

# ***VM Workshop 2011***

## ***Timeless Tips For IT Pros***



*Presented by:*


**Bill Carico**

**ACTS Corporation**

<http://www.actscorp.com>

(see also [www.x4.com](http://www.x4.com))

[bcarico@actscorp.com](mailto:bcarico@actscorp.com)



**What <sup>W</sup>~~sh~~ould you do if  
attacked by an  
anaconda?**

**An anaconda is a relative of the boa constrictor, can grow to 35 feet in length, and weigh between 300 lbs. and 400 lbs.**





# Improving IT's chances for Success

**Beware of vendor promises. Always check references, then ask the references for references.**

**Beware of those who live on the *reading edge*.**

**Beware of highly publicized technology projects.**

**Avoid management by magazine**

***"Skepticism is the first step toward truth."***

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# **ACTS and the Gov of Canada**

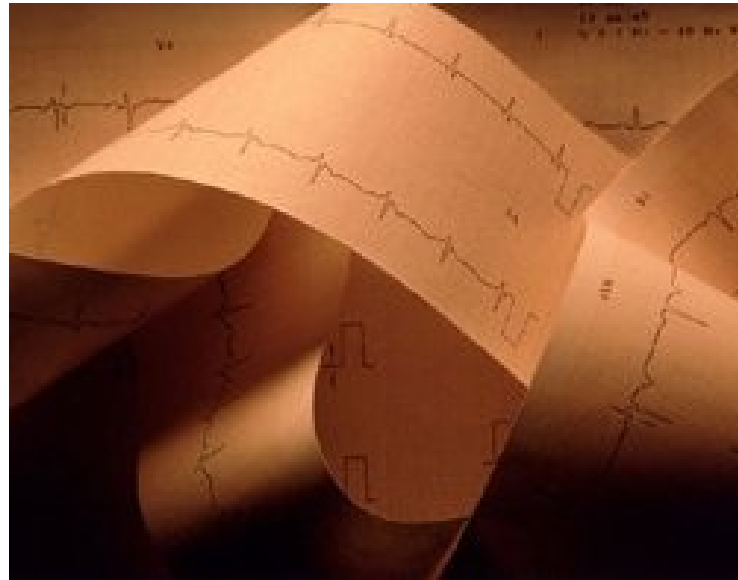
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**Which led to more frequent engagements...**

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# 5 Point Viability Assessment

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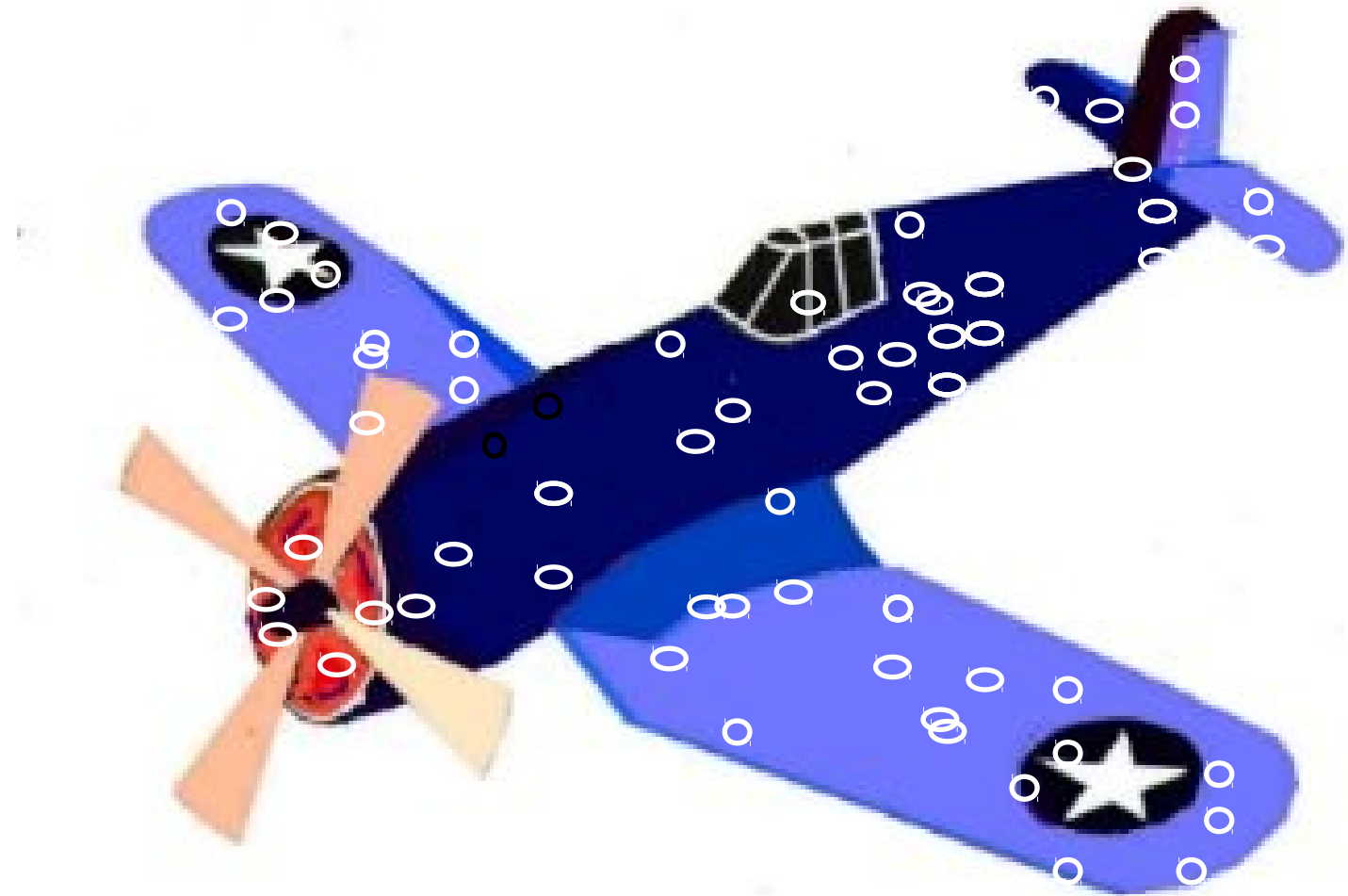


