



## ***Build Your Business***

An eNewsletter for  
CEOs looking to  
grow their companies.

High-value, "how-to" articles on customer-attraction, sales development, leadership, and best-practices in HR, IT, product development, communication, financial operations, engineering and M&A/value creation.

# *Engineering Resources: Captive vs Consulting*

Too many projects and too little staff? Can't afford to hire anyone full-time? Need expertise that your engineers don't have? This article outlines how CEOs can clarify what is important in choosing to hire technical staff or to retain an outside consultant.

*Written by:*

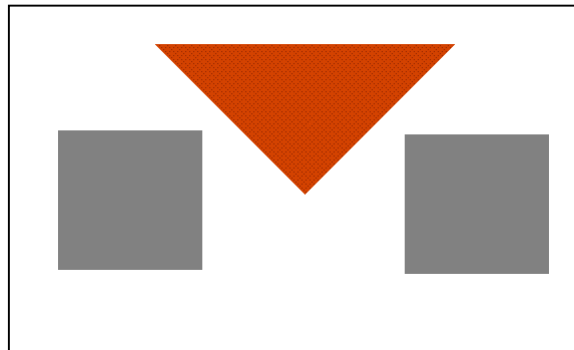
Michael D. Miles, PE

**ME-Tech, LLC**

6135 SW Arrowwood Lane

Portland, OR 97223

503-292-1234 • [www.mdmpe.com](http://www.mdmpe.com)



# Choosing Staff: Hire or Retain

Deciding whether to add staff to a project or to retain a knowledge expert is an ongoing issue for most companies. Budget pressures and down markets often lead to staffing gaps which can hamper new development. When considering whether to hire staff or retain a consultant, various factors can bring the decision into focus for the CEO and management staff.

## Engineering Resources: Captive vs. Consulting

One of the decisions any executive faces in the world of product development is how to acquire design resources that are not already in the company. Similarly, the internal staff may already be stretched thin and additional resources are needed – for either short term or long term assistance.

Many small and medium-sized companies are founded around a particular core capability or discipline (software, electronic, mechanical) staffed with engineers or designers in each specific discipline. Often absent in such companies is one or more of the other disciplines.

Some companies strive to keep their payroll lean and focus on their core technology areas. When they need the expertise of a designer they don't have on staff, they face the question of hiring another staff member (captive) or retaining outside services (consulting). Other companies may have each of the disciplines represented in the company but one or all are stretched thin across several projects with no excess to absorb sudden demands.

With lean staffing, companies now face the very same decision: add staff in that discipline or find a contractor\*/consultant? Consider some of the tradeoffs between the two options:

## Typical of Captive hires:

### Pros

- Can be recruited for highly specific skills and background
- Has more buy-in to the company future
- Can be monitored and directed closely
- Can be re-assigned to other projects or spread across several tasks

### Cons

- Requires integration into company culture
- Becomes a fixed liability with benefits and overhead
- Requires more HR recruiting involvement & maintenance
- Can be hard to find with the deep experience desired

\* Contractor / Consultant: Described later in this article.

- Can be harder to terminate (paperwork, compensation, reassignments, etc)
- Can be distracted from primary task by competing priorities

### Typical of retained Consultants / Contractors:

#### Pros

- Typically has very broad experience and often extensive knowledge in key areas
- Appears more expensive, but is exercised for a fixed term, typically reducing costs
- Doesn't have the same overhead for HR, benefits, etc
- An easier scapegoat (the outside guy is always the problem)
- More likely to offer realistic assessments (less obsequious)
- Agreements are simpler to terminate
- Often highly regarded by personnel as a specialist

#### Cons

- Not always present and may miss ad hoc discussions/meetings
- May require more legal paperwork
- Is outside the workplace systems (email, telecom, etc)
- Sometimes regarded as a competitor to inside personnel

### So, which one to choose?

The decision really comes down to one or more of the following fundamental reasons:

1. Future company staffing will require *ongoing* expertise = hire captive
2. The expertise can be absorbed within the group = retain consultant
3. The need is brief but intense = retain consultant
4. The work task is near full time for an extended period (a year or longer) = hire captive
5. The internal resources are already stretched and the need is immediate = retain consultant
6. The expertise is very specialized and needed every few years = retain consultant

### Is “interim” right for you?

There are also situations where retaining a consultant can be the immediate stop-gap solution while HR is recruiting the long term hire. In such cases the consultant may actually be able to *assist* HR in the screening process as well as make network connections to candidates. Consultants understand that putting the interest of the client first ultimately returns dividends in favorable referrals to new clients.

### Does proximity matter?

There is no substitute for face-to-face meetings but... in this age of internet communication it is possible for consulting resources AND captive resources alike to be remote from the company itself. The key difference between the two becomes a matter of management and authority. A consultant has an innate sense of responsibility to the client, especially since their reputation and future client work depends on it. A remote employee may require more direct supervision to stay on task, and the work product may need more oversight for annual salary reviews, etc.

