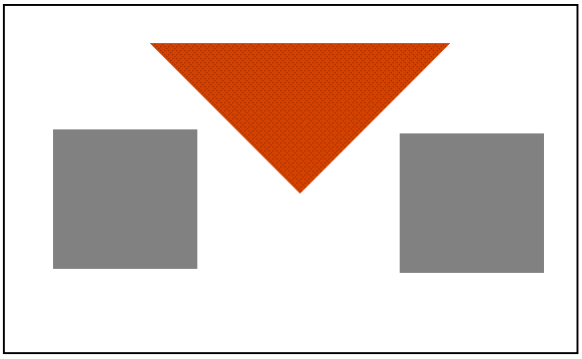
How to Minimize Project Risks

Are your projects often late? Do unexpected events impact your projects? Several factors contribute to schedule problems. This article addresses how CEOs can create an environment for others to identify and manage projects risks.

Written by:
Michael D. Miles, PE
ME-Tech, LLC
6135 SW Arrowwood Lane
Portland, OR 97223
503-292-1234 ● www.mdmpe.com



How to Minimize Project Risks

If your projects fall behind schedule on a regular basis, or have trouble getting off the ground in the first place, you may want to look at managing project Risks. Risk management is often mistaken to be 'zero risk', yet risk is a project reality – to be assessed, weighed against other project parameters, and priorities selected. Development teams think in quantitative terms so risk can be evaluated - but there are also severity levels to consider – in the "C-Suite".

Risk Happens

Like it or not, every person in an organization is faced with a risk/reward decision, sometimes several times each day. Some are big strategic risks, often at the executive level, and some are incidental issues everyone deals with. Everyone wins if risks are minimized or mitigated entirely- and the rewards can propel the entire company forward – if large projects are successful. The core issue of risk management is then, how to *consistently* protect the company from fallout of a risk that goes bad?

The keys to risk management are:

- Identify
- Insure
- Implement

Identify

Every risk is essentially a choice between several possible paths. At the executive level, they tend to be more strategic choices - which can profoundly affect the well being of the entire organization. Executives are expected to be sober in judgement and rely on wise counsel of their staff so such decisions are thought to be well reasoned.

At the departmental and project development level the issues being faced are more tactical, having to do with equipment, material, technology, design, and resources. In some cases a single issue can affect the entire organization but in most cases, each issue appears to stand on its own and have very little impact on the whole.

Here then is the proverbial 'death by a thousand cuts' syndrome. Most particularly in the relatively minor issues there is occasionally a cascade of compounding ramifications from a seemingly innocuous detail.

The action needed to *Identify* risk is to be keenly aware of each and every choice one makes regarding corporate resources, and understand that each decision on that choice must be made with purpose and intent. The action of asking the question – "Can this choice become critical somewhere down the road (later in the project)?" and honestly assessing it will become easier with practice. Not every decision requires excessive scrutiny – for example a project engineer makes a choice on what resistor to use, what screw size to use, what name to give a software module. The discipline of asking the question above is still valuable – the alternative of ignoring the question has the possibility for catastrophe.

Insure

When a risk has been identified as a very real possibility - almost always associated with a decision - it is critical to capture pertinent information about it: what are the circumstances, the decision process, and as crucial as the alternatives going in – what options to get *out* (back on track) if the risk turns sour?

A contingency plan is a plan in waiting that will be executed if what was expected to happen – doesn't happen. A major responsibility that is often overlooked or ignored is: *Plan what to do if the risk occurs*. This is not just some kind of discussion in a meeting that no one remembers exactly – this is a solid fleshing out of the possible outcomes and forethought on the possible actions to take.

It is therefore important to insure (as well as ensure) positive outcome: In the same way the airlines put the little exit path card in the seat pocket, every major risk needs to have a documented plan that gets triggered to get things back on track. Consider it an "Insurance Plan."

Implement

One of the most difficult decisions to make, especially when someone has invested a tremendous amount of energy into something, is to make a decision to go down an alternate path. In some cases it may mean abandoning a promising technology, or a new vendor, or whatever the risk really involved - in favor of a more stable, proven, simpler path that gets the project moving forward.

When the time comes to hit the eject button on a part of the development, it's often difficult for everyone to come to grips with. It feels personal and raw. It feels like failure. It can be embarrassing. To overcome these very-real personal emotions, it requires leadership that is realistic and accepting, to rekindle inspiration - without condemnation – to regain momentum in the individual, the team, and the organization.

