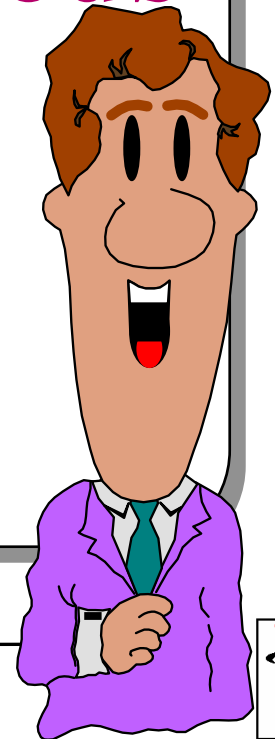


# University of Calgary Project Management Specialization

Dueling Project Managers

“Can Engineering Methods  
work for  
I.T. Projects?”



# The Debate

## Dueling Project Managers

### Yogi Schulz

- ❑ Engineering management principles can make I.T. projects successful

**The Engineer**

### Robin Hornby

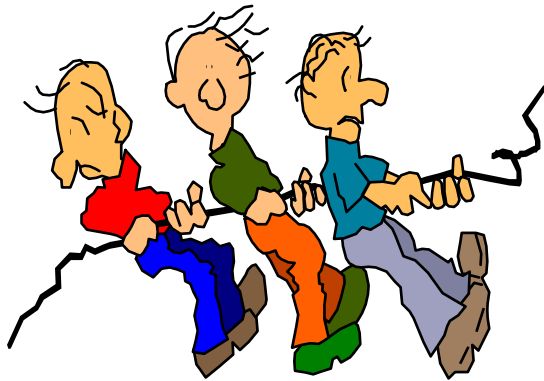
- ❑ Engineering analogy is not always successful when applied to I.T. projects

