

Human Centered Projects and Survivorship Bias

The Perceived Success of Project Outcomes?

By

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Abstract

Due to the bias that process design demands, we forget the example given by failed projects. The tendency to focus on success was first noted during WWII and named Survivorship Bias. This means that as project professionals, we tend to look at projects that completed successfully to identify desirable patterns for repeatability in process and practice. This leads project professionals to seek out patterns based on successful past practice modeled by successful leaders. Project Managers are trained and heavily focused on Scope, Schedule, and Cost. Perhaps the common constraints and practices of project management may be positively impacted by human centered management practices regardless of the success of the process design.

HUMAN CENTERED PROJECTS AND SURVIVORSHIP BIAS

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What is Human-Centered?

The Cambridge Dictionary online defines *Human Centered* as describing the design of technology and other digital systems such that humans may easily use and understand the function (Human-Centered, n.d.). The basis of the understanding is deep knowledge and clarity regarding the needs of the user and the highly valued attributes of the technology in use (User Experience Basics, 2014). In defining usability for a user as an acceptable user experience (UX), the technology or system must present as simple and accessible. It must fulfill the user's need with desirable, original, and trusted content (User Experience Basics, 2014). Additionally, the desired content needs to be findable (User Experience Basics, 2014).

When discussing usability, it turns to how well the technology or system aids the user in achieving their goal (Usability Evaluation Basics, 2014). Several factors affect the determination of usability, such as the ability of the user to understand the trajectory through the architecture to the desired content or outcome and the ease with which one may learn the human interface (Evaluation Basics, 2014). In addition, a part of the learning process is the extent to which the user may remember the navigation and functions of the technology and the efficiency to which the product aids in gaining the desired outcome (Usability Evaluation Basics, 2014).

Being Human

To fully grasp the concept of Human Centeredness and Usability, we need to ground the conversation on being human. Phillips (2015) focuses the discussion of humanity as the whole human to include the desires of the soul, or as Maslow describes, the human attraction to the gratification of basic needs (1948). As Maslow (1948) notes, when the fulfillment of needs

remains unsatisfied, the full faculty of that person is pressed into service to satisfy the unmet need. Maslow continued, saying only satisfiers may fulfill needs (1948).

Phillips (2015) clarified this point in that to be human is heavily dependent on a focus on self and a predisposition toward fulfilling the desires of self. One may visualize this point by Phillips in a story of the denial of water to a person dying of thirst to ensure that at least one person in the party will survive rather than both perishing for lack of hydration (2015). Phillip's story, while very utilitarian in nature, reinforces Maslow's Hierarchy of Needs as explained by McLeod, who expressed that one focuses on the primary physiological and safety needs first and will consider the higher social needs of the community only once these basic needs are met (2007).

In 2006, Budner redefined ambiguity as a fundamental threat to the human condition as a lack of structure or organization, causing a person to view the situation through a lens that lacks the typical societal or cultural cues to provide context. Budner defined the situational condition of ambiguity as the absence of cues, too many cues for immediate processing and conclusion, or contradictory cues (2006). With this in mind, we realize that the early stages of any project are fraught with ambiguity. Thus one may perceive a threat to one's livelihood, the basic needs for physiological fulfillment and security of the project participant.

Frisch and Baron (1988), while defining ambiguity as the gap in the relevant and necessary information concerning a predicted probable outcome, wrote that the weight of evidence, or the expectation to which one perceives their knowledge of the information is high, affects the perceived gap in information. In decision-making, when the perceived weight of evidence is low, the desire to close the knowledge gap increases. Additionally, Frisch and Baron explained that all decisions and probability outcomes are subjective; therefore, decisions with an

unknown level of risk are often avoided (1988; Osmont, Cassotti, Agogue, Houde, & Moutier, 2015).

In the case of projects, team members often fulfill more than one role, thus increasing the potential ambiguity regarding decision-making (Wise, 2013). Additionally, and potentially validating the Tuckman team model regarding onboarding new team members to a project, intentional ambiguity in the onboarding process may add to the level of incivility and, therefore, stress perceived by team members (Tuckman, 1965; Khan, 2013).

A project is a unique, timeboxed endeavor to produce an end product within a specified set of constraints, including scope, schedule, and cost. Inherent to this discussion of project management is changing. Every project, by definition, initiates a change to the status quo, thus increasing the ambiguity and uncertainty in the work environment (Thiry, 2011).