Fortunately, the very presence of the "Insurance plan" will reduce some of the stress involved when it has to be *Implemented*. Although it seems pretty

fundamental to simply follow the script of the *Insurance* plan, such a plan can have a calming effect - that there ARE plans to follow.

Identify, Insure, and Implement – too easy?
This seems so straightforward - perhaps there is something missing? There are a couple of fundamental principles in the descriptions above, which need to be explained a bit more.

Acknowledging that risk is a commonplace occurrence is necessary: any activity has some risk, but we generally never think much about it because it can be so commonplace – driving, crossing the street, eating at the burrito stand. Yet even in those activities we mentally have some contingency plans in mind, and implementation is usually not much of deliberation if safety, health, or comfort is involved.

The organizational challenge is to *Identify* which risks require extensive *Insurance* and which are negligible – recognizing that the accumulation of several minor setbacks can still cause major disruptions.

How do I do this?
The simplest way to begin is to be conscious of the decisions being made all the time and single out those that can impact a schedule or resources if they 'go bad'. Devote a page in a day-timer, scribble a Post-It note to yourself, or build a spreadsheet to organize your thoughts. Later in the day or week, take time to review the key thoughts (*Insurance* ideas you listed). It is important to follow-up and communicate the Identity and its Insurance plan to people who are affected. Get their input and buy-in on any potential mitigating plans.

Impact
For each of the issues *Identified*, and the *Insurances* noted, it's a good idea to quantify the *Impact* of each issue. *Impact* can be measured in expense, time, or opportunity. Clarifying whether the *Impact* might be larger (or smaller) than originally believed, may in turn require altering the *Insurance* details. This will help you maintain an evolving Insurance Plan to help you minimize risk and maximize your company's project success.

It is important to incorporate considered thought as a counter-balance to rapid-fire decision making that occurs each day. It is also important to understand that some organizations are pre-disposed to avoid risk to the exclusion of all else. A strong sense of risk aversion can permeate an entire organization, particularly if a previous project went spectacularly poorly due to lack of risk mitigation. By using the Identify, Insure and Implement method, you can instill a culture of risk *mitigation*, instead of risk avoidance.

In some cases an organization's measure of risk aversion comes from the top levels of management. It often takes the form of strategic decisions with vague communication leaving a sense of uncertainty among the organization about what is really important. As with anything, clear communication is critical to building a healthy sense of confidence that risk management is well reasoned and comprehensive.

Some companies have created an environment of self-regulation of risk such that developers and project managers avoid risk for fear of their jobs or career. When previous risks have gone poorly and jobs are lost as a direct result of a poor risk choice, it creates a paralysis where risk/reward options are not even voiced because the individual is self-regulating that it won't be appreciated. Such an organization tends to avoid even talking about risk and if it isn't *Identified*, it can't be *Insured*, nor is there a plan to *Implement*. At that point the risk management process is reactionary and rarely thought out beyond the immediate action.

Risk can be met head-on with a plan to overcome or minimize its impact, or it can be avoided for as long as possible in the vane hope that it will go away. Choosing to deal with risk in a simple and straightforward way removes much of the fear and fosters confidence in being able to succeed in the face of setbacks.

The buck stops at the CEO.

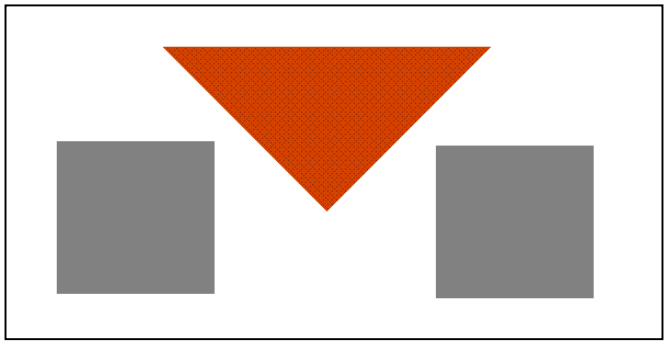
There are many reasons projects get behind schedule. These include lack of requirements clarity, insufficient planning, frequent changes, no scope definition, lack of project ownership and myriad other reasons. However, risk identification, mitigation planning, and having an environment where people are allowed to take risks – without fear of reprisal – contribute significantly to project slippage. And it is the CEO and C-Suite that defines the environment for others to be successful. If you do not do so – you risk more than just individual project failure, you also risk company revenue, profitability and even your fundamental competitiveness.

Ignore risk… at your peril.

