**GLOSSARY**

**Module 1: Project Management Foundations**

- **Agile**: A project management methodology that emphasizes an iterative approach to product development, with the project specifications evolving along with the customer's notion of the software requirements. There are many flavors of Agile, but the most widely used is Scrum
- **Behavioral economics**: According to OxfordDictionaries.com, "a method of economic analysis that applies psychological insights into human behavior to explain economic decision-making"
- **Geometric order**: A type of order identified by the French philosopher Henri Bergson that is characterized by linear development, clear cause and effect, and predictable events
- **Integrated project delivery (IPD)**: A means of contractually aligning stakeholders in a construction project in a way that emphasizes close collaboration, with the goal of delivering value as defined by the customer. IPD is inspired by Lean and relies on a type of contract known as a multi-party agreement, which explains each participant's role in the project
- **Lean**: A business model and project management philosophy that offers a means to streamline projects while allowing for the flexibility required to deal with unexpected events. It emphasizes the elimination of waste through the efficient flow of work from one phase of a project to another
- **Living order**: A type of order identified by the French philosopher Henri Bergson that is characterized by rapid change and unpredictable events
- **Project**: A "piece of planned work or activity that is completed over a period of time and intended to achieve a particular aim"(Cambridge English Dictionary 2018)
- **Project outcome**: In its narrowest sense, a project's measurable output—whether that's a building, a software application, or a part for a fighter jet. In a broader sense, the impact a project has compared to its larger goals
- **Project success**: The degree to which a project is done well. Stakeholders' evaluation of project success is a subjective judgement, varying depending on their perspective, and typically changes over time
- **Project management**: The "application of processes, methods, knowledge, skills, and experience to achieve the project objectives" (Association for Project Management 2018)
- **Value:** In ordinary conversation, a generic term that refers to the overall worth or usefulness of something. But in Lean, value is only meaningful "when expressed in terms of a specific product (a good or a service, and often both at once) which meets the customer's needs at a specific price at a specific time" (Womack and Jones 2003, 16). In other words, value is defined by the customer

**Module 2: Strategy for Project Management**

- **Capacity**: The "maximum level of output that a company can sustain to make a product or provide a service. Planning for capacity requires management to accept limitations on the production process. No system can operate at full capacity for a prolonged period; inefficiencies and delays make it impossible to reach a theoretical level of output over the long run" (Investopedia n.d.)
- **Exit champion**: A manager who is charged with advocating the end of a project if he or she thinks that is in the best interests of the organization, regardless of the desires of the project team members
- **Groupthink**: A type of cognitive bias that causes people to adopt a belief because a significant number of people already hold that belief

- **Operational effectiveness**: Any kind of practice which allows a business or other organization to maximize the use of their inputs by developing products at a faster pace than competitors or reducing defects, for example (BusinessDictionary.com)
- **Portfolio optimization**: The "difficult and iterative process of choosing and constantly monitoring what the organization commits to do" (Morgan, Levitt, & Malek, 2007, p. 167)
- **Portfolio**: The "array of investments in projects and programs a company chooses to pursue" (Morgan, Levitt and Malek 2007, 3)
- **Program**: "A cluster of interconnected projects" (Morgan, Levitt and Malek 2007, 9)
- **Project**: The "temporary initiatives that companies put into place alongside their ongoing operations to achieve specific goals. They are clearly defined packages of work, bound by deadlines and endowed with resources including budgets, people, and facilities" (Morgan, Levitt and Malek 2007, 3)
- **Project champion:** A project team member who serves as the project's chief advocate, especially during the early days of planning. The project champion often becomes the project manager, but not always
- **Satisfice**: A term devised by Nobel Prize winning economist Herbert Simon (by combining "satisfy" and "suffice") to describe a realistic form of decision-making, in which people accept "the 'good-enough' solution rather than searching indefinitely for the best solution" (Little 2011)
- **Set-based concurrent engineering**: An approach to project selection that relies on not filtering projects too quickly, but rather developing multiple solutions through to final selection just before launch. This approach is expensive and resource-hungry, but it is argued that the costs of delay by narrowing to a single solution too soon—which subsequently turns out not to be viable (or sub-optimal)—is greater than the resources expended on multiple, parallel developments
- **Strategy**: According to Merriam-Webster, "a careful plan or method for achieving a particular goal usually over a long period of time"
- **Sunk cost fallacy**: The tendency "to continue investing in a losing proposition because of what it's already cost" (Warrell 2015)

**Module 3: Project Initiation, Scope, and Structure**

- **Business case**: An "argument, usually documented, that is intended to convince a decision maker to approve some kind of action. The document itself is sometimes referred to as a business case. As a rule, a business case has to articulate a clear path to an attractive return on investment (ROI). At its simplest, a business case could be a spoken suggestion…. For more complex issues, a business case should be presented in a carefully constructed document. A business case document should examine benefits and risks involved with both taking the action and, conversely, not taking the action. The conclusion should be a compelling argument for implementation" (TechTarget n.d.)
- **Context**: According to Merriam-Webster, the "situation in which something happens: the group of conditions that exist where and when something happens"
- **Idea averaging**: Taking a little from one idea, and a little from another, and a little from another—without fully committing to any
- **Linear responsibility chart**: *See* RACI chart
- **Organizational breakdown structure (OBS)**: A description of the project team. It explains "who reports to whom, the details of the hierarchy, and the reporting structure…. Organizational breakdown structures are normally communicated visually through the use of graphs or charts. A

project or general manager is listed and underneath the PM several divisions might be created, such as product development, design, materials management, and production" (Bradley n.d.). *See also* responsibility assignment matrix (RAM)*, below*