**The I.T. Professional**



# Outline

Dueling Project Managers



Experiences which  
**ALIGN**

## PMBOK Topics:

- Scope
- Time
- Quality



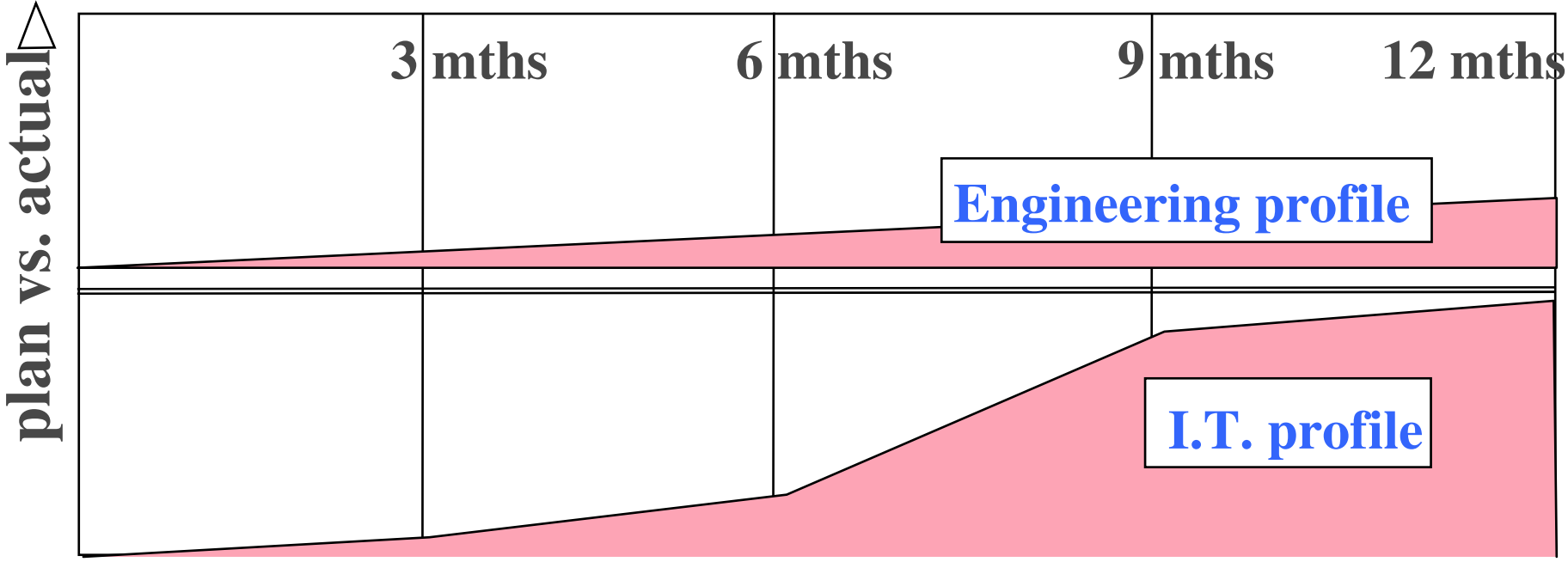
Experiences which  
**DEVIATE**

## Let the Debate Begin!

