

How to Manage Projects with Earned Value Management

Introduction

Earned value management (EVM) is a powerful project management technique that helps project managers track progress, identify risks, and make informed decisions. EVM is based on the concept of earned value, which is a measure of the work that has been completed on a project relative to the work that was planned. By comparing earned value to planned value and actual cost, project managers can identify variances and take corrective action to keep the project on track.

EVM is a valuable tool for project managers of all types. It can be used to manage projects of any size or complexity, and it can be applied to any industry. EVM

is particularly useful for projects that are complex, have a high degree of uncertainty, or are subject to change.

In this book, we will provide a comprehensive overview of EVM. We will cover the basics of EVM, including the key concepts, metrics, and techniques. We will also provide guidance on how to implement EVM on your own projects.

By the end of this book, you will have a solid understanding of EVM and how to use it to improve your project management skills.

What is Earned Value Management?

Earned value management (EVM) is a project management technique that uses earned value to measure project progress. Earned value is the value of the work that has been completed on a project relative to the work that was planned. By comparing earned value to planned value and actual cost, project

managers can identify variances and take corrective action to keep the project on track.

Why Use Earned Value Management?

There are many benefits to using earned value management. EVM can help project managers to:

- Track project progress more accurately
- Identify risks and take corrective action
- Make informed decisions
- Improve project communication
- Increase project success rates

Who Should Use Earned Value Management?

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How to Implement Earned Value Management

Implementing EVM on your own projects can be a challenge, but it is well worth the effort. By following the steps outlined in this book, you can successfully implement EVM and improve your project management skills.

Book Description

How to Manage Projects with Earned Value Management is the definitive guide to earned value management (EVM). This comprehensive book provides everything you need to know to use EVM to improve your project management skills.

Pasquale De Marco has over 20 years of experience in project management, and he has used EVM on a wide variety of projects. In this book, he shares his insights and expertise to help you get the most out of EVM.

How to Manage Projects with Earned Value Management covers all aspects of EVM, from the basics to advanced techniques. You will learn how to:

- Plan and implement EVM on your projects
- Track project progress and identify risks
- Make informed decisions based on EVM data
- Improve project communication and collaboration

How to Manage Projects with Earned Value Management is a must-have for any project manager who wants to improve their skills and achieve project success.

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Chapter 1: Understanding Earned Value Management

Topic 1: Definition and Purpose of Earned Value Management

Earned value management (EVM) is a project management technique that helps project managers track progress, identify risks, and make informed decisions. EVM is based on the concept of earned value, which is a measure of the work that has been completed on a project relative to the work that was planned. By comparing earned value to planned value and actual cost, project managers can identify variances and take corrective action to keep the project on track.

EVM is a valuable tool for project managers of all types. It can be used to manage projects of any size or complexity, and it can be applied to any industry. EVM is particularly useful for projects that are complex,

have a high degree of uncertainty, or are subject to change.

The purpose of EVM is to provide project managers with a clear and concise picture of project progress. EVM can help project managers to:

- Track project progress more accurately
- Identify risks and take corrective action
- Make informed decisions
- Improve project communication
- Increase project success rates

EVM is a powerful tool that can help project managers to improve their project management skills. By understanding the basics of EVM, project managers can use this technique to improve the outcomes of their projects.

Key Concepts of Earned Value Management

The key concepts of EVM are:

- **Earned value (EV):** EV is a measure of the work that has been completed on a project relative to the work that was planned. EV is calculated by multiplying the percentage of work completed by the planned value of the work.
- **Planned value (PV):** PV is the value of the work that was planned to be completed on a project by a given date. PV is calculated by multiplying the quantity of work that was planned to be completed by the unit cost of the work.
- **Actual cost (AC):** AC is the actual cost of the work that has been completed on a project. AC is calculated by adding up the costs of all the resources that have been used on the project.

Benefits of Earned Value Management

There are many benefits to using EVM. EVM can help project managers to:

- Track project progress more accurately: EVM provides project managers with a clear and

concise picture of project progress. This information can help project managers to identify potential problems early on and take corrective action to keep the project on track.

