

## **How to Be an Effective Technical Consultant by Speaking the Language of Business by John Levy**

**Who am I?** (website <http://johnlevyconsulting.com>)

Engineering & Computer Science

Computers, OS, I/O & disk drives

Engineering Management

Consulting since 1982

Strategic planning team in 1996

Moved away from purely technical consulting in 1998-2000

Agile / IT - business consulting 2007-2009

Book on managing high-tech people 2010

**What's the problem?**

**I'm getting plenty of work (or not!) by being a techie, so why should I try to be something else?**

you aspire to work as a consultant for a broader audience

you recognize that the maximum pay per hour you can earn is limited by the functions you perform for your client (can't seem to break the \$100/hr or \$250/hr barrier)

you want to work for different people (than just engineering managers)

the contract work you've been doing has disappeared in the recent downturn

you just are interested in broadening your knowledge beyond engineering & technology

**I really know a lot more than just engineering**

**For example, I know how to**

make a project succeed / make a technology team work well together

sift through a lot of product ideas to find the best ones

connect engineering with marketing productively

get engineers excited about their jobs and be productive

participate productively in a cross-functional team

(such as for strategic planning)

**but I can't seem to get clients to listen to me outside of my traditional areas of work**

they don't take me seriously when I propose to work outside of technology

I don't know what to propose to clients, or how to propose it

I'm not sure how valuable these other services might be

**How you sell your services now**

**The world of Engineering / Technology  
I've never sold my services to anyone besides  
Engineering Managers before**

It feels odd to offer my services to someone in  
Marketing, Procurement, Corporate Planning, HR, or  
anywhere but Engineering & Manufacturing  
I don't know what they need that I can provide  
I don't know where to find them or approach them

**words in your vocabulary are confusing or misleading to your  
audience**

**Hardware**

Virtual machine  
Petabytes  
PATA, SATA, SCSI, FCAL, ...

**Software**

Operating System  
Object Oriented  
Virtual ...  
KLOC  
IDE  
Testing – why? How? What result?  
When is it done?

**Internet / Web**

Hosting  
ISP  
Top-level domain (TLD)  
Malware, Trojan, Phishing  
“Web security” as an oxymoron

**Agile**

Scrum  
Scrum Master  
Scrum Coach  
Product Owner  
Chickens & pigs  
Done done  
XP

***What's the solution?***

- a. understand the client
- b. offer what they need
- c. be understood

***a. Understand the client***

**There are some ways business people are different from us  
techies**

Product Managers – tend to be technical + MBA types; watch for excessive analysis

Sales & Marketing Directors – tend to be high on personal energy & forcefulness; watch for insufficient analysis & reflection

CEOs – tend to value quick decisions with limited input; watch out for providing fuel for their prejudices & predetermined directions

### **Some examples of the business person's point of view**

#### **Love/hate relationship with technology**

Technology is both interesting and confusing/frustrating

I can understand this stuff if I have to, but I don't think I need to.

#### **Decision-making / consequences**

I want to know the impact on my business. How can you help me assess that?

Optimal may not be practical. What are my alternatives?

What are the consequences of choosing the “non-best” alternative?

#### **Requirements management**

Can you tell me what I need to know in fewer than 1000 words? Give me the synopsis, and I'll ask for more detail if I need it.

I want something different from what I've had before – but I don't know exactly what it is.

Can you help me figure it out, without becoming an advocate for the latest whiz-bang technology?

#### **Project management**

I've been burned so many times by a technical person promising what they can't deliver (on time), I don't believe your estimates.

[on the other hand:] If you tell me something is possible, I'll make you (or someone else) commit to delivering it – on a schedule.

### ***b. Offering what they need***

Have confidence in your technical ability and your insight into problems and solutions

Prepare yourself for interaction with non-technical people by trying out explanations on other non-technical people (your family members, school kids, ...)

**Communications – oral and written**

communicating with *technical* people  
Writing reports  
explaining a situation

**making recommendations**

Admit to your shortcomings in business or program management, but make recommendations anyway

**Advising non-technical managers on how to get practical results**

**Get feedback**

Ask for feedback  
interpret the feedback you get

***c. Keys to being understood (by non-technical business managers)***

**Never underestimate the intelligence of a non-technical business person!**

I can and do understand a lot of complex things, such as how this company works. I just don't have the background in specific technologies that you do. So start by explaining what I need to know in general terms, and I'll ask questions when I need more detail.

I want to know about the risks. Tell me what could go wrong. Don't confuse my interest in pocket gadgets with blanket acceptance of all technologies. You have to justify my investment by using business reasoning (cost/benefit analysis, return on investment, measurable business results).

**Learn the key words in the business person's vocabulary, and explain your services in those terms,**

Capital vs. expense  
Revenue (gross income) vs. income (net income)  
Depreciation, Amortization (of capital investments)  
PBIT, PBITDA – Profit Before Interest, Tax, Depreciation and Amortization  
Tax credits  
Good Will  
Overhead & fixed costs  
IT: KTLO (operations), Enhancement (maintenance), Strategic Investment (new initiatives)

***Some more tips for becoming a more effective consultant.***

Be thoughtful, not just brilliant

Asking questions makes you seem smarter – and gives you a chance to find out what you need to know

(“You can observe a lot just by watching.” – Yogi Berra)

Keep learning – read business journals & newspapers

Try teaching non-technical people about technology – sharpens your communications skills

Write articles for trade publications, general press publications

John Levy is a management consultant who helps organizations manage development to get timely, innovative and relevant products. His current focus is on resolving conflicts between business and engineering management.

He also acts as an expert witness in patent litigation related to computer, software and Internet technologies, and has been a technical advisor to two U.S. District Court judges.

John has held engineering management positions with Quantum Corporation, Apple Computer, Tandem Computers, and Digital Equipment Corporation. He earned a Ph.D. in Computer Science from Stanford University, and holds engineering degrees from Cornell and Caltech. He is inventor or co-inventor on seven U.S. patents related to computer design.

John’s book on management for technology executives, due to be published in March, 2010, is titled, “Get Out of the Way.” His website is <http://johnlevyconsulting.com> and he can be reached at 415 663-1818 or [info@johnlevyconsulting.com](mailto:info@johnlevyconsulting.com)