# Scope Deviation Profile

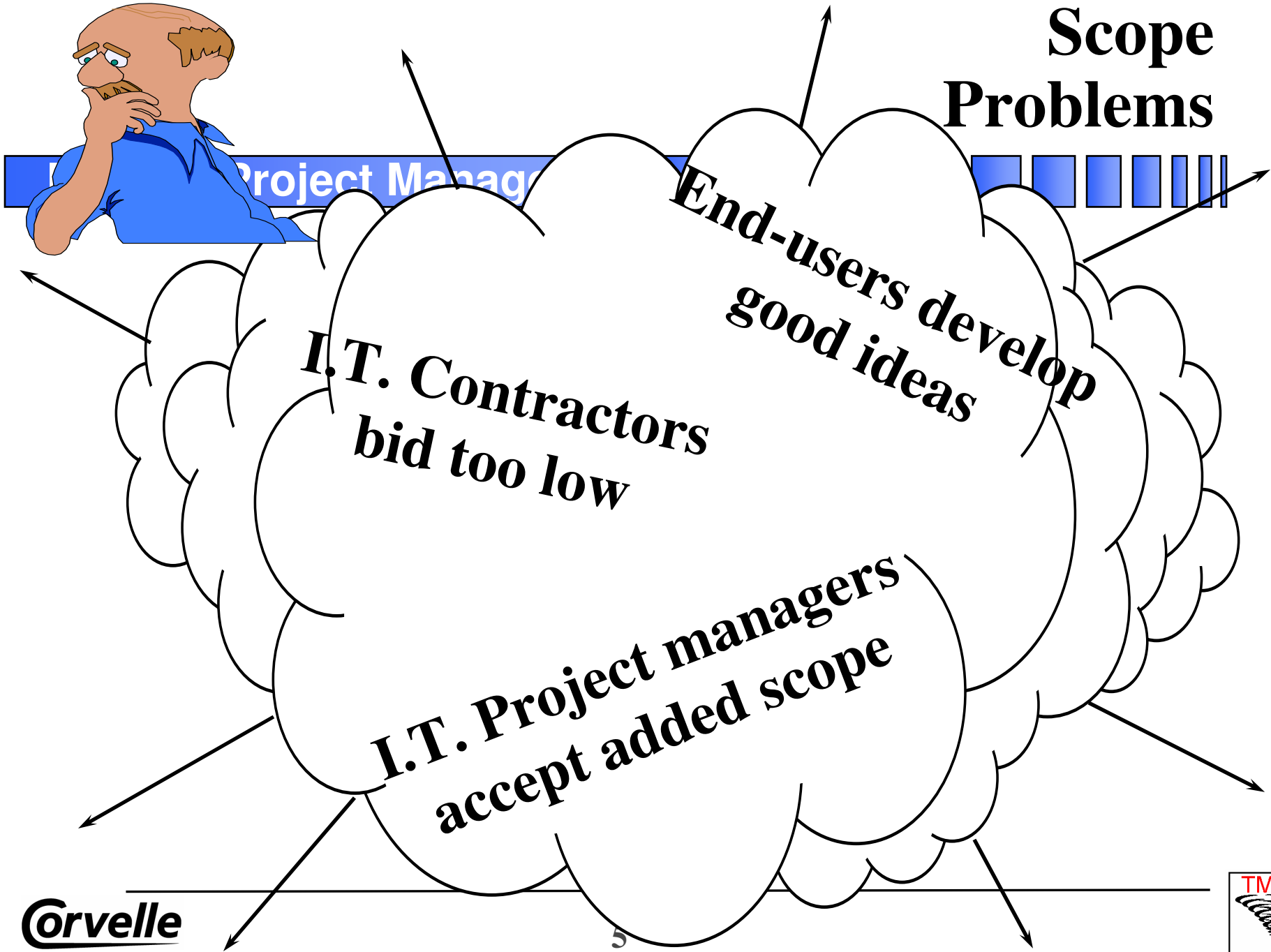
Dueling Project Managers

## DEVIATIONS FROM SCOPE

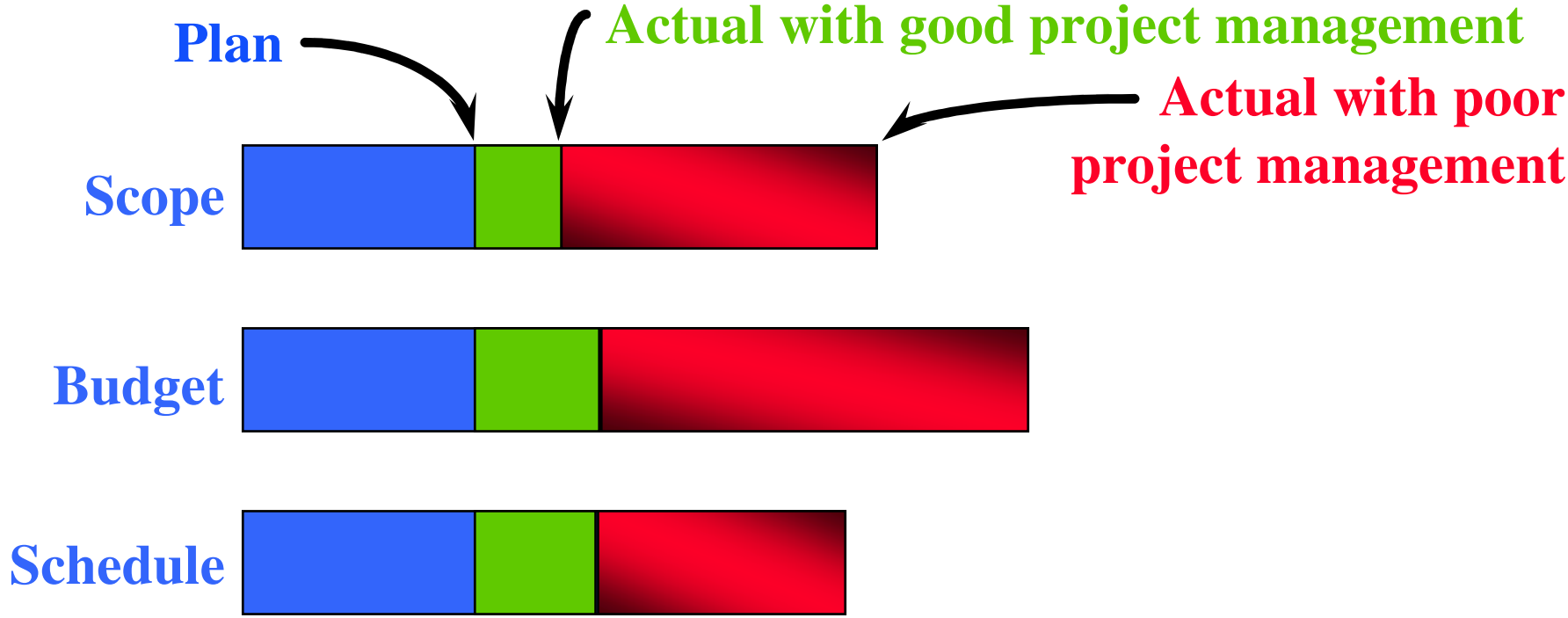


Profile of scope deviations for I.T. and Engineering projects seem quite different