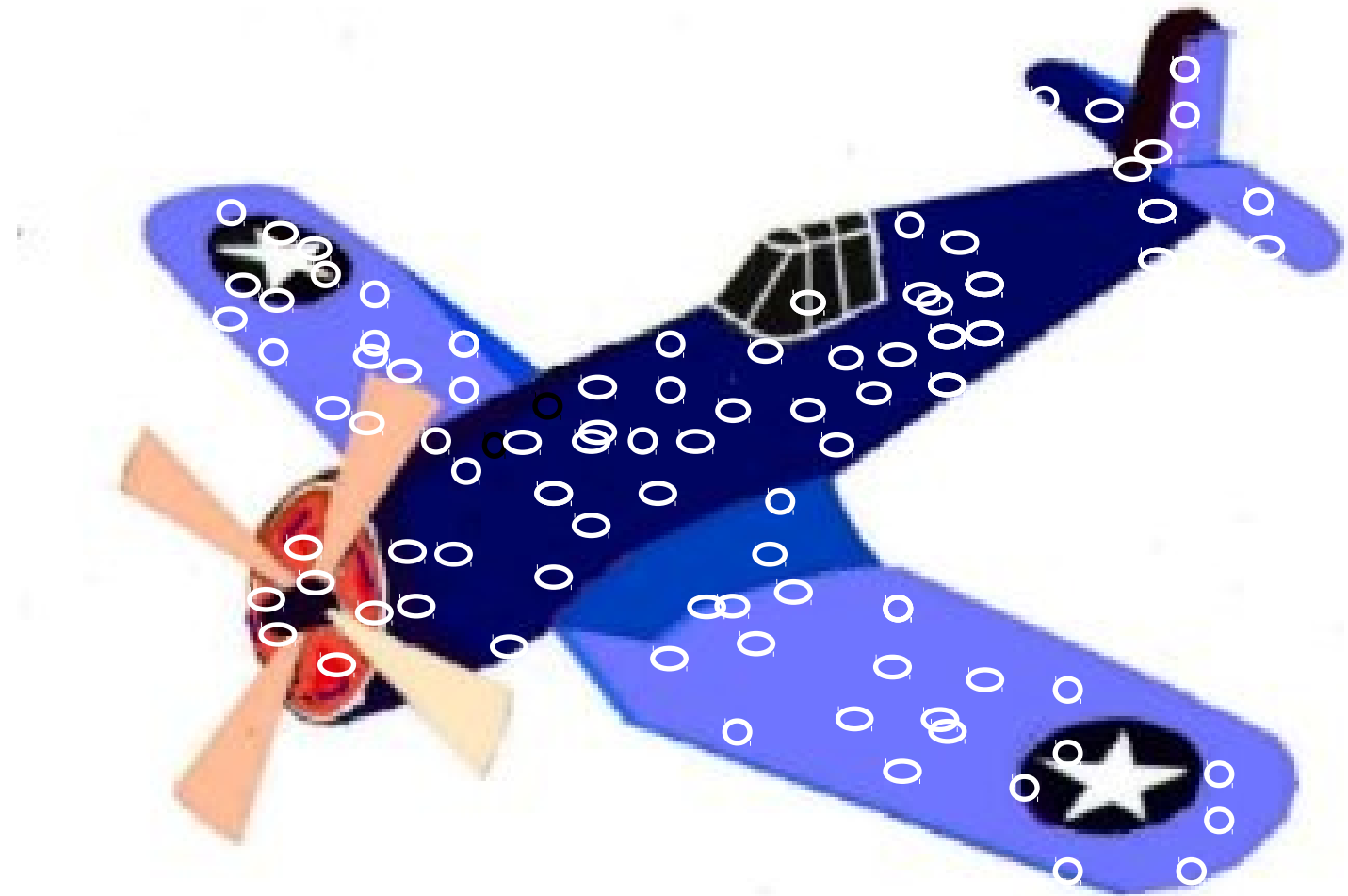
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