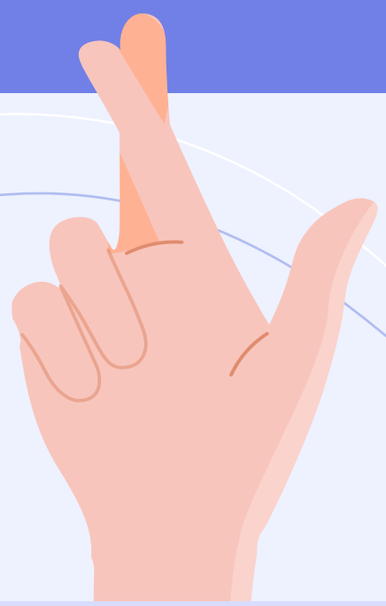
epicflow

How to Protect Your Business from Threats with a Resource Management Solution During the Toughest Economic Times

In Questions & Answers



THREATS FOR BUSINESSES AND PROJECT MANAGEMENT

Are there any specific challenges that have occurred as a result of recent events?

Yes, there are. For instance, for the **Aerospace and Defense industry**, the following challenges are peculiar today:

- Increased number of projects;
- Bringing distributed resources together;
- Leveraging the latest technology and related risks;
- Lack of skilled resources;
- Cyber threats;
- Supply chain difficulties.

The Construction industry is primarily facing the following challenges:

- Keeping track of material resources;
- Changing requirements;
- Limited budget;
- Supply chain difficulties.

For the Manufacturing industry, the following challenges are relevant:

- Highly siloed organizational environment;
- Keeping track of material resources;
- Changing requirements;
- Skilled labor shortage;
- Supply chain difficulties.

What types of project management challenges and threats are the most common for any industry?

In general, we can distinguish the following challenges and threats any company is facing today:

- Labour shortage;
- Managing multiple projects with a shared resource pool;
- Rapidly changing market trends;
- High level of uncertainty;
- Increased number of risks;
- Cybersecurity;
- Supply chain difficulties;
- Cutting costs as a result of recession.

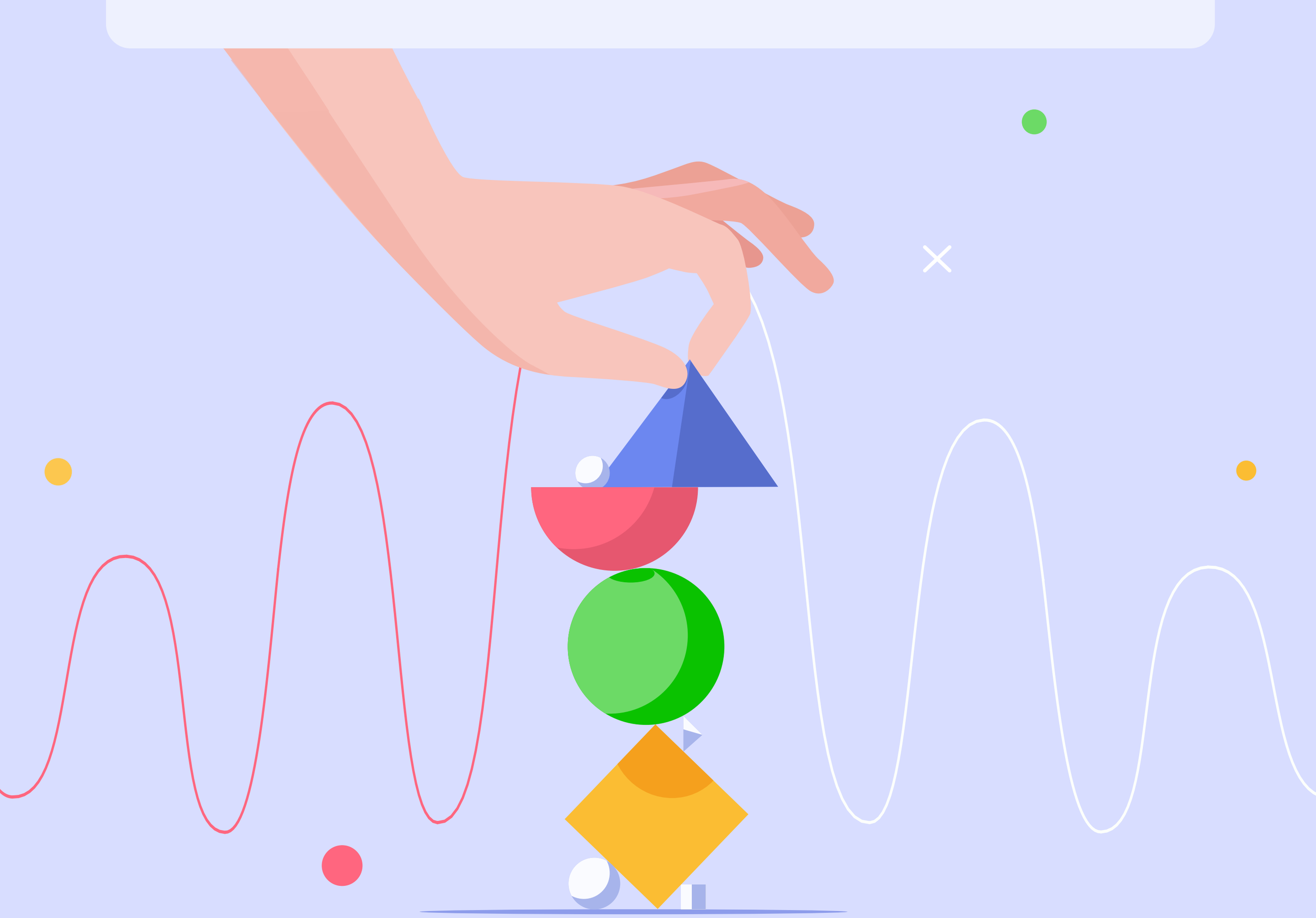
How is the current situation affecting project management?