### **The difference between contracting and consulting**

Many people equate a consultant with a contractor: indeed most agreements that are presented to consultants state they are a contractor. One distinction is the way they are used by the company. In most cases a contractor is someone that is brought into a company, assigned space to work in, and directed by company staff in what they are to do. It is very important for the company to check with their state laws since contractors that are on-site more than a specified amount of time are considered part-time employees, and the company may be liable for payroll taxes.

Consulting on the other hand is quite literally obtaining the advice, wisdom, and knowledge of an outsider while not engaging in any kind of authority or employment strictures. A contractor is someone you *hire* to tell them what they are to do; a consultant is someone you *retain* who tells you what you *should* do.

### **So, Captive vs Consulting?**

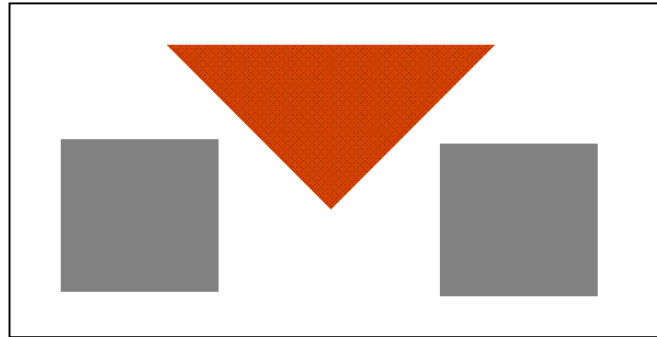
As any engineer will say: "It depends". It depends on the strategic and tactical issues at-hand. Review the six points outlined above and the decision should be clear.

© 2011 Michael D. Miles, PE All rights reserved.



### **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.



## 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



**Build Your Business**  
An eNewsletter for  
CEOs looking to  
grow their companies.

High-value, "how-to" articles on customer-attraction, sales development, leadership, and best-practices in HR, IT, product development, communication, financial operations, engineering and M&A/value creation.

*March's eNewsletter summaries are provided below. If you would like to receive the three trial issues, please go to: [www.synergy-usa.com/eNews.html](http://www.synergy-usa.com/eNews.html).*

**How a \$3 million/yr Company was Acquired for nearly \$20 million: in 6 Months** Mark Paul

Are you looking for ways to increase the value of your company? As one CEO found out: Attracting significantly more "A" customers, while decreasing expenses is the surest way.

**How to Improve Your Company's Cash Flow**

Patrick Wheeler

Do you need extra cash? Are you searching for new sources of capital to help you survive & thrive? This article is for nonfinancial CEOs and discusses the different "levers" you can pull to improve your cash flow.

**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.

**Simplifying the Sales and Channel Strategy**

Bill Etheredge

Is your sales and channel strategy defined? Have you assessed the effectiveness of existing strategies? Are changes in market conditions causing chaos in your strategy? This article defines what to do to boost effectiveness.

**How to Really Get Things Done**

Alexander Stein

Are you always short on time? Does your To-Do list only get longer? Are you at the end of your rope with trying to get ahead? In this article, learn how to get you and your business ticking.

**How to maximize the value of IT in your business - IT Outsourcing**

Manoj Garg

You know that you spend a lot of money on IT and that you need to maximize the value of your investments in IT. Do you know if you have made the right decisions on make vs. buy on IT functions and services?

**Are You Jumping on the Lean Bandwagon?**

Rick Pay

Are you trying to reduce operations cost – and considering Lean Manufacturing? Companies are climbing on the Lean bandwagon in droves, but how do you know if Lean is the right approach for your organization?

**Got Heart?**

Dan Duggan

Is morale an issue at your company? Do employees act listless? Is absenteeism beginning to be a problem? Learn how to recognize and transform "lost heart" into "loving your work".

**Ten Reasons to go International**

Richard Biggs

If you are pondering whether to go global, recognize the fact that you are already "global", in that you very likely have global competitors. You are in a competitive global marketplace.

**Engineering Resources: Captive or Consultant?**

Mike Miles

Too many projects and too little staff? Can't afford to hire anyone full-time? This article outlines how CEOs can clarify what is important in choosing to hire technical staff or to retain an outside consultant.

**Can you do it in 6:40?**

Dave Yewman

Chances are your presentations are too long. Why? Because everyone's presentations are too long. So how do you fix that? Here's one option, a radical option. Are you feeling brave?

**How to Find & Attract Capital to Grow Your Company**

Brent Freeman

If you have ever had to find capital to grow your company, this article will show you how prepare critical documents required to find capital from non-traditional sources.

This is the third edition of a three-month trial of the Build Your Business eNewsletter. We are interested in your thoughts via a survey. To receive past months' articles and to take the survey, please 'subscribe' at [www.synergy-usa.com/eNews.html](http://www.synergy-usa.com/eNews.html). Thank you.