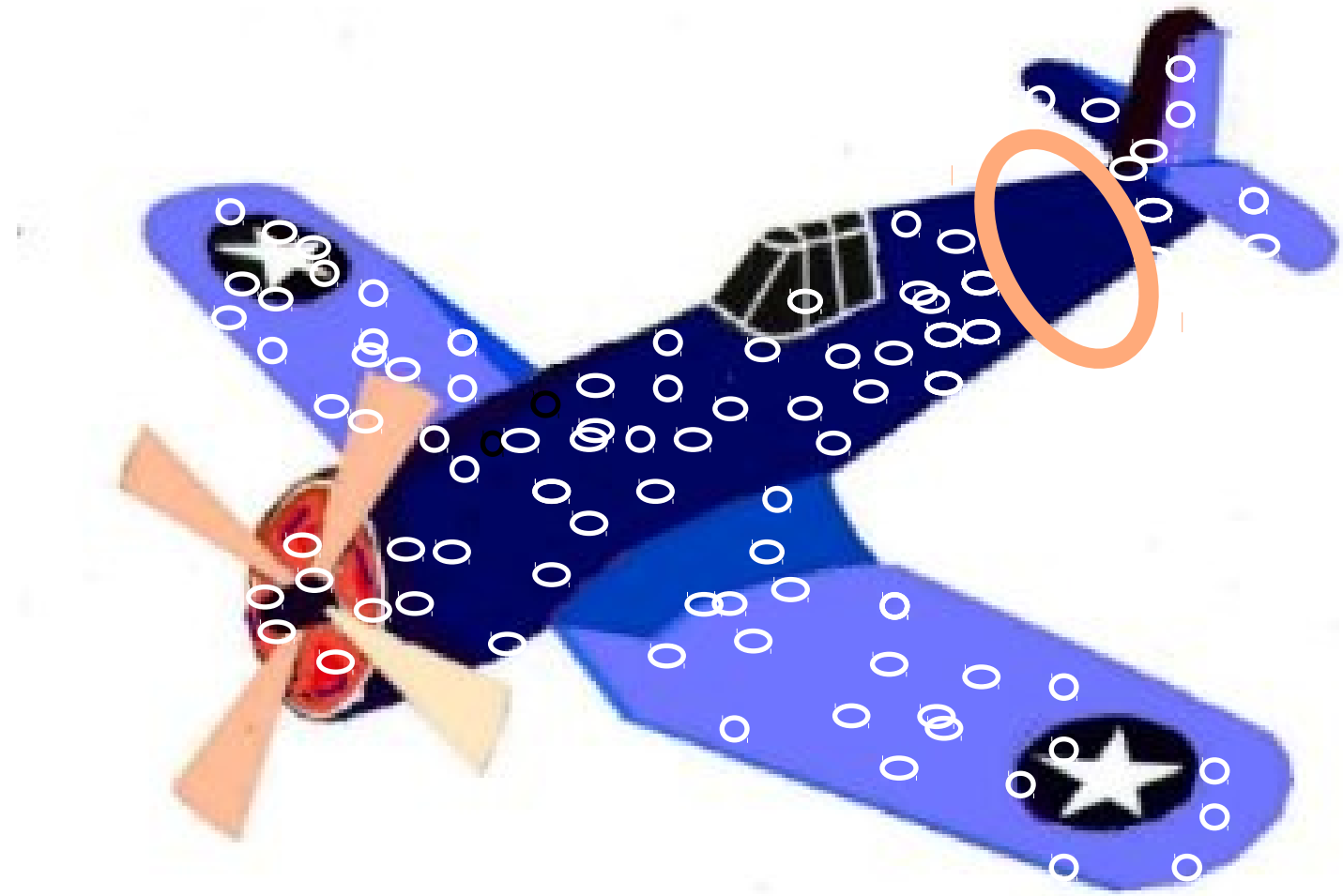


