, "pay for performance" and other incentive programs were linked to the use of the various scheduling techniques. (For more on the history of scheduling see "A Brief History of Scheduling- Back to the Future" by Pat Weaver, Mosaic Project Services25)

COST KEEPING AND MANAGEMENT ENGINEERING

A TREATISE FOR ENGINEERS, CONTRACTORS AND SUPERINTENDENTS ENGAGED IN THE MANAGEMENT OF ENGINEERING CONSTRUCTION



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And while the tools and techniques used in these projects may have been mechanized and automated, the fundamental processes to initiate, plan, execute, control and close projects are pretty much unchanged for 5000 years. This was reaffirmed by a research project done between 2004 and 2006 entitled "Rethinking Project Management: Developing a New Research Agenda." This research which the author participated in and contributed to concluded that "project management is a discipline stuck in a 1960's time warp" and that this paper was designed to revisit.

Which raises the questions that given the new product development processes and the project management processes have remained more or less the same for 5000+ years, and given that the tools and techniques are much the same save for mechanization (think of moving the blocks of stone for the pyramids using a crane vs. using hand labor) and that the estimating, planning and project controls functions have been automated (think P6, MSP, CostOS, and Sage) why can't we deliver projects that "succeed" with greater regularity?

²⁵ Weaver, Patrick (2006) A brief history of scheduling https://mosaicprojects.com.au/PDF_Papers/P042_History_of_Scheduing.pdf



Conclusion

At the outset, the intent was to see if "project management is a discipline caught in a 1960's time warp" and what has evolved is that not only the processes of project management but also many of the basic tools and techniques have remained substantially unchanged now well beyond a mere 70 years, but for many hundreds if not thousands of years. Sure, they have been mechanized and automated and computerized, but the processes themselves are truly much as they were when humans tamed fire or invented the wheel. One could argue that the propensity to "initiate, plan, execute, control and close" projects is somehow hard wired into the human psyche- that if we don't have "project" to keep us busy, we invent them. And as evidence, look at the list of "sticky notes" on the door of your refrigerator containing all the "Honey Do" lists

Yet despite over 6000 years of history, it is clear from reading any newspaper around the world that projects are 'failing" with increasing regularity and despite PMI, AACE, IPMA, APM and other professional societies having been around for 60 years or more; there is no evidence of any improvements.

So how much longer are we going to continue to do the same things over and over again and expecting different results? And more importantly, when are we going to capture the lessons learned over the past 6000 years and apply them to today's projects?

We know for a fact that the oil and gas industry has developed a model that, when followed appropriately, results in not only "successful" projects but also the production of successful products and services created, acquired, updated, expanded, maintained and eventually disposed of their organizational assets.²⁶ HOWEVER this model only works if and when we are able to define 70% or more scope and/or objectives defined AND the project is able to tolerate changes within this band. If this is NOT true, then we need to find one of the alternate asset delivery options which are appropriate to the scope/objective definition and tolerance for changes.

The recommendations from this paper are simple-

- We need to pressure PMI, APM, IPMA, APM and other organizations to follow the lead of AACE with their Total Cost Management Framework (TCMF) and the Guild of Project Controls with their Compendium and Reference (GPCCaR) and adopt the Asset centric approach developed by Esso/Diamond Shamrock circa 1955 and still in use today. This means MERGING ISO 55000 with ISO 21500
- 2) Stop positioning the Project Manager as the "star" of the show. The project manager is an important supporting actor, but the real stars of the show are the Asset and Operations Managers in their role as project SPONSORS. Those are the people who make

²⁶ Merrow, Edward W. (2011) "Industrial Megaprojects- Concepts, Strategies and Practices for Success", John Wiley and Son <u>https://goo.gl/tcssPp</u>



the strategic decisions that determine whether a project will or will not enable the organization to "realize any benefits."

- 3) Accept that project management is not the ONLY available delivery system for organizational assets nor is it necessarily the best under all circumstances.
- 4) Hold the project managers and project sponsors legally and financially accountable for the decisions they make. Until or unless there is more accountability, misfeasance, malfeasance and non-feasance by project sponsors, project managers and project team members will continue. Only when we see project sponsors and project managers in handcuffs doing the perp walk on the CNN nightly news will we ever see any serious improvements to deliver "successful projects" and better performing assets from those projects.

While the author realizes that what is being proposed will be considered heresy by some, given that the USA and much of Europe are bankrupt, with the economies of Japan and even China being challenged, we really don't have much choice other than to admit what we have been advocating for the past 50 - 60 years is not working, and only a major change in thinking is going to fix the problem.

References

See Footnotes



About the Author



Dr. Paul D. Giammalvo, CDT, CCE (#1240), MScPM, MRICS, is a Senior Technical Advisor (Project Management) to PT Mitratata Citragraha. (PTMC), Jakarta, Indonesia. <u>www.buildproject-management-competency.com</u>. He is noted for the development and delivery of graduate level, blended learning curricula designed for the mid-career path, English as Second Language (ESL) professionals to develop competency in the local practitioner and build capacity for the local organizations. For 25+ years, he has been developing and delivering Project Management training and consulting throughout South and Eastern Asia Pacific, the Middle East, West Africa, and Europe.

He is also active in the Global Project Management Community, by playing a "thought leadership" role for the Association for the Advancement of Cost Engineering International, (AACEI) <u>http://www.aacei.org/ since 1991</u>; He has also been active in two IPMA member organizations: The Green Project Management Association (GPM) <u>http://www.greenprojectmanagement.org/</u> where he served on the Certification Board of Directors for two years and the American Society for the Advancement of Project Management <u>http://www.asapm.org/</u> for which he served for four years on the BoD as Director of Marketing. He also sat on the Board of Directors of the Global Alliance for Project Performance Standards (GAPPS), <u>www.globalpmstandards.org</u>, Sydney, Australia and is active as a regional leader. Currently, he is a compensated consultant to the International Guild of Project Controls. <u>http://www.planningplanet.com/guild_</u> as the primary author of their "Compendium and Reference" as well as the chief architect of their competency-based credentialing program. <u>http://www.planningplanet.com/guild/certification</u>

He has spent 35 of the last 50 years working on large, highly technical international projects, including such prestigious projects as the Alyeska Pipeline and the Distant Early Warning Site (DEW Line), upgrades in Alaska and the Negev Airbase Constructors, Ovda, Israel and the Minas Oil Field in Rumbai, Sumatra. His current client list includes Fortune 500 major telecommunications, oil, gas and mining companies plus the UN Projects Office and many other multi-national companies, NGO organizations and Indonesian Government Agencies.



In addition to 45+ years of hands-on field experience, Dr. Giammalvo holds an undergraduate degree in Construction Management, his Master of Science in Project Management through the George Washington University and was awarded his PhD in Project and Program Management through the Institute Superieur De Gestion Industrielle (ISGI) and Ecole Superieure De Commerce De Lille (ESC-Lille) under the supervision of Professor Christophe Bredillet. "Dr. PDG" can be contacted at <u>pauldgphd@gmail.com</u>.