# Scope Problems



# Scope Case History

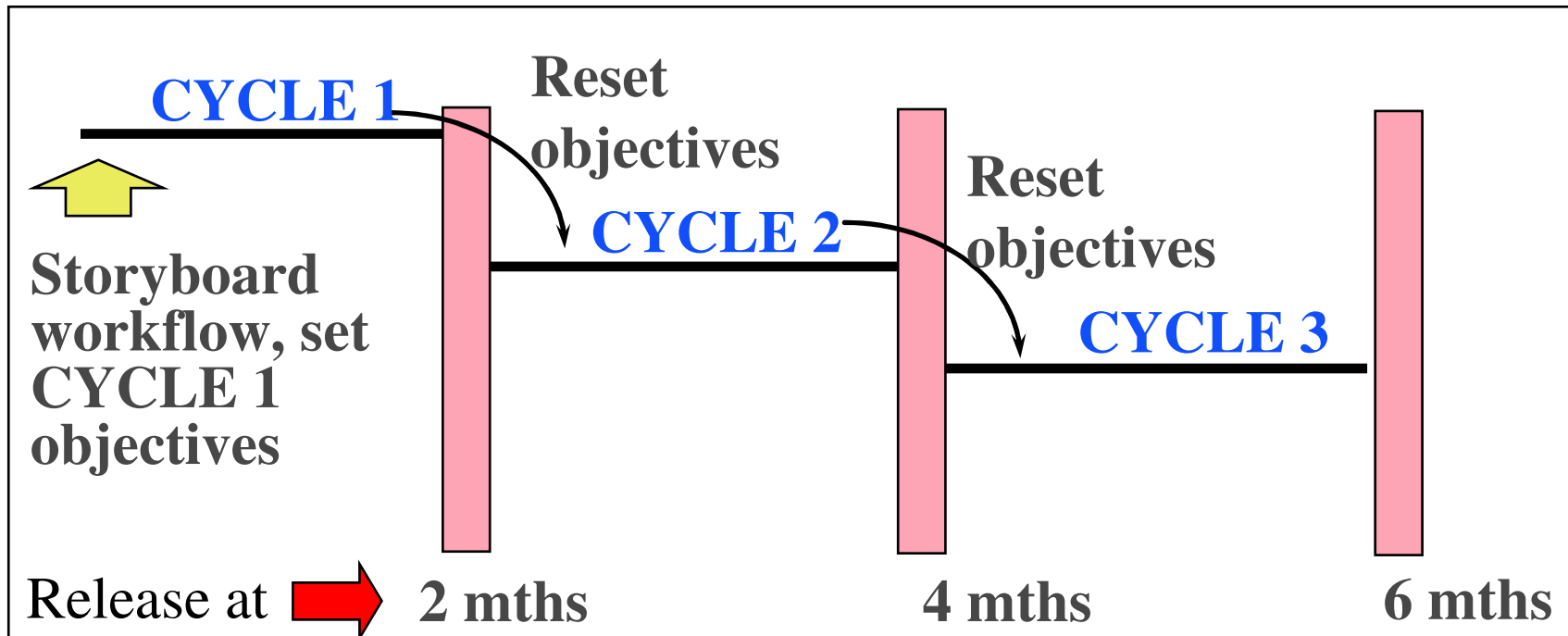


**The Price of Successful Projects  
is Constant Vigilance**

# Scope Case History



**35% CONTINGENCY**



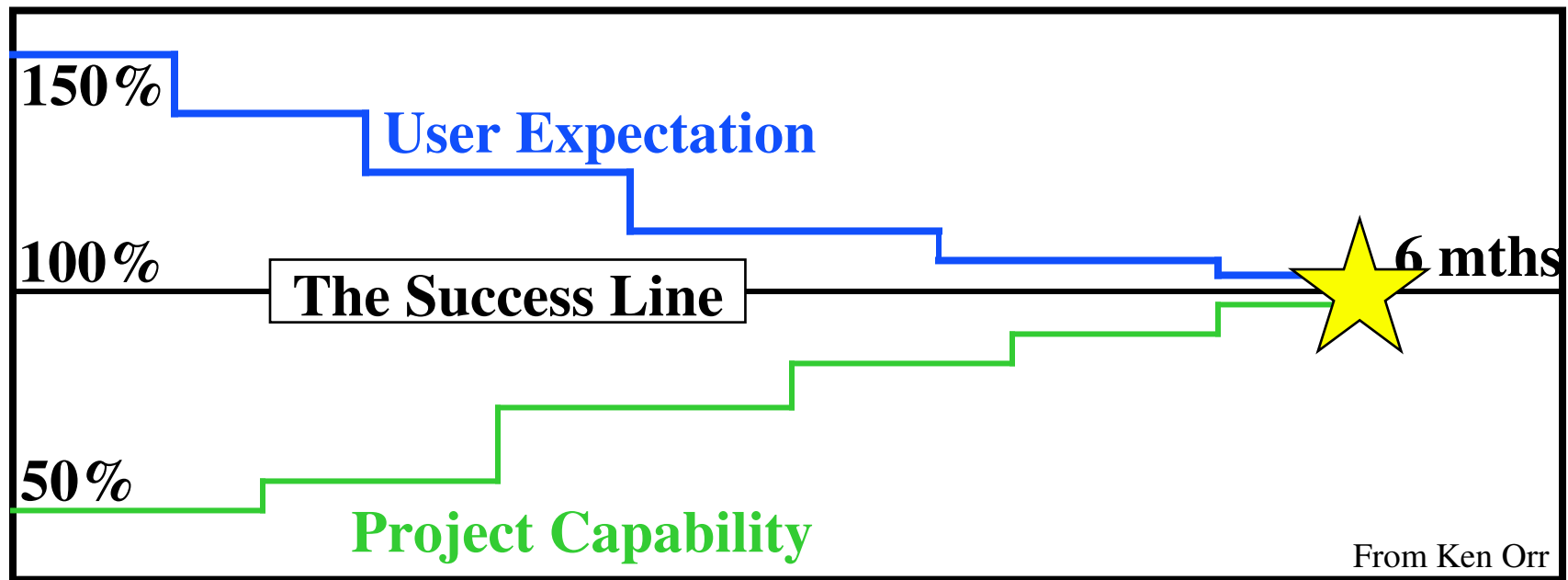
**We threw the scope report away!**

# Scope Conclusion

Dueling Project Managers



## MODEL OF A SUCCESSFUL PROJECT



Success means convergence of expectation with capability

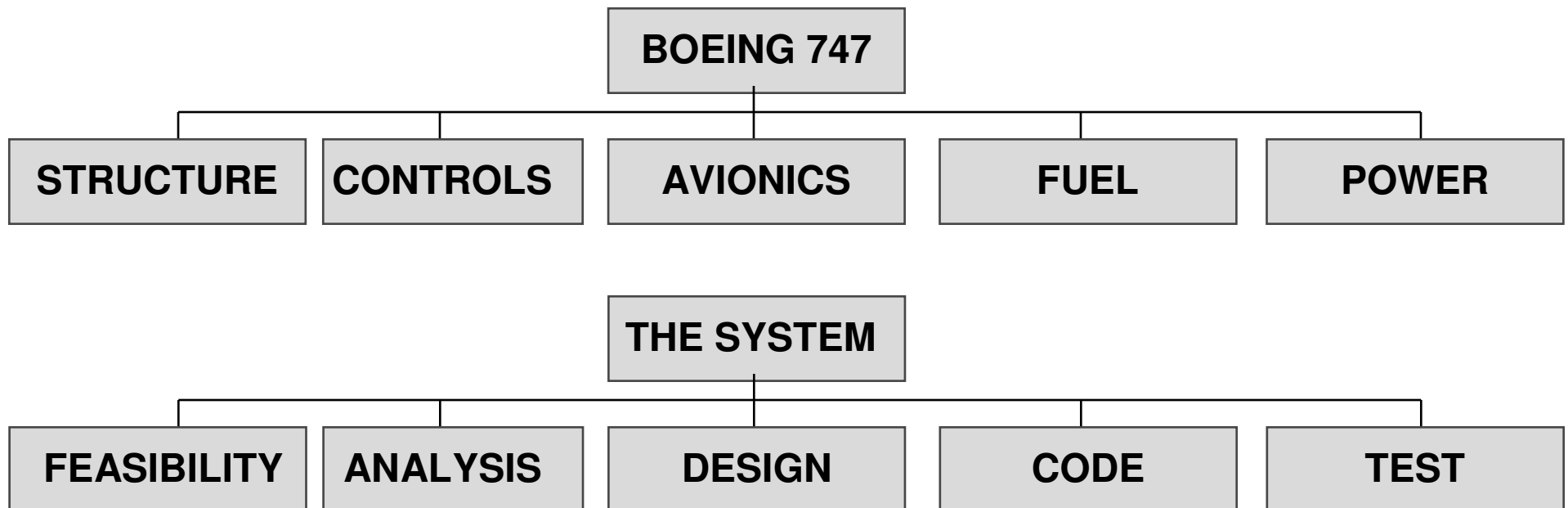