**Too many planes getting shot down. Who would know best as to where to add 100 lbs of plate armor?**









# To Illustrate the Point

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Holmes: "Somebody stole our tent."



# Common Sense?



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# Mainframe Pain Points

Costs

Lack of skills

Lack of applications

Lack of ISVs

*Other:*

---



Are any of these life threatening?

# Cost of Ownership

- ✓ **Total Cost of College analogy**
- ✓ **TCOC studies**
- ✓ **Look deeper: vendor comparisons could be against older or mismatched technology**
- ✓ **Beware of benchmarking**
- ✓ **Compare units that really show ability to handle real work**

# Mainframe Costs

**Industry claims: based on an analysis of actual IT spend and business performance comparing companies with a greater than average mainframe mix vs. less than average mainframe mix, customers may see<sup>1</sup>:**

- 33% higher Server-based computing platform costs vs. mainframe-based computing costs

## **Retail**

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# Mainframe Scalability

- **zEnterprise Unified Resource Manager and the z196 are expected to manage up to 100,000 virtual servers.**  
(IBM calculations of zManager limits across maximum z196 configuration. Results may vary)
- **Scale out to trillion of instructions per second: zEnterprise BladeCenter® Extension (zBX) + zEnterprise 196.** (IBM Internal analysis)

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The zEnterprise 196 delivers the world's most efficient virtualization designed to support over 13,000 Virtual Machines per Server and over 100,000 Virtual Machines in a cluster (Ensemble):

CEC cores	80
Max guests/core	60
Total CEC VM's	<b>4,800</b>
zBX Power Blades	114
Cores/blade	8
AIX images/core	10
zBX VMs total	<b>9,120</b>
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CEC's in an Ensemble	8
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# Mainframe Apps

As of 1H 2011:

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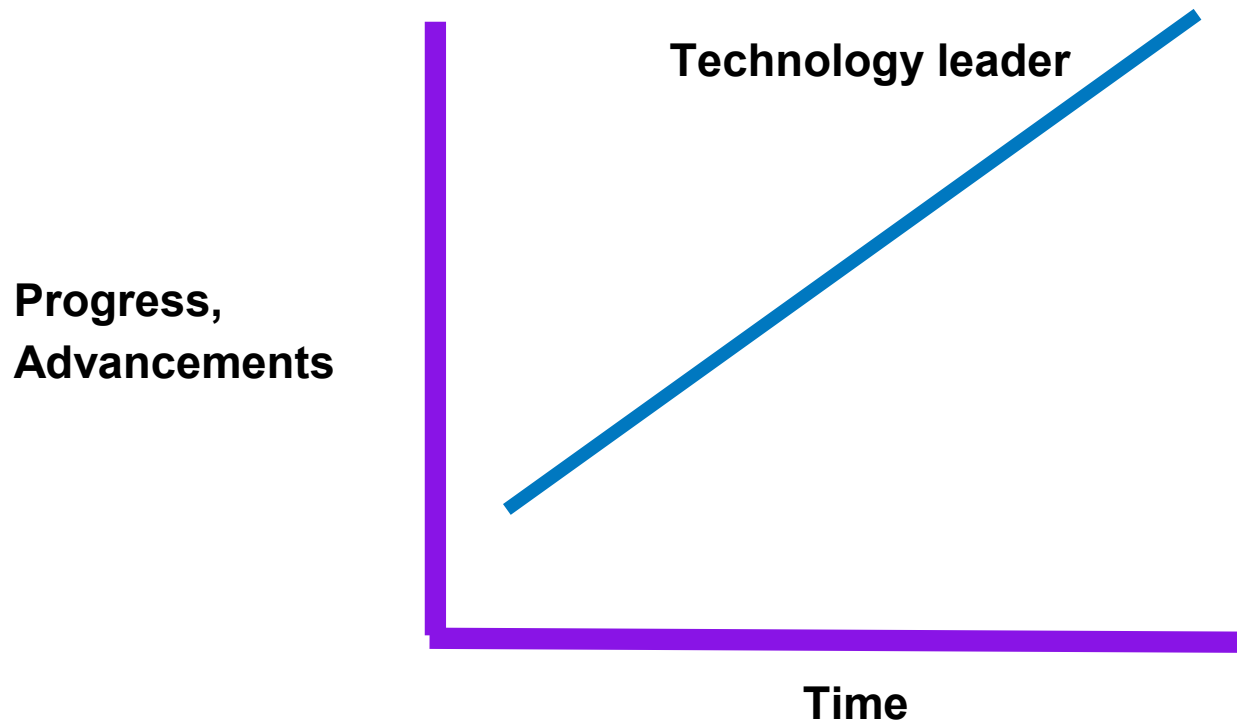
- *z/OS:*
  - Over 4,000 total z/OS applications
  - Over 275 new or upgraded applications for z/OS in 1H'11
  - More than 2,500 total applications on z/OS V1.9 and later
- *Linux on System z:*
  - 3,000+ total Linux applications
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# Mainframes and Edu