- Identify risks and take corrective action: EVM can help project managers to identify risks and take corrective action. By comparing earned value to planned value and actual cost, project managers can identify variances that may indicate that the project is at risk.
- Make informed decisions: EVM can help project managers to make informed decisions. By understanding the progress of the project, project managers can make better decisions about how to allocate resources and manage the project.
- Improve project communication: EVM can help project managers to improve project communication. By providing a clear and concise

picture of project progress, EVM can help project managers to communicate the status of the project to stakeholders more effectively.

- Increase project success rates: EVM can help project managers to increase project success rates. By using EVM, project managers can identify and mitigate risks, make better decisions, and improve project communication. This can lead to increased project success rates.

Chapter 1: Understanding Earned Value Management

Topic 2: Benefits of Using Earned Value Management

Earned value management (EVM) offers numerous benefits to project managers and organizations. Here are some of the key advantages of using EVM:

Improved Project Visibility and Control

EVM provides project managers with a clear and concise view of project progress. By tracking earned value, project managers can easily identify areas where the project is ahead or behind schedule and budget. This information allows project managers to make informed decisions about how to allocate resources and mitigate risks.

Enhanced Risk Management

EVM helps project managers to identify and manage risks more effectively. By comparing earned value to planned value, project managers can identify variances that may indicate potential risks. This information allows project managers to take proactive steps to mitigate risks and prevent them from impacting the project schedule or budget.

Improved Communication and Collaboration

EVM provides a common language for project stakeholders to communicate about project progress. By using earned value metrics, project managers can easily share information about project status with stakeholders, including project sponsors, team members, and customers. This improved communication helps to foster collaboration and ensure that everyone is working towards the same goals.

Increased Project Success Rates

Studies have shown that projects that use EVM are more likely to be successful than projects that do not use EVM. This is because EVM helps project managers to identify and manage risks, make informed decisions, and communicate more effectively with stakeholders.

Specific Examples of EVM Benefits

In addition to the general benefits listed above, EVM can also provide specific benefits for organizations in different industries. For example, EVM can help construction companies to:

- Track progress on multiple projects simultaneously
- Identify and manage delays and cost overruns
- Improve communication with stakeholders

EVM can also help software development companies to:

- Track progress on complex and iterative projects
- Identify and manage risks associated with changing requirements

- Improve communication with customers

Conclusion

EVM is a powerful project management technique that can provide numerous benefits to organizations. By using EVM, project managers can improve project visibility and control, enhance risk management, improve communication and collaboration, and increase project success rates.

Chapter 1: Understanding Earned Value Management

Topic 3: Key Concepts of Earned Value Management

Earned value management (EVM) is a project management technique that uses earned value to measure project progress. Earned value is the value of the work that has been completed on a project relative to the work that was planned. By comparing earned value to planned value and actual cost, project managers can identify variances and take corrective action to keep the project on track.

EVM is based on the following key concepts:

- **Planned value (PV)** is the value of the work that was planned to be completed on a project by a specific date.

- **Earned value (EV)** is the value of the work that has actually been completed on a project by a specific date.
- **Actual cost (AC)** is the actual cost of the work that has been completed on a project by a specific date.

These three values are used to calculate the following EVM metrics:

- **Cost variance (CV)** is the difference between earned value and actual cost. CV measures the amount of money that has been overspent or underspent on a project.
- **Schedule variance (SV)** is the difference between earned value and planned value. SV measures the amount of time that has been saved or lost on a project.
- **Cost performance index (CPI)** is the ratio of earned value to actual cost. CPI measures the efficiency of a project's cost performance.

- **Schedule performance index (SPI)** is the ratio of earned value to planned value. SPI measures the efficiency of a project's schedule performance.

These EVM metrics can be used to track project progress, identify risks, and make informed decisions. By understanding the key concepts of EVM, project managers can use this powerful technique to improve their project management skills.

This extract presents the opening three sections of the first chapter.

Discover the complete 10 chapters and 50 sections by purchasing the book, now available in various formats.

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