



Energy  
Exemplar



# HOW TO BUILD A BUSINESS CASE

FOR FORECASTING AND  
ANALYSIS SOFTWARE



“

*The sole role of a business case is that of a communication tool, composed in a language that the target audience understands and with enough detail to facilitate decision making on his or her part.*

— TECH REPUBLIC

## CREATE YOUR TEAM

Assemble a team to create the business case. One or two people will be responsible for the writing, while the other team members will gather information and research.

Include people outside of your department who are change agents. Look at possible members, not only for their capabilities, but also for their strategic value to the team and to the success of the project.

## INTRODUCTION

Any time an organization needs to make changes, start a new project or implement new technologies, the first step in the process is to build a business case. This usually means getting executive buy-in, so it's important for key stakeholders to understand the rationale, the advantages and challenges, and the overall cost.

Implementation of power market forecasting software is no different. While the benefits of a powerful, flexible and fast system may be obvious to an analyst, it may be less apparent to a CFO, CEO or other members of senior management. They will have important questions that need to be considered and answered using a business case.

This eBook provides tips for building a solid business case that will help decision makers understand how implementing the right power forecasting software will make a positive impact on the organization.

## GATHER INTELLIGENCE BEFORE STARTING

Begin by identifying your audience. What are their main concerns? Who will give the final approvals? How does this solution give them a “win?” Other considerations at the beginning of the process include budgetary or regulatory issues to address. With a clear vision of these factors, you're now ready to start gathering intelligence.

Your business case will explain in clear terms why the recommended power market forecasting software should be adopted. It will answer financial, organizational and long-term results of adopting the software and lay out the consequences of staying with the status quo. The business case will be clear, comprehensive and above all, persuasive.



## CREATE THE BUSINESS CASE

While there isn't one definitive template for business cases, they all have common elements. Add elements like graphs, charts and illustrations to make the business case visually appealing.

## EXECUTIVE SUMMARY

This one-page section briefly outlines the complete business case. Having a strong executive summary is key because many executives will read this section and skim or skip the other sections.

## GOALS OF THE ORGANIZATION

It's a best practice to create a section that reminds decision makers of the mission and overall goals of the organization. This sets the stage for later detail regarding how forecasting software will help the organization reach these goals. This section may be hard to quantify, but if you align the project with the business objectives, it can be more meaningful than simply stating operational efficiencies and hard numbers.

## IDENTIFY THE PROBLEM

Most stakeholders are averse to any change or expenditure that doesn't improve the organization or fix a specific problem. Outline the issues and remember to be completely honest. This is not a time to minimize issues that highlight problems. Simply be respectful of the previous efforts and people who have been involved while making your case for change.

This is your opportunity to show that the department is forward-thinking and preparing for the future. Quantify current costs for forecasting and analysis. How many employee hours are used? What outside costs, including consultants, are incurred? Make sure to recognize shadow systems like spreadsheets and databases, as well as time spent on emails and conference calls. If you are currently using a solution and want to make a change, discuss customer service issues and time spent waiting for results.