# Time

## The Estimating Chasm

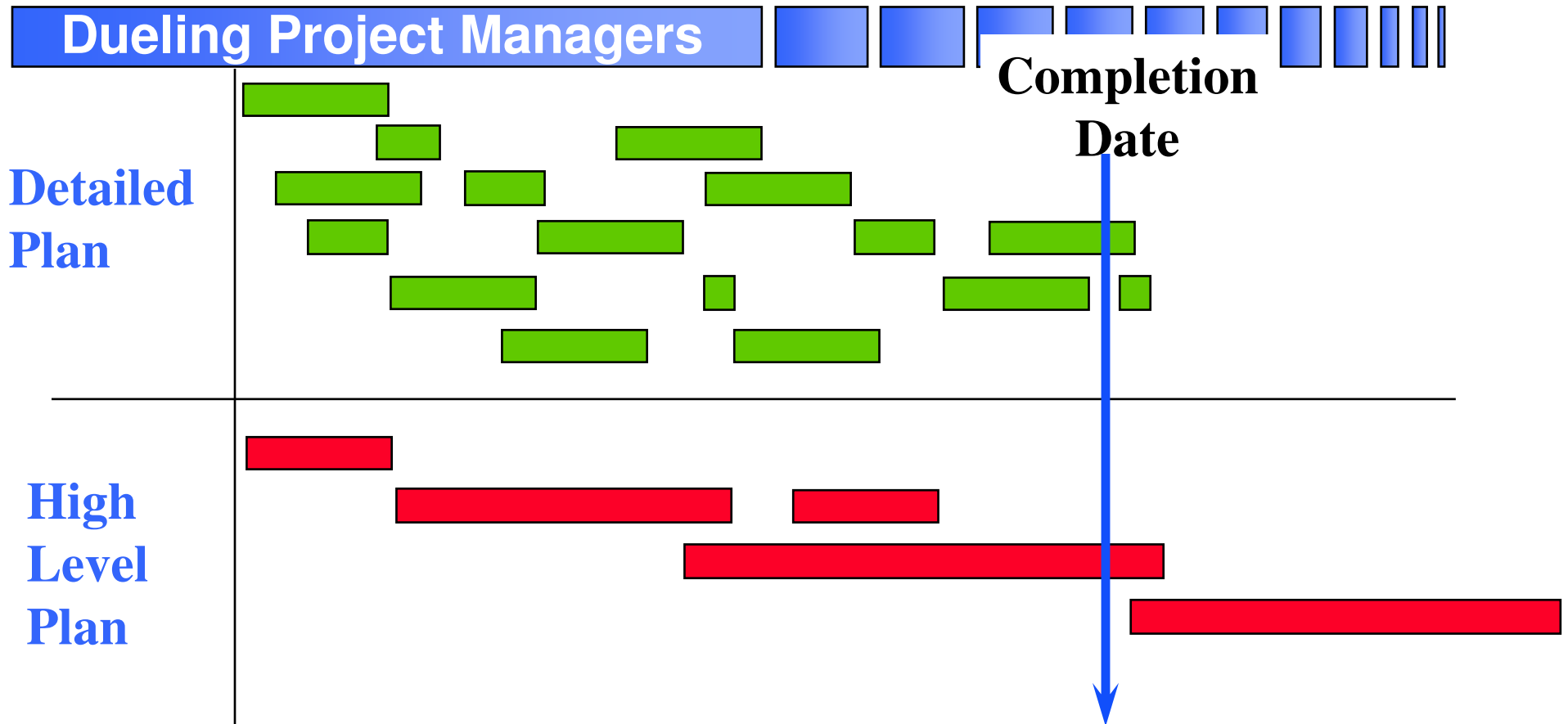


**ESTIMATES ARE BASED ON WBS**



**The I. T. WBS emphasizes what we shall DO!**

# Time Case History

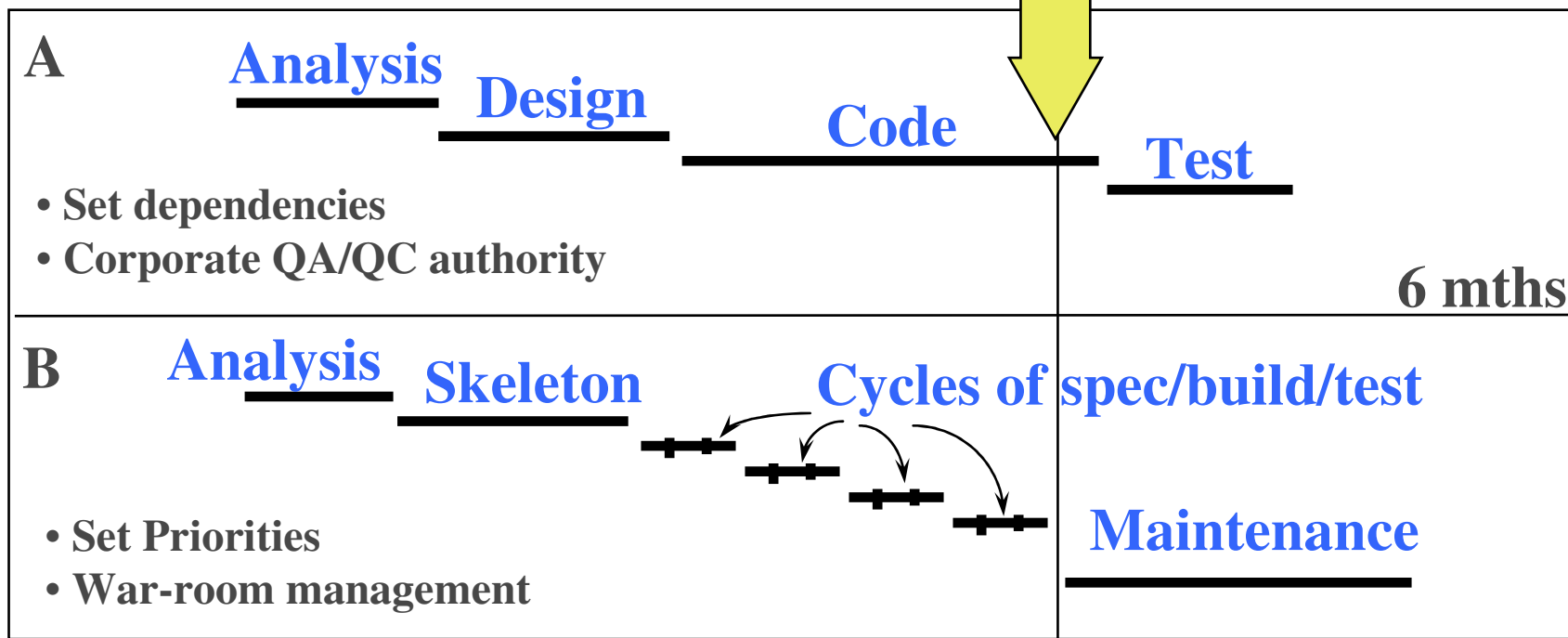


**Only a detailed plan enables commitment to a completion date**

# Time Case History



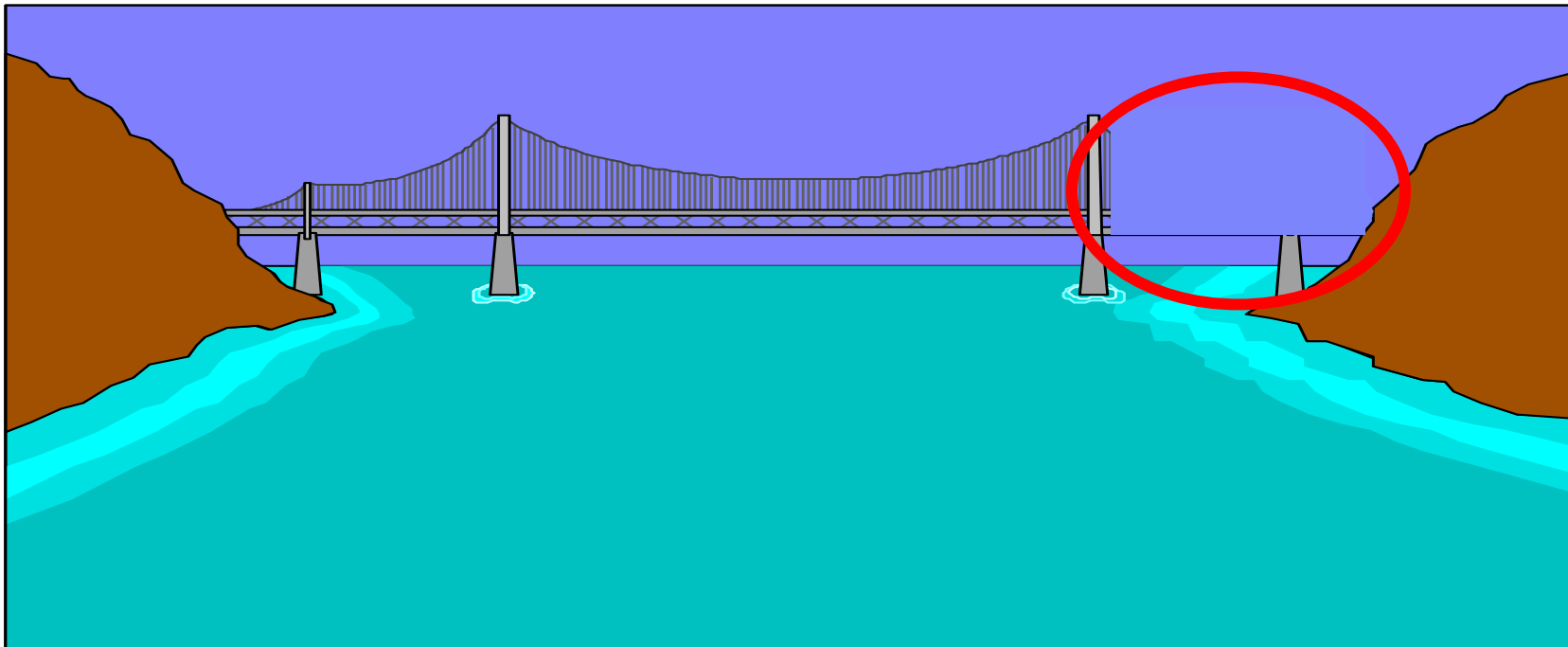
## THE IMPOSED DEADLINE



## The Timeboxed Schedule

# Time Conclusion

Dueling Project Managers