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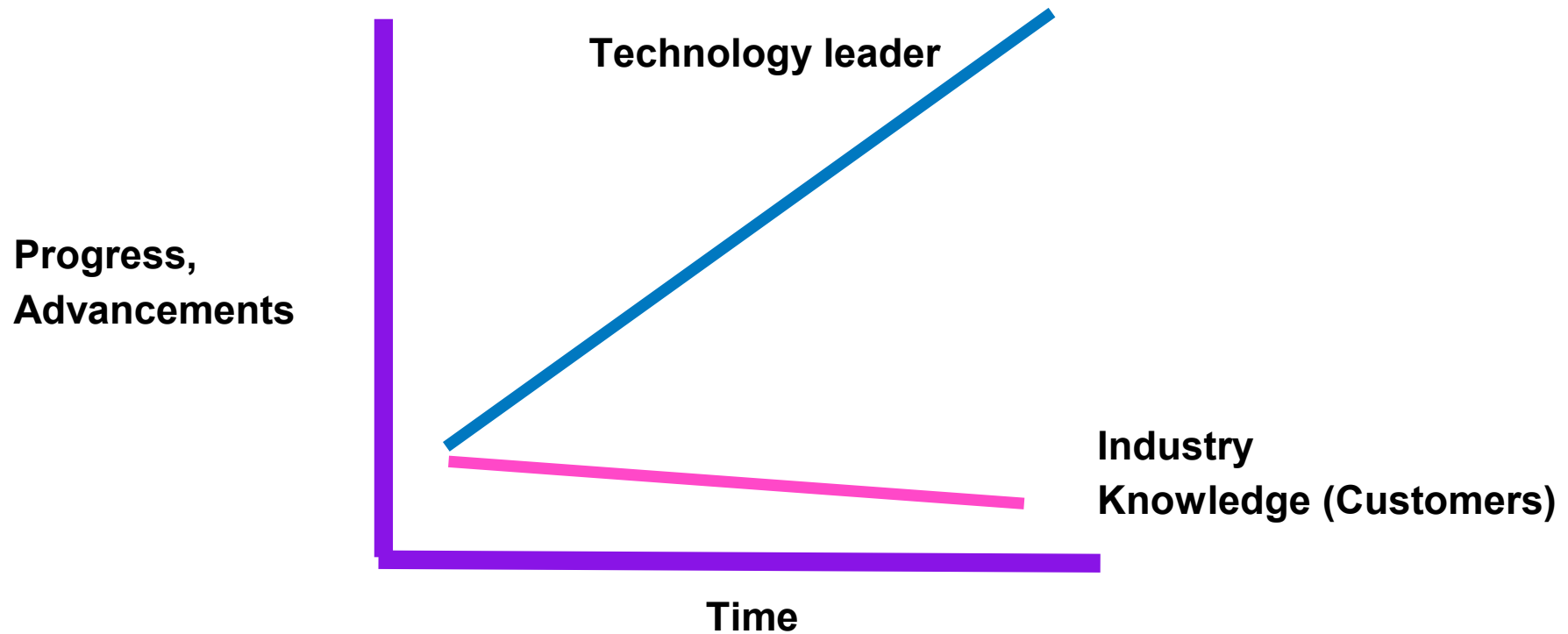
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# A Big Part of the Problem