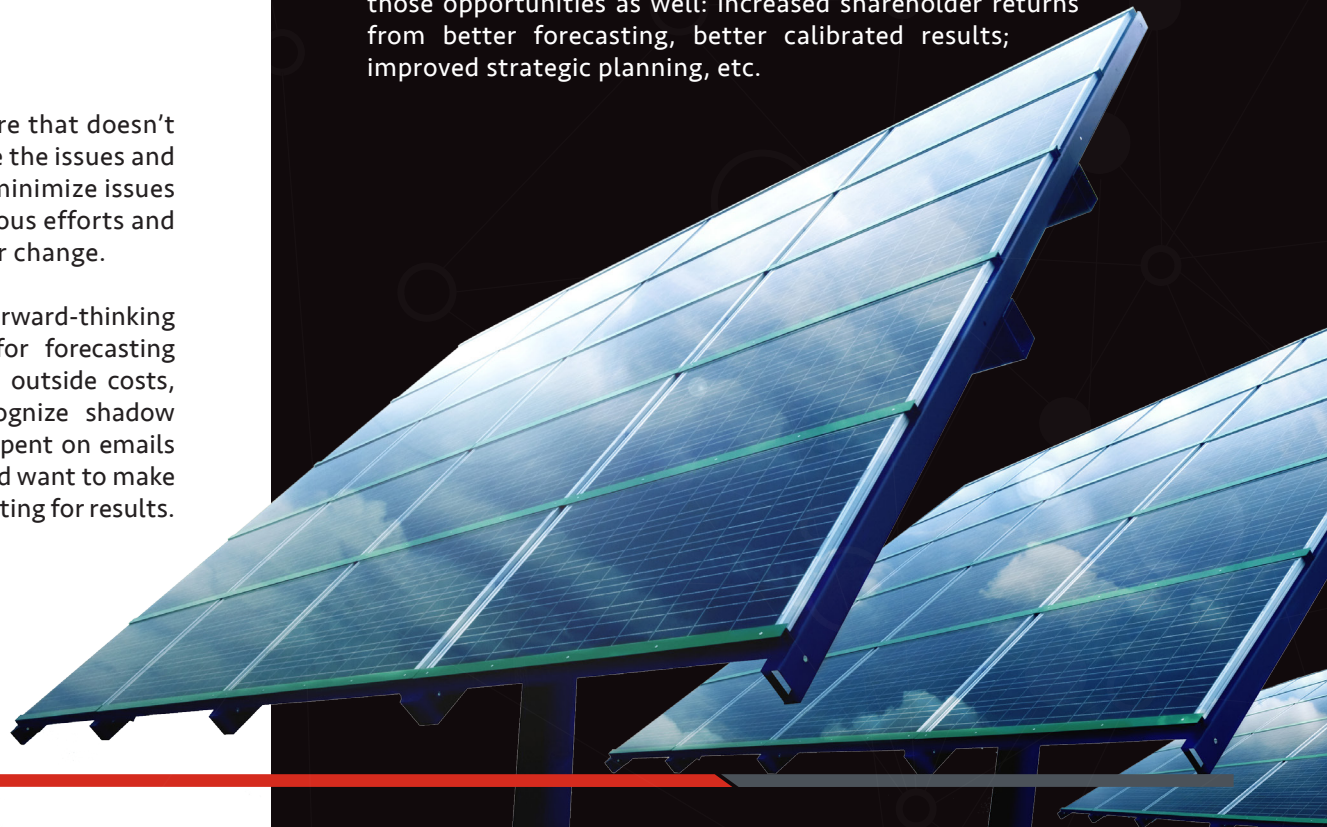
## IDENTIFY A POSSIBLE SOLUTION

Remember that a business case is about due diligence. Once your team has gathered information, make a recommendation. Elaborate on how the research was done, and discuss how deploying the right power market forecasting software will address the specific goals of the organization and solve current challenges. Include the criteria or capabilities that are needed to fit your organization's needs.

## COST/BENEFIT ANALYSIS

This kind of analysis compares the monetary benefits and costs of the project.

Ask the question: "How much will power market forecasting software cost?" Calculate not only the hard costs, but also the time needed to implement the solution. Then determine the costs accrued if nothing is done – estimating all of the costs that are invisible in your day-to-day work life: time spent formatting and loading data, time lost waiting for reports or output, lost opportunity costs... anything that could be replaced or lessened by the right power market forecasting software. While some benefits may be difficult to quantify, be sure to identify the those opportunities as well: increased shareholder returns from better forecasting, better calibrated results; improved strategic planning, etc.



## COST BENEFIT ANALYSIS WORKSHEET

Begin by identifying items in your cost categories.

### DIRECT COSTS

The costs associated with producing the models, such as labor, materials, training, hardware, software, maintenance, upgrades and vendor support.

### INDIRECT COSTS

The costs that are often fixed, such as department overhead (managers and administrative staff), quality control, IT support and depreciation.

### INTANGIBLE COSTS

These costs may be more difficult to quantify, such as productivity loss, down time, lost opportunities, errors or miscalculations, rework, damages to customers and inefficient workflows. This may also include the cost of recruiting new talent and developing career paths. It can also include the work around regulatory filings.

Next, quantify the benefits.