**Timeboxing is a technique you may NOT wish to apply to all projects!**

# Quality Different Languages

## Dueling Project Managers



### ENGINEERING

- Materials shall meet spec
- Tolerances = 2 thou
- System lag not > 3 ms
- Structure shall withstand 1.5 x operating load
- MTBF = 300 hrs
- etc.

### I.T.

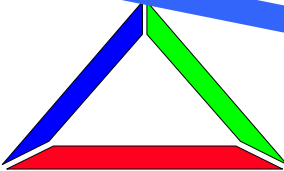
- Specs shall be approved by end user
- No more than 7 process boxes per DFD
- 25% of code shall be comment lines
- QA shall sign-off production

# Quality Case History

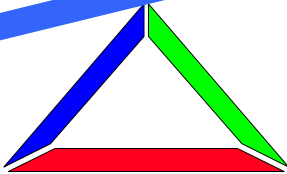
Dueling Quality Managers



Inadequate Quality



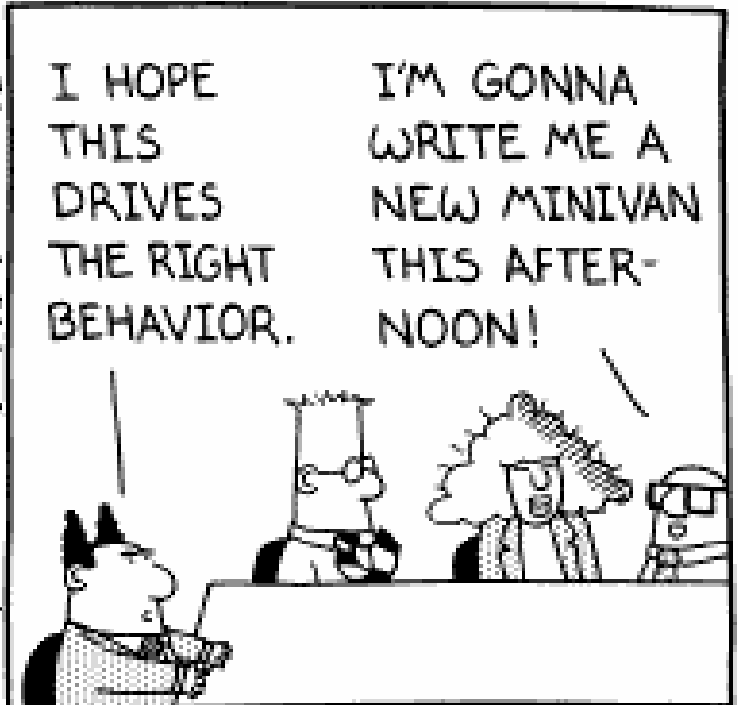
Sufficient Quality



Quality requires Investment

# Quality Measurement Dilemma

OUR GOAL IS TO WRITE BUG-FREE SOFTWARE. I'LL PAY A TEN-DOLLAR BONUS FOR EVERY BUG YOU FIND AND FIX.