A technologically-centered paradigm has dominated the approach to project management for decades. The Project Management Body of Knowledge (PMBOK) creates a framework for understanding, building, executing, controlling, and closing a project. This framework is process oriented and provides a global expectation for the profession we call project management. Work Breakdown Structures (WBS), a hierarchical decomposition of the project, are designed around the essential elements of a project and defined as the detailed deliverables, activities, and scheduling components of the project. The Project Management Institute suggests that one constructs the WBS using project phases, significant deliverables, and subcomponents. In the conversation regarding the project management profession and buried in the PMBOK is the participation of humans and the inherent involvement of people as a resource. As project management professionals, we must also understand team members as holistic individuals with personality.

Projects are notoriously ambiguous in the initiation and planning phases. During the project, a discovery process elucidates the expectations, requirements, scope, cost, and schedule. During this time of discovery, a team member's aversion to risk and tolerance of ambiguity may affect their overall participation.

Personality

Writing in 1931, Allport sought to define one's personality by the human traits portrayed through the behaviors or habits of the individual. Following on the definition of personality traits as formed through habit, Allport further refined the definition as integrating two or more habits into commonly displayed behaviors that one may prescribe as independent traits (1931). By viewing personality through the lens of traits, Allport purported, one may discuss personality from an individual or population perspective (1931).

There is common agreement that effective decision-making requires the skill referred to as ambiguity tolerance (Endres, Showdhury, & Milner, 2009). Individuals naturally differ in their tolerance for ambiguity (AT) and, therefore, the amount to which AT affects their perceived stress and conflict (Endres et al., 2009). Williams (2001) noted that increasing social group membership might reduce stress and team conflict. Additionally, as leaders recognize and articulate the amount of stress project members encounter, team members are less likely to perceive other members' behaviors and personality conflicts as troublesome (Williams, 2001).

Emotional Intelligence

In a review of Cherniss and Adler, Fox (2002) noted the necessity of skill among team members in identifying and processing information related to emotions in self and others which may, in part, be a predictor of team success (Jordan & Lawrence, 2009). According to Folkman and Lazarus, emotion is a needed mitigating means by which project stress is processed (1988).

Research indicates a negative relationship between dysfunctional stress and organizational effectiveness (Allen, Hitt, & Greer, 1982).

Survivorship Bias

According to Gavin (2013), a young and brilliant mathematician working for the United States named Abraham Wald sought to find any means of gaining an advantage against the Axis powers during World War II. As a statistician, Wald studied the damage to Allied bombers as they daily pounded Nazi Germany. Gavin wrote that the attrition rate of Allied aircraft was devastating, so engineers looked to find new ways to armor bombers to give the aircraft a greater survivability rate (2013). In a stroke of genius, Wald noticed a distinctive pattern of bullet strikes on surviving aircraft. Due to this, engineers proposed that the pattern suggested that engineers should armor the aircraft at the point of the greatest concentration of strikes (Gavin, 2013). Wald challenged the engineers to see the missing pattern, what happened to the aircraft that did not survive, and reinforce those points. This pattern, Gavin says, describing Wald's response, is suggested by the missing data.

Wald noticed that the typical response to such patterns of surviving examples in a population prompted a response based on the survivorship pattern (Gavin, 2013). Gavin described the tendency to respond to the pattern of surviving members of a population as Survivorship Bias (2013). Gavin's point is the need to understand better the pattern revealed by the sample of victims, suggesting the best response may be to see what is missing (2013). This same failure to notice the sample of failed firms in investments affects the choice of traders and investors (Blitzer, 1995).

Persistently uncertain and without closure, Ambiguous loss is insistent stressful (Boss, Roos, & Harris, 2021). This paper postulates that the missing sample may be the humanity of

team members as an element in the project development cycle. What pattern is suggested by those missing from the surviving project sample? One may see the project team members taking hits continuously, stressors related to the attempts at breaking down the work into workable, bitesize pieces. One may also see holes in the team, those burned out, seeking a less stressful lifestyle – a work-life balance. The Survivorship Bias may cause one to conclude that hard work, better tools, and time may solve the problem. However, could the realization that people – a human-centered approach – the realization that people require emotional support may be a necessary project skill – a human-centered project methodology?

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