In general, there's a tendency among companies to reduce costs in any possible way. Some reduce staffing, some stop investing in technology, while others hire extra people not to let their active projects fail.

What is uncertainty? Has it increased recently? How do businesses deal with it?

A situation of uncertainty can be described as a lack of necessary information when there are a lot of variables that can affect project delivery. Former US treasury secretary from 1995 to 1999, Robert Rubin, defined **uncertainty as a situation in which even a good decision might produce a bad outcome.** In a time of crisis, the uncertainty rate becomes even higher because the economic and geopolitical situations are becoming even more unpredictable.

One of the ways to deal with uncertainty and get prepared for risks is to ensure flexibility of your project environment. Using priorities instead of scheduling, avoiding strict due dates of tasks, and having access to real-time project data provide enough room for flexibility, which in other words, is an opportunity to adapt to new circumstances. Another way to cope with uncertainty is scenario building: trying out different variables and considering their effect on a project environment.
A multi-project resource management solution plays a crucial role in dealing with uncertainty and risks.



PROJECT MANAGEMENT TOOLS AND MULTI-PROJECT RESOURCE MANAGEMENT SOFTWARE SOLUTIONS

What is the role of project management software?

The goal of any project management software is to help track projects, tasks, and schedules. These tools are usually used to manage a single project, while for managing complex multi-project environments, this type of solution often turns out to be inefficient.

What's the difference between managing a single project and multiple projects with a shared resource pool?

The complexity of a multi-project environment with a shared resource pool is explained by the resource dependency between projects and a lot of variables affecting it. This kind of environment is always accompanied by uncertainty and is vulnerable to risks. In contrast, a single-project environment is much easier to manage because each resource works on one project only, which eliminates the possibility of resource conflicts and other threats that may affect the project flow.

What's the difference between a multi-project resource management solution and a project management solution?

As stated before, a project management solution is usually a tool used to manage a single project. It is primarily focused on the projects and their progress: the way the tasks are executed in terms of due dates and constraints.

The main difference between these two types of solutions is the approach to managing multiple projects and the number of capabilities. A multi-project resource management solution is aimed at ensuring maximum efficient utilization of resources for the on-time delivery of multiple projects. It's another kind of software that is used by large enterprises running multiple projects with a shared resource pool. It improves resource efficiency, allows tracking of their performance and project progress, and helps deliver multiple projects on time and within the approved budget (upon the availability of necessary functionality).

What's the role of resource allocation in multi-project management?

Proper resource allocation is a prerequisite for the successful delivery of multiple projects with a shared pool of resources. One of the main goals of resource allocation is to maximize the efficiency of employees by giving them optimal workload and making them work on the most important parts of projects.

PROTECTING PROJECT ENVIRONMENT FROM COMMON THREATS AND ADDRESSING CHALLENGES WITH A MULTI-PROJECT RESOURCE MANAGEMENT SOLUTION

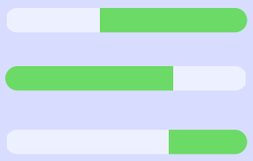
As we mentioned above, the common challenges and threats all industries are facing today are **managing multiple projects with a shared resource pool; labor shortage; rapidly changing market trends; high level of uncertainty; increased number of risks; cybersecurity; supply chain difficulties; cutting costs as a result of recession**.

Let’s see how a multi-project resource management solution can help cope with them.