# Quality Case History



## THE MISGUIDED SOFTWARE QA GROUP



**Illogical veto will be resolved by POWER!**

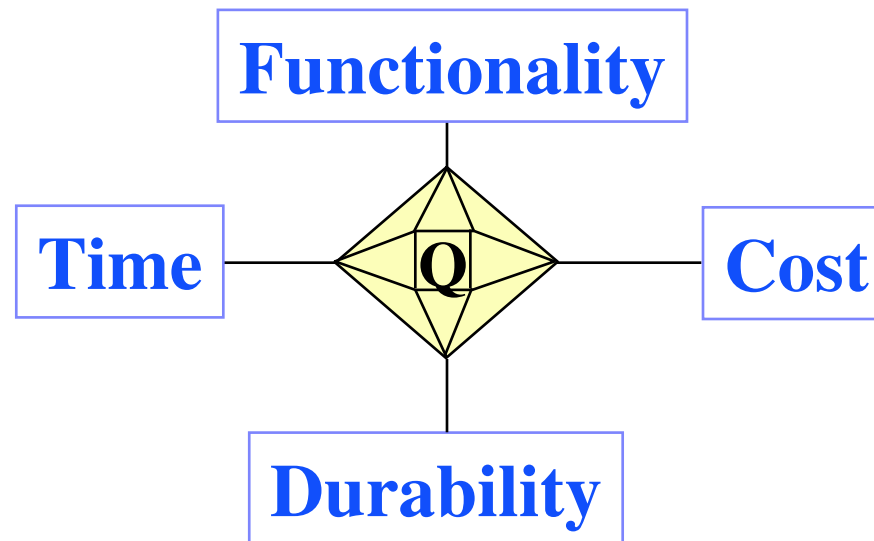


# Quality Conclusion

Dueling Project Managers



## THE QUALITY QUADRANT FOR SOFTWARE



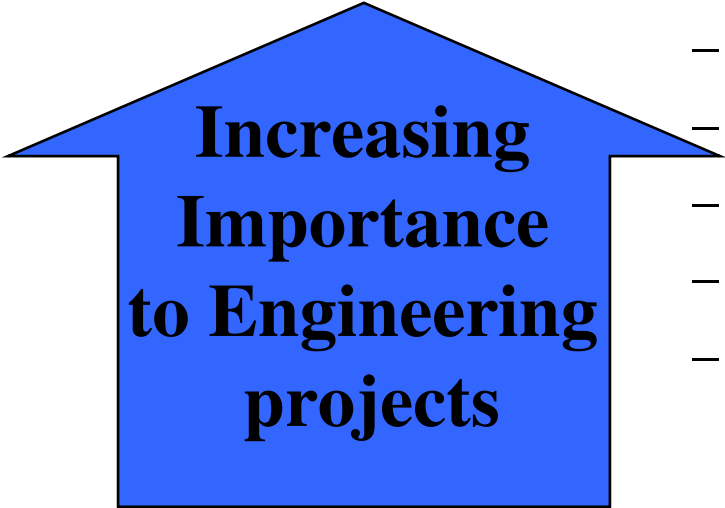
**Successful I.T. projects use a trade-off model to define Quality requirements**

# Overall Conclusions

## Dueling Project Managers

❑ Project approaches are based on:

- History
- Standards
- Technology
- Project requirements
- Client environment



**Increasing  
Importance  
to Engineering  
projects**



**Increasing  
Importance  
to IT projects**

I.T. and Engineering weigh these influences **DIFFERENTLY!**

Also - - I.T. projects are often meshed in **SOCIAL FACTORS**

# Recommendations

## Dueling Project Managers



### Scope

- Make sure the analytic tools are truly applicable
- IF YOU DEVIATE, have a trusting client relationship

### Time

- Make sure your client values a lower risk implementation
- IF YOU DEVIATE, ensure the client accepts higher risk and is tolerant of error

### Quality

- Make sure your client can afford the price
- IF YOU DEVIATE, ensure the client views quality as a trade-off, not an intrinsic

# ...Finally, What Do YOU Think?

## Dueling Project Managers

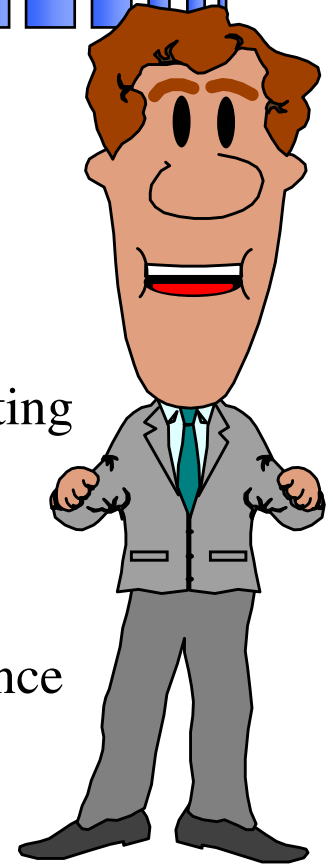


- Do your experiences match with Yogi - the Engineer?
- Do your experiences match with Robin - the I. T. Guy?
- Or does it depend???

# The End

## Dueling Project Managers

- ❑ **Yogi Schulz, B. Comm., I.S.P.**
  - President of Corvelle Management Consultants
  - project management and systems development
  - information technology related management consulting
  
- ❑ **Robin Hornby, PMP, M. Sc., I.S.P.**
  - Owner, Tempest Management Inc.
  - extensive project and delivery management experience with software development
  - risk and contract management methods



**THANKS FOR ATTENDING!!**