- **Planning bias**: The tendency to optimistically underestimate the amount of time required to complete a task
- **Project charter**: A "single, consolidated source of information" (Richter 2014) for project initiation and planning. It describes your current knowledge about the project and includes information such as the names of all stakeholders, a statement of your organization's needs, the history leading up to the project, the project's purpose, deliverables, and roles and responsibilities. A project charter is also sometimes called a project overview statement. It's sometimes helpful to think of the project charter as a contract between the project team and the project sponsors
- **Project initiation**: The early phase in which you lay the groundwork for the entire project
- **Project overview statement**: *See* project charter
- **Project scope**: All the work "that needs to be done to provide the product or service your project is delivering" (Martinez n.d.)
- **Responsibility assignment matrix (RAM)**: A type of organizational breakdown structure in the form of a grid that typically lists project tasks in the first column, and stakeholders across the top row, with tasks assigned to the various stakeholders. You can use it to determine if you have enough resources for a project, and to record who is responsible for what. See also *RACI chart*
- **RACI chart**: A type of responsibility assignment (RAM) matrix. Also known as a linear responsibility chart. The name "RACI" is an acronym of "responsible, accountable, consult, and inform"
- **Stakeholders**: The people who will be affected by or who can affect a project
- **Scope creep:** Uncontrolled changes to a project that occur with no corresponding authorized changes in budget and schedule
- **Scope statement**: A document that defines the project's scope (or requirements)
- **Work breakdown structure (WBS:** A description of the tasks associated with project deliverables, often in the form of a tree diagram. A work breakdown structure "displays the relationship of each task to the other tasks, to the whole and the end product (goal or objective). It shows the allocation of responsibility, and identifies resources required and time available at each stage for project monitoring and management" (Business Dictionary n.d.)
- **Work package**: A "group of related tasks within a project. Because they look like projects themselves, they are often thought of as sub-projects within a larger project. Work packages are the smallest unit of work that a project can be broken down to when creating your Work Breakdown Structure (WBS)" (Wrike n.d.)

**Module 4: Procurement**

- **Contract**: According to Merriam-webster.com, "a binding agreement between two or more persons or parties." A contract can take many forms, ranging from a submitted invoice (which can serve as a binding agreement) to 200 pages of legal language plus appendices
- **Cost-plus:** An agreement in which the contractor or seller "is reimbursed for all direct allowable costs (materials, labor, travel) plus an additional fee to cover overhead and profit. This fee is negotiated in advance and usually involves a percentage of the total costs" (Larson and Gray 2011, 452). In small projects, this arrangement is sometimes referred to as **time and materials**

- **DBOM (Design, Build, Operate, Maintain)**: A type of partnership in which a private organization builds a facility and operates it on behalf of the public for as long as 20 years. DBOM partnerships have been used since the mid-1980s to construct and operate waste-to-energy projects that transform trash into electrical power
- **DBOOM (Design, Build, Own, Operate, Maintain)**: A new variation on DBOM which makes it possible for public or private organizations to finance and operate huge undertakings like infrastructure, energy, or transportation projects
- **Fixed-price:** An agreement in which the contractor or seller "agrees to perform all work specified in the contract at a fixed price" (Larson and Gray 2011, 451)
- **Procurement**: The process of acquiring goods and services. Used to refer to a wide range of business activities
- **Proposal**: According to Merriam-webster.com, "something (such as a plan or suggestion) that is presented to a person or group of people to consider." Depending on the nature of your company, this "something" might consist of little more than a few notes in an email, or it might incorporate months of research and documentation, costing hundreds of thousands of dollars to produce
- **Request for proposal (RFP)**: A "document that describes a project's needs in a particular area and asks for proposed solutions (along with pricing, timing, and other details) from qualified vendors" (Peters 2011)
- **Service-level agreement (SLA)**: "A contract between a service provider and its internal or external customers that documents what services the provider will furnish and defines the performance standards the provider is obligated to meet" (TechTarget n.d.). An SLA is an example of a document that can be used to codify an agreement between an organization and external vendors (that is, an external contract), or between departments within an organization (that is, an internal contract)
- **Single-sourcing**: The practice of using one supplier for a particular product
- **Supply chain management**: According to the Council of Supply Chain Management Professionals, "the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities"
- **Sustainable procurement:** Procurement that emphasizes goods and services that minimize environmental impacts while also taking into account social considerations, such as eradicating poverty, reducing hazardous wastes, and protecting human rights (Kjöllerström 2008)
- **Total cost of ownership (TCO):** All the costs associated with owning a particular asset, throughout the lifetime of the asset

**Module 5: Project Leadership - Team Formation and Management**

- **Emergent leaders**: People who emerge as leaders in response to a particular set of circumstances
- **Emotional intelligence**: The ability to recognize your own feelings and the feelings of others
- **Physical distance**: The actual space between team members
- **Pre-mortem**: A meeting at the beginning of a project in which team members imagine that the project has already failed and then list the plausible reasons for its failure
- **Reliable promise**: A commitment to complete a task by an agreed-upon time. In order to make a reliable promise, you need to have the authority to make the promise and the competence to fulfill the promise. You also need to be honest and sincere in your commitment and be willing to correct the situation if you fail to keep the promise

- **Self-organizing team**: As defined in Agile, a "group of motivated individuals, who work together toward a goal, have the ability and authority to take decisions, and readily adapt to changing demands" (Mittal 2013)
- **Team**: A "small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable" (Katzenbach and Smith 1993, 45)
- **Virtual distance**: The "psychological distance created between people by an over-reliance on electronic communications" (Lojeski and Reilly 2008, xxii)