### INCREASED PRODUCTIVITY

- Common, formatted datasets
- Integrated model
- More efficient workflow
- Less down time

### GLOBAL COMMUNITY

- Thousands of users
- Find experienced, trained talent
- Develop career pathways

### HIGHER QUALITY

- More accurate forecasts
- Auditable models
- Automated processes
- Supported by a global, real-world technical team

### DECREASED FIXED COSTS

- Calibrated, tested datasets
- Hosted infrastructure
- Integrated visualization
- One platform for electricity, water and gas (co-optimization)

### GREATER INSIGHTS

- Time spent on evaluating insights versus running models
- Identify more advantageous opportunities
- Run models more frequently
- Run simulations down to the second

## CREATE YOUR CALCULATION WORKSHEET

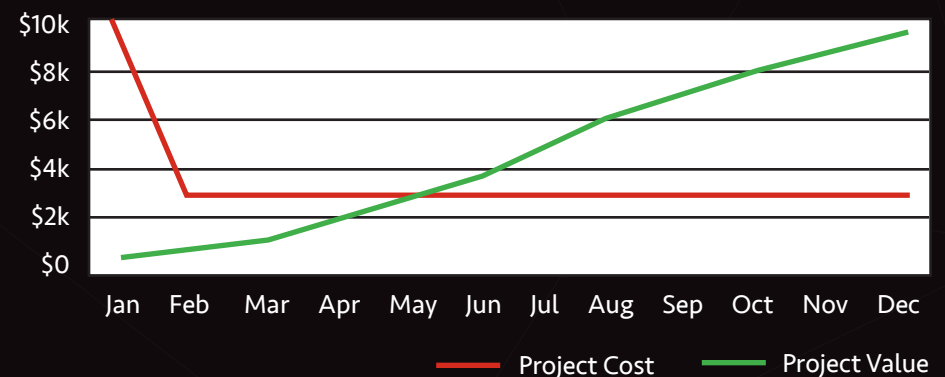
### COST BENEFIT ANALYSIS: FORECASTING AND ANALYSIS SOFTWARE

Costs				
Category	Item	Quantity	Cost	Total
TOTAL COSTS				
Benefits				
Category	Item	Quantity	Value	Total
TOTAL BENEFITS				

Finally, compare the aggregate costs and benefits and project the time frame for the benefits to repay the costs.

When including this in your business case, a line graph showing the cost projections against the benefits calculations will help visualize the point where you'll start to earn a return on investment.

### COST-BENEFIT ANALYSIS







Have an **abbreviated version** of your presentation ready in case time is short.

### ADDRESS POSSIBLE ROADBLOCKS

If you know that there will be specific questions or issues that slow the approval process, create a separate section to identify and address them. Possible roadblocks include interoperability, deployment time, training, customer service and migration issues.

### COMPATIBILITY/INTEROPERABILITY

Outline the specific legacy systems that are currently used in the forecasting and analysis process and then note how the right software solution will interact with them. When your team looks at possible solutions, make sure to have a list of the existing systems that your organization uses, so the vendor can help give specific information.

### DEPLOYMENT/MIGRATION ISSUES

Work closely with team members and possible vendors to identify and outline what the process will be for the migration to the recommended forecasting and analysis software. Talk to existing users of the solution so you can gain an understanding of their migration process.

### MAKING THE PRESENTATION

When the background work is done, the business case is written, and the visuals are inserted, it's time to present your work. Stay focused on the ROI. Highlight the work that team members did to prepare the business case. Be ready to answer any questions that come up – and this means practice.

Remember that your team has the domain expertise on forecasting and analysis for your organization. If you come to the discussion ready and enthusiastic, you have a great chance of success.



## ABOUT ENERGY EXEMPLAR

Energy Exemplar ([www.energyexemplar.com](http://www.energyexemplar.com)) is the market leader in the technology of optimization-based energy market simulation. Our software suite, headlined by PLEXOS® and Aurora, is used across every region of the world for a wide range of applications, from short-term analysis to long-term planning studies. It is relied upon by hundreds of organizations worldwide to inform multi-million-dollar decisions. Our people continually think of novel approaches and more realistic simulations that enhance decision making, create market opportunities and enable utilities and regulatory authorities to become smarter, more energy efficient and profitable. Energy Exemplar continues to 'push the envelope,' being first-to-market with the latest advances in programming and energy market simulations, as it strives to offer the most comprehensive simulation software to its customer base.



Energy  
Exemplar



Powerful tools for a complex marketplace

[www.energyexemplar.com](http://www.energyexemplar.com)