



A monthly newsletter of the Energy Facility Contractors Group's Project Delivery Working Group

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Earned Value Tailoring and Scalability

Many questions about Tailoring and Scalability have been asked over the years. The questions are usually centered on which contractors at which sites are using a tailored approach to earned value. Other questions ask when would tailoring or scalability be used and what would it look like? The reality is Tailoring and Scalability have very different applications. A closer look at each helps to understand when and how each could be applied. While Tailoring and Scalability are different, each approach is intended to optimize and align the effort and cost with a specific mission, project, or program objective.

Tailoring as defined in 413.3B "Program and Project Management for the Acquisition of Capital Assets" - [413.3-B Chg5](#)

- Tailoring is necessary for the efficient delivery of projects and should be applied to all projects considering size, complexity, cost, and risks.
- Tailoring does not imply the omission of requirements, and requirements must be addressed to the extent necessary and practical.
- Tailoring may involve consolidation or phasing of CDs, substituting equivalent documents, using a graded approach to document development and content, concurrency of processes, or creating a portfolio of projects to facilitate a single CD or Acquisition Strategy (AS) for the entire group of projects.
- Tailoring may also include adjusting the scope of Independent Project Reviews (IPRs) and External Independent Reviews (EIRs), delegation of acquisition authority, and other elements.
- Major tailored elements such as consolidating or phasing CDs or delegation of Project Management Executive (PME) duties must be specified in the Project Execution Plan (PEP) or the Tailoring Strategy and approved by the PME.
- For Hazard Category 1, 2, and 3 nuclear facilities, the Tailoring Strategy must include the approach to satisfying DOE-STD-1189-2016 safety document development.

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EV Scalability: 413.3B definition and guidelines

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Table 2.1 CD-1 Requirement – Prior to CD-1:

- Approve a preliminary Project Execution Plan (PEP). The Tailoring Strategy, if required, can be included in the PEP or placed in a separate document. (Refer to DOE G 413.3-15.)

Appendix C:

- Tailoring should be applied to a project's ISMS to enable tasks to be managed at the appropriate levels enabling those closest to the task plan to assume responsibility for planning and performance. Refer to DOE P 470.1A for more information.
- Tailoring is an element of the acquisition process and must be appropriate considering the risk, complexity, visibility, cost, safety, security and schedule of the project.
- Tailoring must be identified as early as possible prior to the impacted CD and must be approved by the PME.
- In the Tailoring Strategy or the PEP, the FPD will identify those areas in which a project is planned to be tailored as well as an explanation and discussion of each tailored area.

- Tailoring does not imply the omission of requirements in the acquisition process or other processes that are appropriate to a specific project's requirements or conditions.
- Tailoring may involve consolidation or phasing of CDs, substituting equivalent documents, graded approach to document development and content, concurrency of processes, or creating a portfolio of projects to facilitate a single CD or AS for an entire group of projects.
- Tailoring may also include adjusting the scope of IPRs and EIRs, delegation of acquisition authority and other elements. Major tailored elements such as consolidating or phasing CDs or delegation of PMEs should be specified in the PEP or the Tailoring Strategy.
- Tailoring does not apply to nuclear safety requirements, which use a "graded approach" as prescribed in 10 CFR Part 830, Nuclear Safety Management. Details on developing a tailoring approach that could be applied are provided in DOE G 413.3-15.

Environmental Management Cleanup Projects.

- Environmental Management (EM) Cleanup Projects are frequently the antithesis of construction projects in that EM is deactivating, decommissioning, remediating, stabilizing and disposing (also known as Environmental Restoration) versus constructing.

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EV Tailoring and Scalability: More in the NDIA Guide

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- These projects are conducted under a variety of regulatory processes and site-specific clean-up agreements which are legally binding and specify the process, end states, decision points and approvals required.
- The TRAs plays an important role in determining the solution. For these projects, the performance and scope parameters and start/end dates are based on negotiated terms with Federal and/or State regulatory agencies. As a result of this variability, it is not possible to draw a single crosswalk to the traditional construction project that would be applicable to all EM Cleanup Projects.
- Hence, a tailored approach is necessary for each project. As such, the FPD will submit a Tailoring Strategy, which may be included in the PEP, to the PME for approval. See DOE G 413.3-15 for additional guidance.

Attachment 2 - Definitions

- Tailoring: An element of the acquisition process and must be appropriate considering the risk, complexity, visibility, cost, safety, security, and schedule of the project.
- Tailoring does not imply the omission of essential elements in the acquisition process or other processes that are appropriate to a specific project's requirements or conditions.

Conclusion: Earned value tailoring language does not exist in 413.3B

Scalability as defined in the National Defense Industrial Association (NDIA) Integrated Program Management Division (IPMD) Earned Value Management System Guideline Scalability Guide.