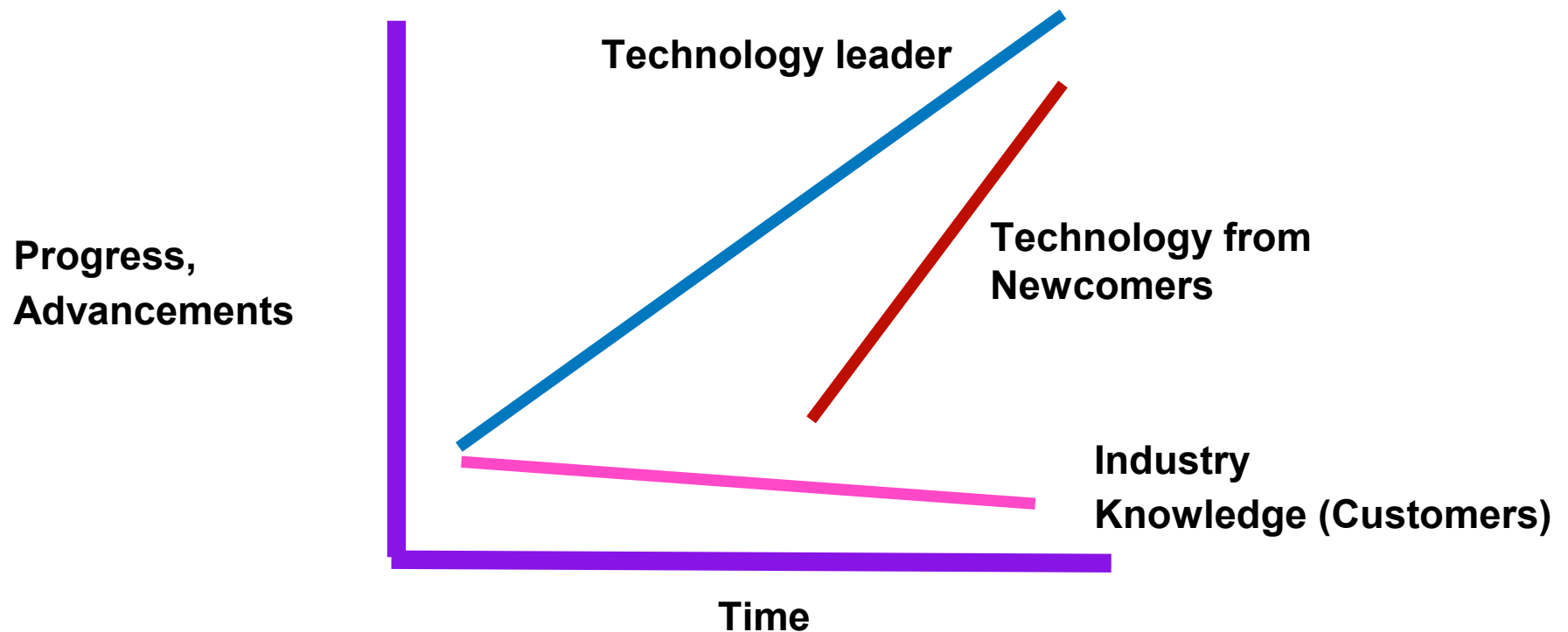
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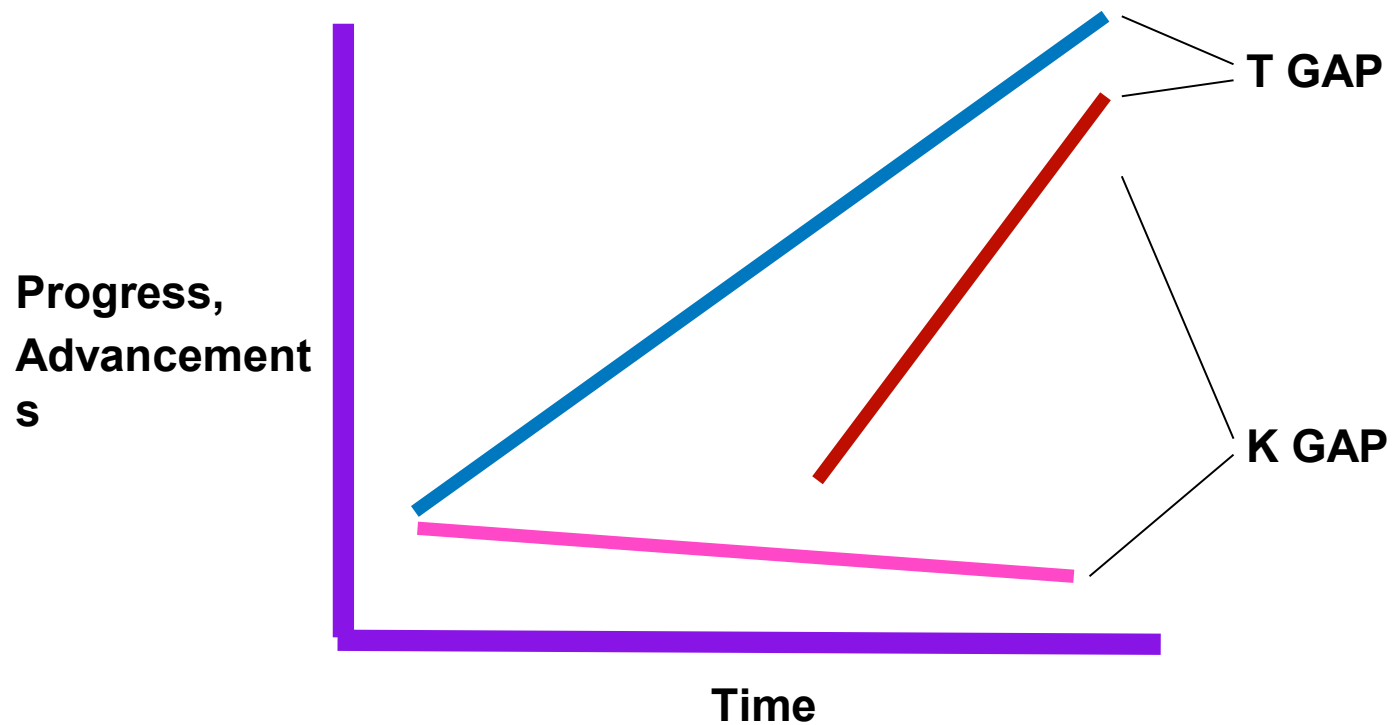
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# The Gaps

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**Customers, Vendors, Journalists,  
Consultants, Analysts**

