Introduction to Failing Fast

Many people know Thomas Edison as the famous inventor of the modern light bulb. But did you know he also invented an electronic vote recorder, an electric pen, and an early home projector for viewing movies? Thomas Edison was a prolific inventor, but many were failures (at least at their onset). When he took the electronic vote recorder to congress, they told him they did not want it. It is also believed that he failed many times when advancing the design of the lightbulb.

In traditional project management methodologies, project managers spend much time at the beginning of the project developing a project plan and defining a project scope that the team rigidly follows throughout the project's life. Modern project management methodologies follow an approach that is more focused on failing and learning fast. In this reading, you will explore what failing fast means, when you should take a fail-fast approach as a project manager, and what benefits a fail-fast approach can provide for your projects.

Failing and learning fast

As a project manager, you deliver high-quality projects that meet project objectives quickly. One strategy is to learn and change course as soon as you know something isn't working. In other words, fail fast.

"Failing fast" is a concept that is often associated with agile software development, but it has broader applicability to many areas of business and life. At its core, "failing fast" means identifying failures and problems as early as possible in a project or process so that you can quickly pivot and adjust the course. The idea of failing fast is partially based on iterative development, which requires you to break projects down into small, manageable iterations. At the end of each iteration, the team evaluates progress and then adjusts plans as necessary. A project could shift or pivot completely depending on what is learned, and when implementing a fail-fast mindset, those pivots are encouraged.

When working on a project as a project manager, you always manage time, resources, and budget constraints. The longer it takes you to realize that the feature your team is working on is not one the customers want, that the materials that you are using cannot be used, or that the marketing strategy you are implementing is not meeting objectives, the harder it is for you to manage those constraints. But the faster you can validate the features your team is building, start using a more durable material, or test your marketing message quickly, the easier it is to manage those constraints and see a return on investment.

Complex, uncertain, and fast-moving

A fail-fast approach is perfect for every project, and while all projects may find some benefit in failing fast and learning early, there are specific projects where a fail-fast approach would produce the most benefits.

Complex projects

Projects that involve multiple stakeholders, complex requirements, or dependencies on other projects or systems can benefit from a fail-fast approach. By breaking the project down into smaller, more manageable pieces, you can identify and address issues early and reduce the risk of project failure.

For example, developing a large-scale software application or platform, such as a social media platform or an e-commerce website, is complex. These projects involve multiple stakeholders, including software developers, user experience designers, product managers, and quality assurance specialists. Developing a large-scale software application or platform involves several stages, including requirements gathering, software design, development, testing, and deployment. These sorts of projects are perfect for a fail-fast approach where project managers and teams break the work into smaller iterations and aim to gather feedback from stakeholders and potential customers as early as possible during the project.

Uncertain projects

If a project has a high level of risk or uncertainty, a fail-fast approach can help you identify issues early and avoid costly mistakes. By building a minimum viable product (MVP) or conducting smaller experiments or pilots, you can test assumptions, identify risks, and validate solutions before investing too much time and resources.

A company expanding into a new country or market is an example of a high-risk project. Entering a new market often involves navigating cultural differences that can impact how a product or service is received, which may affect product features and marketing. There are also new legal and regulatory considerations and an established competitive landscape to manage. Using a fail-fast approach when expanding into a new market allows project managers to develop and run tests to validate their product offering and messaging in a new market, quickly adapt to compliance and regulatory concerns, and see how established competitors react.

Fast-moving projects

Projects with tight timelines or deadlines or operating in rapidly changing environments can also benefit from failing fast. By being open to experimentation, breaking the project down

into small parts, and pivoting based on feedback, you can adapt to changing conditions and increase the likelihood of project success.

Fast-moving projects may find a fail-fast approach beneficial, such as a company shift to new artificial intelligence software to keep up with current trends. These projects often involve competitive and regulatory environments that change rapidly, and organizations may need to pivot quickly to keep up with new laws or customer requirements. Project managers can react quickly to these changes by using a fail-fast approach.

How to fail fast and learn

A fail-fast mentality is as much about learning as it is about failing. Here are some strategies that project managers can implement to fail fast while learning as much as possible.

- **Define clear objectives and metrics**: Before beginning the project, define clear objectives and metrics for success to help the project team to stay focused on what matters and make data-driven decisions about which experiments and approaches to pursue.
- **Create a culture of experimentation**: Encourage the project team to experiment and take risks. Celebrate failures as learning opportunities and encourage the team to share what they learned with others.
- **Test early and often**: Begin testing early in the project and continue to test frequently throughout the project.
- **Measure and analyze results**: Collect and analyze data on the results of each experiment and test. Data should be collected to provide insight into the defined objectives and metrics.
- **Focus on speed and efficiency**: A fail-fast approach is about speed and efficiency. Encourage the project team to work quickly and efficiently and to focus on delivering results as soon as possible.
- **Encourage collaboration and communication**: A failing fast approach requires collaboration and communication among the project team and with stakeholders. Encourage open and honest communication and foster a culture of transparency and trust.
- **Embrace feedback**: A failing fast approach requires being open to feedback and using it to inform decisions and adjust the project plan and strategy. Encourage the

project team to seek input from customers, partners, and other stakeholders and use this feedback to improve the project and its outcomes.

Conclusion

Project managers, and the organizations they work for, can benefit in many ways from taking a fail-fast approach to their projects. They can identify failures and problems early on by failing fast and pivoting quickly to correct the course. While not the best for all projects, this approach is excellent for fast-moving, complex, and uncertain tasks. Project managers with a fail-fast mindset should make learning a top priority. To do this, they must define and measure clear objectives and metrics, embrace a culture of experimentation and testing early and often, and encourage collaboration, communication, and feedback.