How does a resource management solution address the challenge of simultaneous management of multiple projects with a shared pool of resources?

As we previously discussed, a multi-project resource management solution is a new type of software designed specifically for complex multi-project environments. Its main purpose is to increase the efficiency of resources and create all necessary conditions to help companies deliver multiple simultaneous projects on time and within budget:

- It unites globally distributed resources,
- It prioritizes tasks across projects taking all dependencies between them into account;
- It prevents resource conflicts and boosts resource efficiency;
- It detects, eliminates, and predicts bottlenecks;
- It provides access to historical and real-time data;
- It helps manage risks.



How can a multi-project resource management solution help deliver the required scope of work when there's a lack of resources?

A multi-project resource management solution addresses this challenge by calculating task priorities across all projects in the portfolio and helping allocate limited resources in such a way that every employee works on one task at a time, which is the most important part of the project at the moment. Besides, it analyzes historical and real-time data and leverages predictive analytics to prevent bottlenecks and keep resources' load balanced. As a result, everyone in the project team is engaged, being neither overloaded nor idle. When any changes to the project environment appear, a software solution recalculates the priorities with regard to resource availability to make them be delivered on time.

This also refers to changes in resource availability, e.g., if someone from the team gets sick, a project/resource manager receives prompts on resource reallocation or moving milestones to ensure a smooth workflow, even if the number of available resources has reduced.

Competence management is a crucial part of successful delivery of multiple projects in terms of resource shortage. When there's a lack of resources for some projects, a software solution provides a resource manager with the details: how many resources are needed and what competences they should possess. It also shows available resources from other groups, who can be retrained to do this part of project work. Therefore, instead of hiring extra people, a company can utilize resources from other groups.

Besides, an AI-driven multi-project resource management solution provides opportunities for scenario building to test different changes to a multi-project environment before implementation to check their effectiveness. This significantly increases the chances for the successful delivery of multiple projects.

Speaking of AI that is available in some resource management solutions, scenario building is not the only functionality that improves multi-project management. For example, in Epicflow we have a feature called Project Staggering: automatic adjustment of the start dates of multiple projects to avoid resource conflicts and overload, which increases chances for successful and timely delivery of all of them.

What functionality helps manage risks and deal with uncertainty and how exactly?

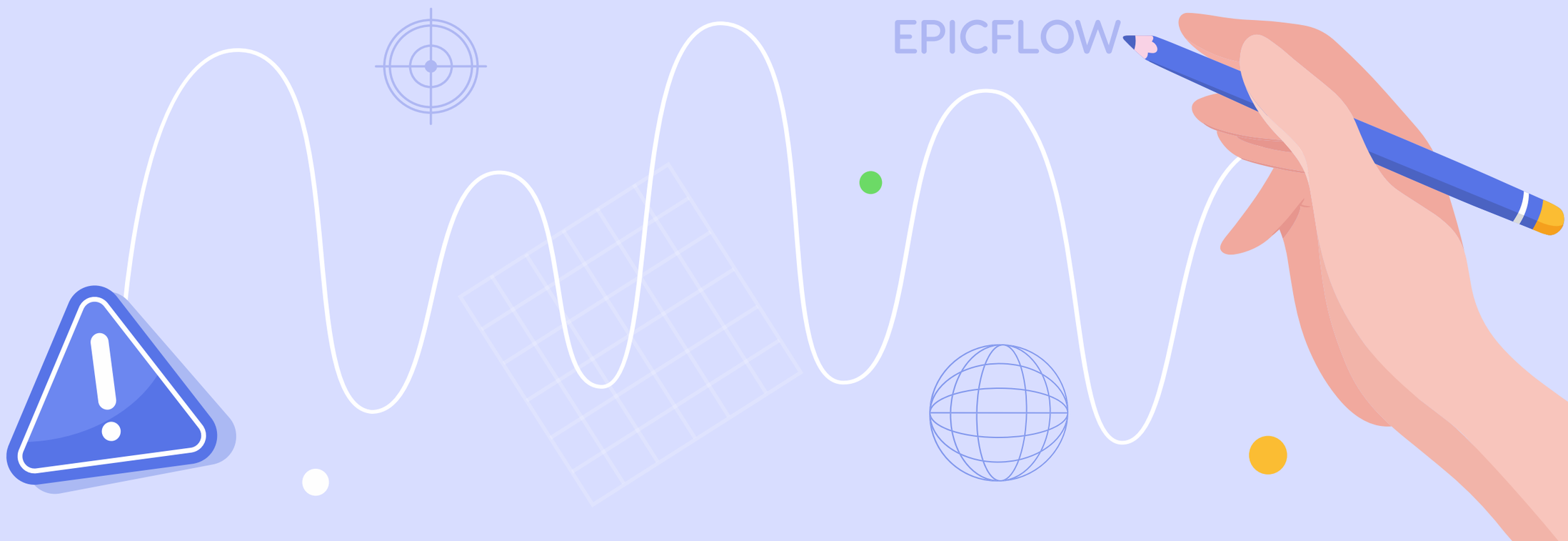
It depends on the solution and the methodology behind it. Let us show you how we deal with uncertainty and risks at Epicflow, but let's consider the difference between risks and uncertainty first.