**T** \_\_\_\_\_ **GAP**

**Scalability is  
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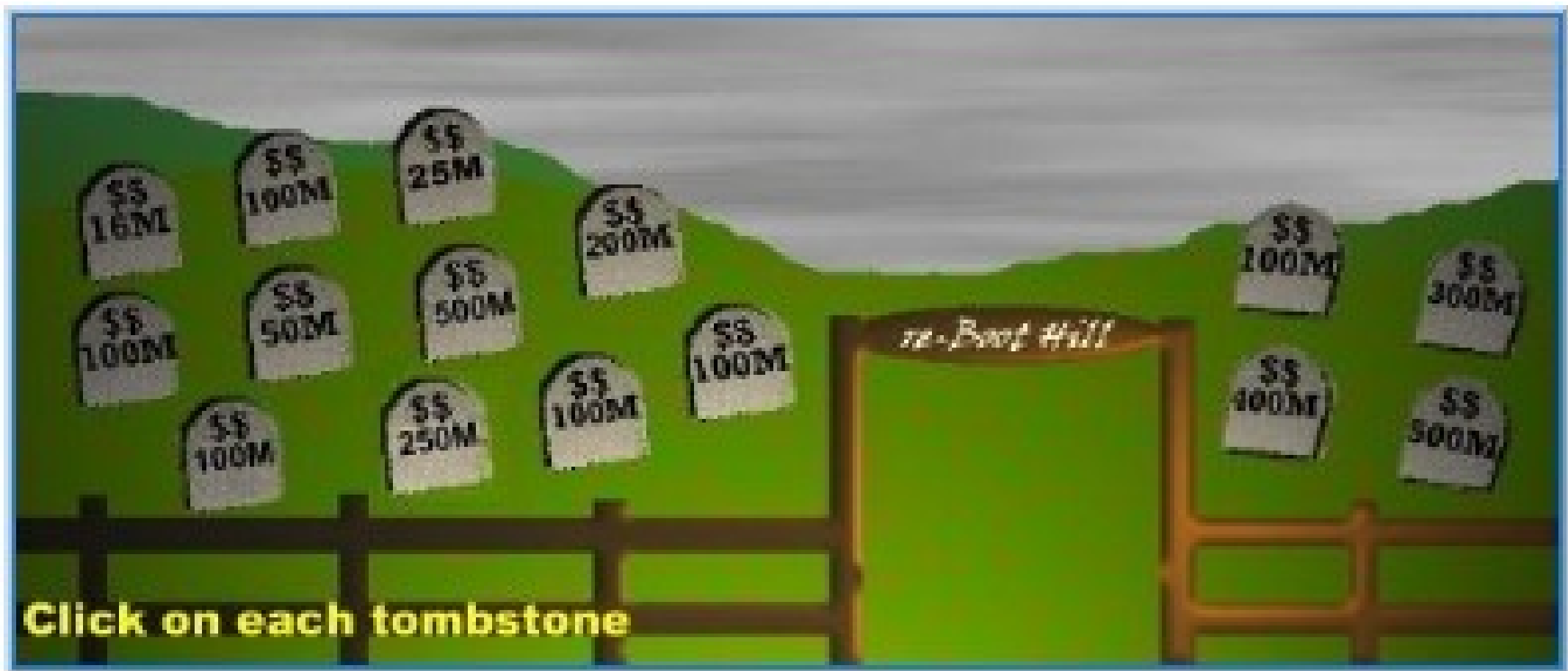
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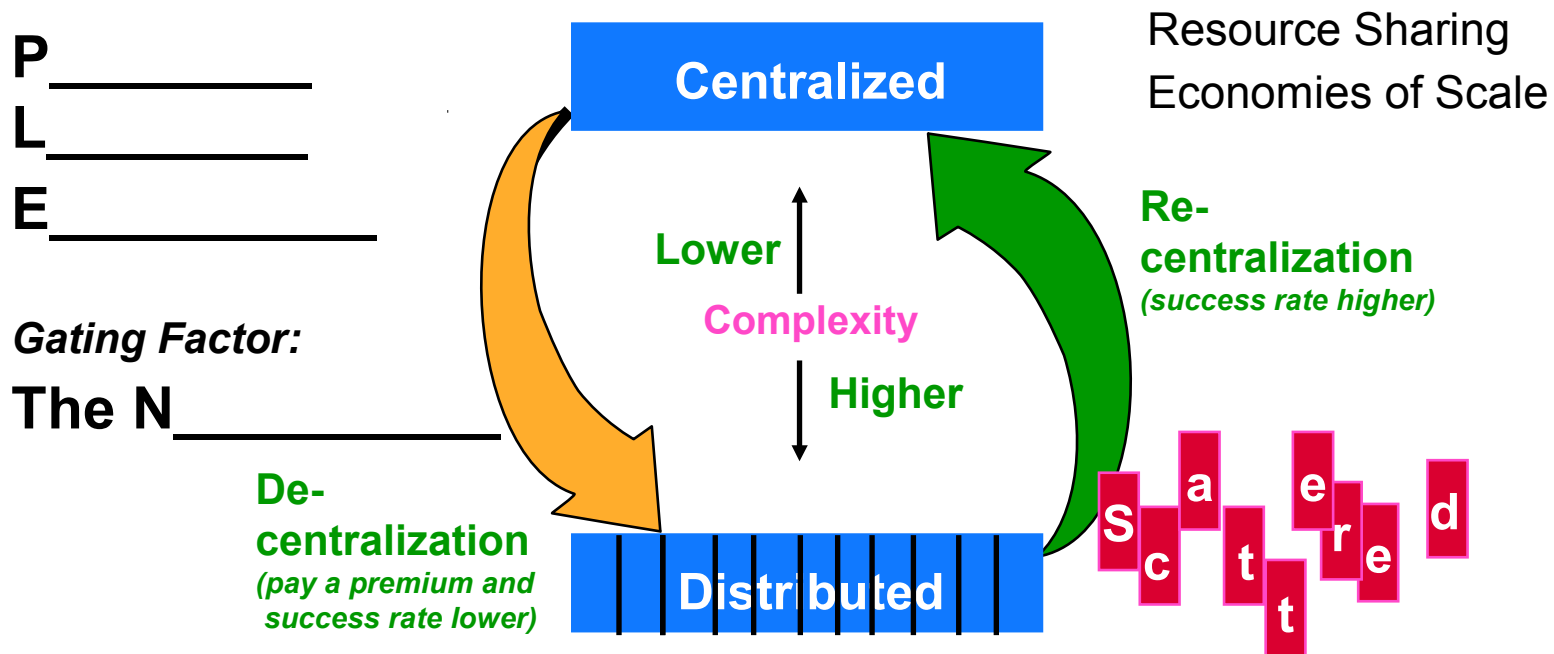


