**Week4 Agile and Traditional Methods Podcast Script**

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SYS 5013: System Engineering Analysis

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**Introduction**

To illustrate the differences between Agile and traditional methods in modern project management and software engineering, I’ve crafted a dialogue between me, an Agile advocate and the Host of the podcast. As the pair partner is not available in this group project, there is a virtual guest speaker who will represent the traditional SDLC approach. However, I will record the podcast all by myself. In my solo podcast, I will read both characters' statements to convey the conversation effectively using Panopto. You can find the Panopto link below: <https://sdfasdf.com/asf.mp4>

**Dialogue**

Me (Agile Advocate/Host):

"Welcome to the 'Innovate or Perish' podcast, where we break down the trends and techniques that shape project management and software engineering today. I'm your host, H.Yang, and in this episode, we’ll be comparing two major approaches: Agile and Traditional project management. To help us navigate this discussion, we have a special guest, Tim, an advocate for Traditional methods. Tim, welcome to the show."

Tim (Traditional Advocate/Guest):

"Thanks, Yang. I’m excited to get into it."

Me:

"Before we dive into the nuts and bolts of Agile versus Traditional, let’s start with a real-world example that got everyone talking — the Boeing 737 MAX crashes. This tragedy shook the aviation industry and raised some tough questions about engineering, management, and safety. Tim, as a supporter of Traditional methods, how do you view this situation?"

Tim:

"The Boeing 737 MAX disaster is a stark reminder of why structured, thorough planning is so critical in industries where safety is non-negotiable. In a project like this, every phase, from design to testing, must be airtight. Traditional project management, like Waterfall, emphasizes careful, sequential progress. You don’t move on to the next phase until the current one is complete. That level of control is necessary when lives are at stake."

Me:

"I hear you, but I’d argue Agile could have prevented some of these issues by encouraging more frequent testing and feedback loops. Agile’s iterative approach is perfect for identifying problems early and responding quickly. Without waiting until the end of a long, linear process, you can constantly check your work in progress (WIPs), adjust, and improve along the way. In a situation like Boeing, those early iterations could have highlighted the MCAS system issues before they became catastrophic."

Tim:

"That’s an interesting take, Yang, but in high-risk industries like financial industry and aerospace, constant changes mean more challenges to risk control. The linear process of Traditional methods ensures that every aspect is rigorously tested and validated before you move forward. With Agile, you run the risk of shifting things too quickly, potentially sacrificing something else, like quality or critical safety protocols."

Me:

"I get that, but Agile doesn’t mean recklessness. It’s about flexibility—being able to pivot when you need to. In the fast-paced world of software engineering, for example, requirements are always changing, and Agile allows teams to adapt quickly. In contrast, Traditional methods can be too rigid, often leading to delays or delivering something that’s outdated by the time it’s ready."

Tim:

"That’s true for software, but in industries like aerospace, healthcare, or automotive, stability and predictability are paramount. The meticulous nature of Traditional project management allows for thorough risk assessments and long-term planning, which Agile’s fast iterations may not provide. When you’re designing something like an airplane or a medical device, you can’t afford to make changes on the fly. Every decision needs to be carefully weighed, tested, and retested."

Me:

"Absolutely, and that’s why I believe both methods have their place. In software engineering, Agile’s focus on adaptability allows for rapid innovation, but I see how in high-risk fields, the more controlled environment of Traditional methods might be necessary. Still, I think Agile could add value by incorporating continuous feedback into even highly structured environments. It’s about striking the right balance."

Me:

"Let’s take a moment to define both approaches for our listeners. Tim, can you give a quick overview of the Traditional method?"

Tim:

"Sure. Traditional project management, like Waterfall, is a linear, phased approach. You start by gathering all your requirements upfront, move into design, then development, testing, and finally deployment. The idea is that each phase is fully completed before moving to the next, which works well when you have a clear, fixed scope and need to minimize risks by following a strict plan."

Me:

"On the other hand, Agile is about flexibility and collaboration. Instead of locking everything down upfront, Agile teams work in short cycles, or sprints, delivering small, functional pieces of a project regularly. This allows them to incorporate feedback, adapt to changes, and continuously improve the product throughout the process. It’s a more fluid, iterative way of working, which is why it’s so popular in software development."

Tim:

"And that’s where we see the contrast. Agile thrives in environments where change is expected, like tech, but it can be problematic when working with fixed requirements. In industries where safety and precision are vital, Traditional methods provide the control needed to avoid costly mistakes or life-threatening risks."

Me:

"True, but Agile isn’t just about responding to change for the sake of it—it’s about managing change effectively. The key strength of Agile is its ability to surface issues earlier, allowing for course correction before things spiral out of control. For instance, frequent testing in Agile could have caught those MCAS system errors at Boeing much sooner. Agile’s emphasis on collaboration also ensures that teams communicate constantly, catching misalignments before they become bigger problems."

Tim:

"That’s valid, but in projects where human lives are on the line, there’s little room for error, and Agile’s flexibility might actually create more risks by introducing changes too late in the game. When things are fixed, as they often are in industries like aerospace or healthcare, a more conservative, Traditional approach ensures that nothing gets overlooked."

Me:

"Fair point. I think it’s clear that Agile and Traditional methods each have their strengths, depending on the context. Let’s wrap this up by looking at the bigger picture. Can these two approaches coexist?"

Tim:

"Absolutely. I believe there’s room for both approaches to thrive. Traditional methods are essential for industries where safety, compliance, and long-term planning are critical. But I can see how Agile can complement these industries by introducing more regular feedback loops without compromising safety. It’s about finding the right balance between flexibility and control."

Me:

"I couldn’t agree more. Agile brings speed and adaptability, while Traditional methods offer stability and thoroughness. In the end, the right approach depends on the project, the industry, and the level of risk involved. They may seem like opposites, but I think Agile and Traditional methods can work together, each bringing their own strengths to the table."

Me:

"That’s all the time we have today. Thanks so much to Tim for sharing your insights on Traditional project management. I think we’ve both made a good case for why Agile and Traditional methods can coexist in different industries. And thank you, listeners, for tuning in. Until next time, keep innovating, and remember—there’s no one-size-fits-all solution when it comes to project management."

**References**

George, B. (2024, January 24). Why Boeing’s Problems with the 737 MAX Began More Than 25 Years Ago. *Harvard Business School*. <https://hbswk.hbs.edu/item/why-boeings-problems-with-737-max-began-more-than-25-years-ago>