Bottom line, up front... Scalability *"...is intended to support any agency or organization which does not have a contractual requirement to implement EVMS, but would still benefit from using EVM practices by implementing a scaled EVMS."*

Learn more about scalability in the [NDIA EVMS Scalability Guide](#)

The PDWG is committed to evaluate other opportunities to optimize project effectiveness while meeting the requirements for sound project management of the Department of Energy contracts entrusted to its contractors. The PDWG 2020 Annual Work Plan includes a strategic initiative to assess "tailoring". Stay tuned.

Behavior-Based Project Management

Project intelligence starts with the computer between the ears

Meet the minds behind the science

In last month's issue we introduced Behavior-Based Project Management, an emerging field that combines cognitive and neuroscience with project management to get more accurate prediction in planning and forecasting, and more effective project delivery. This is a promising new discipline that benchmarks off key sciences such as Behavioral Economics, using neuroscience, forecasting and prediction sciences, risk and uncertainty sciences, cognitive sciences, social psychology, and many more. In this issue, as promised, we'll introduce you to a few of the key scientists who have helped pave the way, as well as some key reading and other tidbits you might find interesting.

Behavior-Based Project Management – Benchmarking from the Best

Meet Daniel Kahneman, a Nobel Laureate who won the prize in 2002 for his work in behavioral science that led to the creation of Behavioral Economics. Dr. Kahneman (age 85) is considered one of the most influential and leading modern psychologists. He and Amos Tversky were a team that, along with Richard Thaler, helped form an entire new discipline and challenge centuries of economic theory, eventually leading to science that explained why people make decisions the way they do. To read more about Kahneman and Tversky's work, check out the book [The Undoing Project](#). Another book written by Kahneman is [Thinking Fast and Slow](#), an excellent book on how people think, and is highly recommended by just about every expert in the field.



Dr. Daniel Kahneman

Another great scientist and Nobel Laureate (2017) who helped "invent" Behavioral Economics is Richard Thaler. While Kahneman and Tversky did much of the foundational work in behavioral science, Dr. Thaler was key in bringing and applying much of science to the business world, being a pioneer that had to face many of the naysayers head-on to challenge the traditional way of thinking and establish a field that showed just how irrational humans can be in business decision-making.

I was lucky enough to meet Dr. Thaler in 2017 at the Society for Judgment and Decision Making conference. If you want to read some really good books by Thaler, there's [Misbehaving](#) and [Nudge](#). *Misbehaving* is about his journey to create Behavioral Economics, and *Nudge* is about choice architecture, the science of debiasing



Dr. Richard Thaler (left) and Josh Ramirez

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Meet the Scientists: The brains of Behavior-based Project Management *Continued from previous page*

decision-making by creating defaults and routines where people make better decisions by design. He also plays a short cameo in the movie *The Big Short*, where he explains to Selena Gomez how people make bad financial decisions. If you haven't seen the movie, it's about the 2008 market crash, and Thaler's short part helps explain the human behavior that drove the crash.

Another influential scientist is Dan Ariely. Dr. Ariely has been a pivotal leader in the application of behavioral science in a number of domains. If you want to learn a lot about behavioral science in business, read Dan's books and watch some of his TED talks. While Thaler and Kahneman have been key in laying the foundations, Ariely has been instrumental in applying and popularizing the science. Some of Ariely's books include [Predictably Irrational](#), [The Upside of Irrationality](#), [The Honest Truth About Dishonesty](#), and [Dollars and Sense: How We Misthink Money and How to Spend Smarter](#), to name a few. His TED talks include [Are We In Control of Our Decisions?](#), [What Makes Us Feel Good About Our Work?](#), and [Our Buggy Moral Code](#). He also has a great documentary that I highly recommend, [\(Dis\)Honesty: The Truth About Lies](#).



Dr. Dan Ariely

The last (but not least) scientist I want to mention is [Tali Sharot](#). Her research is some of the best in the field in terms of prediction, and is definitely at the top of my list. As a cognitive neuroscientist (how humans make decisions, viewed through the brain), Dr. Sharot's work is primarily in decision-making in the domains of optimism and influence. Her work is key to



Dr. Tali Sharot

research areas such as optimism in project planning, forecasting, and risk. Her books include [The Optimism Bias](#) and [The Influential Mind](#). And if you do nothing else today, go watch her documentary [The Optimism Bias](#); it's amazing!

— Author Josh Ramirez is a Ph.D. candidate and project manager in the Washington River Protection Solutions' Earned Value Management System Compliance and Reporting organization

It is Not One World

In this country, most of industry is requirement and rule based. And while we often complain about the rules and the associated cost, it is sometimes good to pause and take a look at what our industry could look like without regulation. To view the video, enable 3D content viewing and then save this pdf to your computer. Reopen the pdf and then click on the TV icon at right to open the video.