Author's Biography

More than thirty years experience in defining and executing mechanical and electro-mechanical product and systems architecture, product design, detailed component design, thermal analysis, and simulations. Over 6 years in CTO/co-founder roles in two startup companies which included patent work, process brainstorming and simulation, equipment planning and acquisition, product concept development, and Activity Based Costing in operations.

"*Build Your Business*" is a CEO eNewsletter published by Synergy Consulting Group (© 2011) which is collaborating with a dozen experienced consultants to bring you valuable how-to advice. If you are looking to dramatically grow your company, become a subscriber: Go to www.synergy-usa.com/eNews.html to find out more about contributing consultants.



ME-Tech, LLC

The focus of the ME-Tech, LLC consulting practice is to serve industry with Mechanical Engineering expertise in all areas of product design including system architecture, prototype and production planning, detailed part design, system and device thermal management and analysis, EMI issues, design for manufacture and assembly (DFM/A), and tooling approval. Additional concerns of the consulting practice are air/fluid flow simulation, part stress analysis, coordination of ID resources, and mechanism development.

The integration of electronics with the appearance and structural integrity of the product is the domain of the Mechanical and Electro-Mechanical Engineer. Conception, design, and selection of appropriate materials, fabrication technology, and tooling strategies of the physical parts is the primary responsibility but it also extends into design for cost effective assembly, service, and care to meet the rugged requirements of the environment the product will be used in. Testing and verification of the components and the overall design prove the durability of the product. In a broader view, the Mechanical and Electro-Mechanical Engineer must cooperate and work synergistically with other disciplines in electronics, manufacturing, testing, marketing, and Industrial Design for the client to achieve a product that is appropriate, sustainable, and successful in the marketplace.

ME-Tech, LLC provides over 30 years direct experience in defining and executing mechanical and electro-mechanical product and systems architecture, product design, detailed component design, thermal analysis, and simulation.

ME-Tech, LLC Areas of Expertise

- Mechanical Product Design
- Startup Experience
- Hybrid Powertrain Design
- Strategic Planning
- Various Fabrication Technologies
- Material Handling
- Project Planning
- Postal Equipment
- Thermal Management

.

Additional insights and value from leading authorities in their areas. Articles in the February, 2011 publication:

Are you Leaving Money on the Table? **Mark Paul**
You may be stunting your corporate growth and company value due to your team's mispriced offerings. How can your team learn what the market will bear?

How to Align Information Technology (IT) with your Business Needs **Manoj Garg**
You know IT is needed for business success. Yet, sometimes you have a nagging feeling that you are not getting value from your investments. This article discusses how to align IT with your business.

Maximizing Sales Velocity Despite Economic Headwinds **Bill Etheredge**
Have you allowed the downturn to be a convenient excuse for recent financial performance? This article strips away the superficial convenience of financial downturns and shows how to *capitalize* on it.

Using HR to Boost Company Performance **Iris Sasaki**
If you are interested in dramatically increasing your employees' and managers' performance, there is a little-known secret that will leverage your strengths – and those around you – to accomplish far more.

What Does a Lost Customer Cost You? **Patrick Wheeler**
This article discusses that affect that losing customers has on your business, which could amount to 10% to 20% or more.

Clueless in the C-Suite **Tom Cox**
CEOs and others in the C-Suite can find themselves in a bubble, an alternate reality, detached from what's really happening in the business. Figure out if you're in a bubble and how you can get out.

Maximizing the Value of Your Exit Strategy **Brent Freeman**
Do you have an exit strategy for your company? Do you know what you need to do to get the maximum value for your company? This article will give you 6 ways to maximize your company's value.

Powerpoint Makes You Stupid **Dave Yewman**
Master communicators tell stories and have one or two major points. They're smart enough to not try and communicate too much in a presentation. Are you?

How to Take Your Products International **Richard Biggs**
Exporting isn't simply an add-on to your existing business. It should be part of an overall strategy to develop your business. This article takes a close look at the opportunities and threats that exporting can bring to your company.

The Secret to Building a Stronger Business **Alexander Stein**
Your company's most valuable asset: a psychologically savvy chief executive. In this article, learn how to deploy yourself more effectively.

How to Minimize Project Risk **Mike Miles**
Are your projects often late? Do unexpected events impact your projects? This article addresses how CEOs can create an environment for others to identify and manage project risks.

If you are interested in these articles, subscribe to the Build Your Business CEO eNewsletter today: Go to www.synergy-usa.com/eNews.html to sign up.