When running your projects, you can manage risks, while uncertainty is unmanageable. The only thing you can do is to get prepared for it.

Epicflow has everything necessary to manage risks: as we mentioned above, with AI-driven What-if Analysis you can build scenarios and choose the best way possible to respond to risks.

Dealing with uncertainty is more complicated. It involves several approaches to be used in combination to get prepared for Murphy's strike:

- Use work amount estimates instead of time estimates.
- Eliminate task deadlines and make resources report on task completion as soon as possible.
- Put buffer time at the end of the project (instead of adding it to every task) and use it only for emergencies.
- Focus on resource performance (instead of project progress only): bottlenecks become evident at the resource level as soon as they arise.
- Check real-time data to be able to take necessary measures in case some negative tendencies occur.
- When something unpredicted happens, test different ways to respond to the situation with an AI-driven scenario-building mechanism.



How to let your business survive during a crisis?

A multi-project resource management solution can help you not only survive but also stay ahead of competitors. While other companies are cutting costs and losing opportunities, you can embrace digital transformation and strengthen your business, which will be especially visible over time. A crisis cannot be endless. And when it's over, you'll have a healthy project environment with smooth project flow and efficient resources, and will be ready to undertake new projects, while your competitors will be 10x steps away from you trying to hire resources to deliver their first project.

How does a resource management solution help spend less but gain more?

Wise resource management can help you do that. Efficient utilization of your available resources reduces lead time and the possibility of cost overrun without extra hiring. When your resources are properly allocated across multiple projects, you can deliver the required scope of work (and sometimes even grow your business) and save money.

How does the right approach and tool help react to unpredictable things?

One of the proven ways to get prepared for Murphy's strike (if anything can go wrong, it will) is getting rid of project schedules with strict deadlines. If anything unpredictable happens, you have to rebuild the schedule according to the newly appeared circumstances, which is both time- and effort-consuming. As a result, you may miss project due dates and face budget overruns. An alternative to project scheduling is the reprioritization of tasks across projects automatically calculated in real time by a multi-project resource management solution. If any changes to your project environment happen, priorities are recalculated right away, even without your assistance.

How can we be sure that our project data is protected?

It depends on a solution, but in Epicflow, project and personal data is reliably protected according to GDPR principles. Access to all project data can be fine-tuned by management: only you can decide what information and who can access and manage.

How can we improve stakeholder engagement with an RM solution?

An AI-driven resource management solution can contribute to stakeholder engagement by keeping them updated on the status of all projects and assuring them about the success of projects even before their start. Thanks to predictive analytics, stakeholders can find out about the reasonableness of initiating projects and their chances for success, corroborated by data-based calculations. Besides, with automatic report generation, they're always aware of project details.

How does AI help protect businesses from threats and address the above-mentioned challenges?

AI in project management is a disruptive technology, whose main aim is not just automating processes but providing profound assistance to project and resource managers. The advantages of using AI in PM as a way to resolve challenges and resist threats are numerous, so we'll list just a few of them here:

- Assistance in making informed decisions;
- Facilitation of efficient resource allocation;
- Prediction of bottlenecks;
- Assistance in risk management.

GETTING THE DESIRED BUSINESS OUTCOMES

How can the solution itself improve my business outcomes?

The software solution manages neither projects nor resources, its purpose is to create all necessary conditions for the efficient work of project teams led by an intelligent and open-minded project manager. A combination of the right approach to multi-project resource management, a multi-project resource management solution, and a project/resource manager together with the project team who want to get the desired results will definitely help improve the business outcomes, reduce costs, and grow profitability. None of these can bring positive results in isolation.

What should I do as soon as I choose and implement a solution?

You should provide training to all team members and get them familiar with the new way of working. Keep in mind that only relevant and correct project data can provide the expected output. Always remember the rule “Garbage in garbage out”, especially when working with AI-driven solutions.

When should I expect the first results after the adoption of the solution?

This depends on the size and specifics of your company. It takes about 2-3 months for small companies to get their first results, and bigger organizations may need much more time (1-3 years). But you’ll notice positive changes as soon as you shift a paradigm.

epicflow

To learn more how to protect your business from threats and grow profitability, contact us at

epicflow@epicflow.com