Just for Fun: January's Notable Events and Famous Birthdays

1 — The Julian calendar took effect (45 B.C.), patriot Paul Revere was born (1735), and the ball was first dropped at Times Square in New York City (1908)

2 — Georgia became a state (1788)

3 — King Tut's tomb was discovered (1924), the March of Dimes was founded (1938), actor Mel Gibson was born (1956), Alaska became a state (1959), and quarterback Eli Manning was born (1981)

4 — Sir Isaac Newton was born (1643), Utah became a state (1896), and the euro made its debut (1999)

5 — The Yankees purchased Babe Ruth from the Red Sox (1920), construction on the Golden Gate Bridge began (1933), and the space shuttle program was authorized (1972)

6 — Joan of Arc was born (1412), Samuel Morse demonstrated the telegraph (1838), New Mexico became a state (1912), Wheel of Fortune debuted on TV (1975), and quarterback Jameis Winston was born (1994)

7 — The first U.S. presidential elections were held (1789), TV personality Katie Couric (1957), and actors Nicolas Cage (1964) and Jeremy Renner (1971) were born, and President Clinton's impeachment trial began (1999)

8 — Singers **Elvis Presley** (1935) and David Bowie (1947) were born

9 — President Richard Nixon was born (1913), and Apple launched iTunes (2001) and the iPhone (2007)

10 — The world's first subway system opened in London (1863), singer Rod Stewart (1945) was born, the United Nations met for the first time (1946), and boxer George Foreman was born (1949)

11 — The Grand Canyon was declared a national monument (1908), American League baseball adopted the "designated hitter" rule (1973)

12 — Amazon founder Jeff Bezos was born (1964), **Batman debuted on television** (1966), and a magnitude 7.0 earthquake struck Haiti (2010)



14 — The Treaty of Paris officially ended the American Revolutionary War (1784), rapper LL Cool J (1968) and actor Jason Bateman (1969) were born, the Miami Dolphins completed the only undefeated season in NFL history (1973), the Simpsons debuted on TV (1990), and basketball legend Michael Jordan retired (1999)

15 — Civil Rights activist Dr. Martin Luther King Jr. was born (1929) and the first Super Bowl was played (1967)

16 — The PGA was formed (1916), Prohibition went into effect (1919), **the Chevy Corvette was first unveiled** (1953), and Operation Desert Storm began (1991)



17 — Statesman Benjamin Franklin was born (1706), Americans overthrew the Hawaiian monarchy (1893), and boxer Muhammad Ali (1942) and former first-lady Michelle Obama (1964) were born

18 — Actor Kevin Costner was born (1955)

19 — Writer Edgar Allen Poe (1809) and singer Dolly Parton (1936) were born

20 — The "British Invasion" began when the Beatles released their first album in the U.S. (1964), the Iran Hostage Crisis ended (1981), and quarterback Nick Foles was born (1989)

21 — The Kiwanis Club was formed (1915), and golfer Jack Nicklaus was born (1930)

22 — Abortion was legalized in the U.S., and President Lyndon Johnson died (1973)

23 — The world's deadliest earthquake killed 830,000 in China (1556), statesman John Hancock was born (1737), and **the Frisbee was introduced** (1957)



24 — Singer Neil Diamond was born (1931), beer was first sold in cans (1935), actor John Belushi was born (1949), and British statesman Winston Churchill died (1965)

25 — Transcontinental phone service began in the U.S. (1915), the first Winter Olympics were held in Chamonix, France (1924), the first Emmy Awards were presented (1949), and singer Alicia Keys was born (1981)

26 — The dental drill was patented (1875), actor Paul Newman was born (1925), television was first demonstrated to the public (1926), and guitar god Eddie Van Halen (1955) and hockey legend Wayne Gretzky (1961) were born

27 — Composer Wolfgang Amadeus Mozart was born (1756), the National Geographic Society was founded (1888), and **three astronauts died in a launch pad fire aboard Apollo 1** (1967)



28 — The space shuttle *Challenger* exploded, killing all seven crew members (1986)

29 — President William McKinley was born (1843), Kansas became a state (1861), baseball's American League was founded (1900), the first members of the Baseball Hall of Fame were elected (1936), and TV personality Oprah Winfrey was born (1954)

30 — President Franklin D. Roosevelt was born (1882), Adolf Hitler was named chancellor of Germany (1933), Mohandas Gandhi was assassinated (1948), musician Phil Collins was born (1949), **the Vietnam War's Tet Offensive began** (1968), and actor Christian Bale (1974) was born



31 — Slavery was abolished in the U.S. (1865), baseball legends Jackie Robinson (1919) and Nolan Ryan (1938) were born, President Truman announced the development of the hydrogen bomb (1950), and singer Justin Timberlake was born (1981)

PDWG Goings-On

Recent events/meetings held in December:

ASU Maturity Study Core Team fifth meeting in Phoenix, January 15 and 16 .

Upcoming events:

ASU Maturity Study Core Team sixth meeting in DC, March 2020

Check out the latest DOE Project Management newsletter!

(Click on the banner below)