# Reboot Hill



# Why Consolidation works

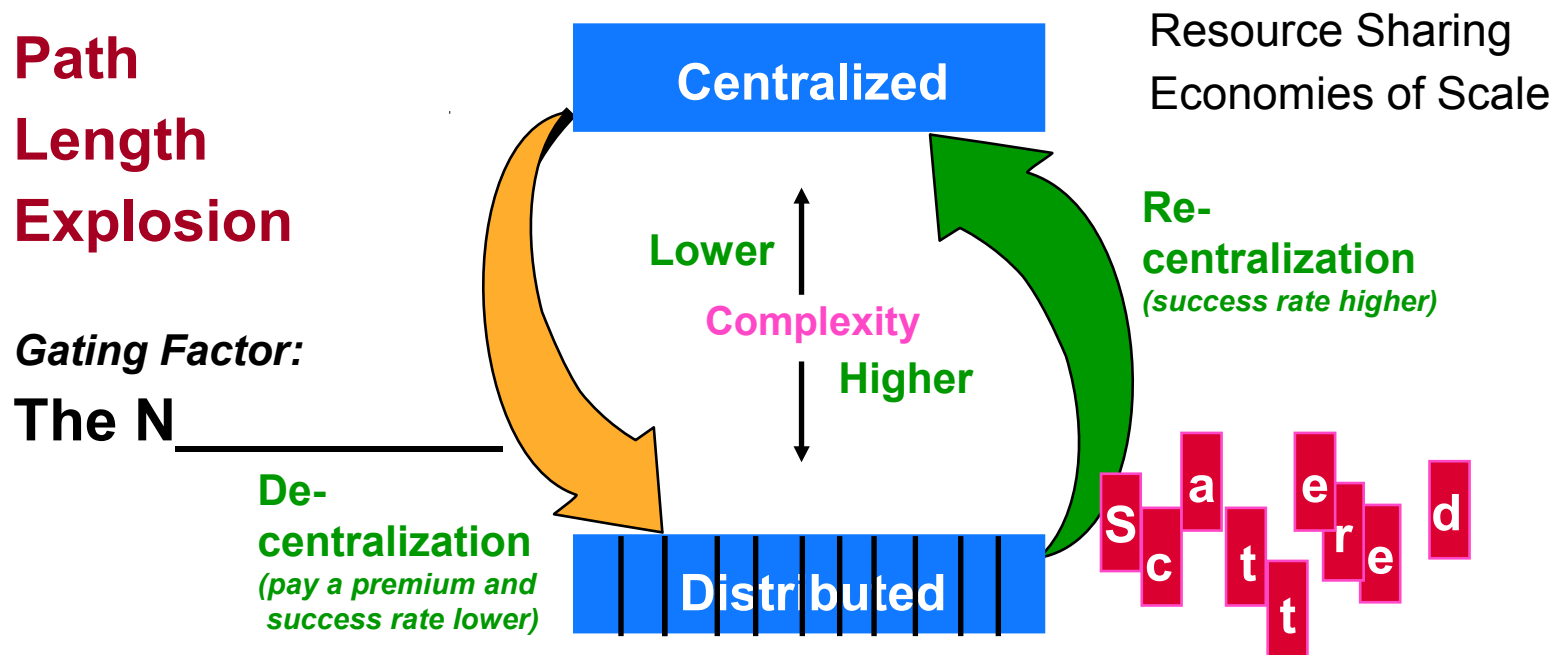
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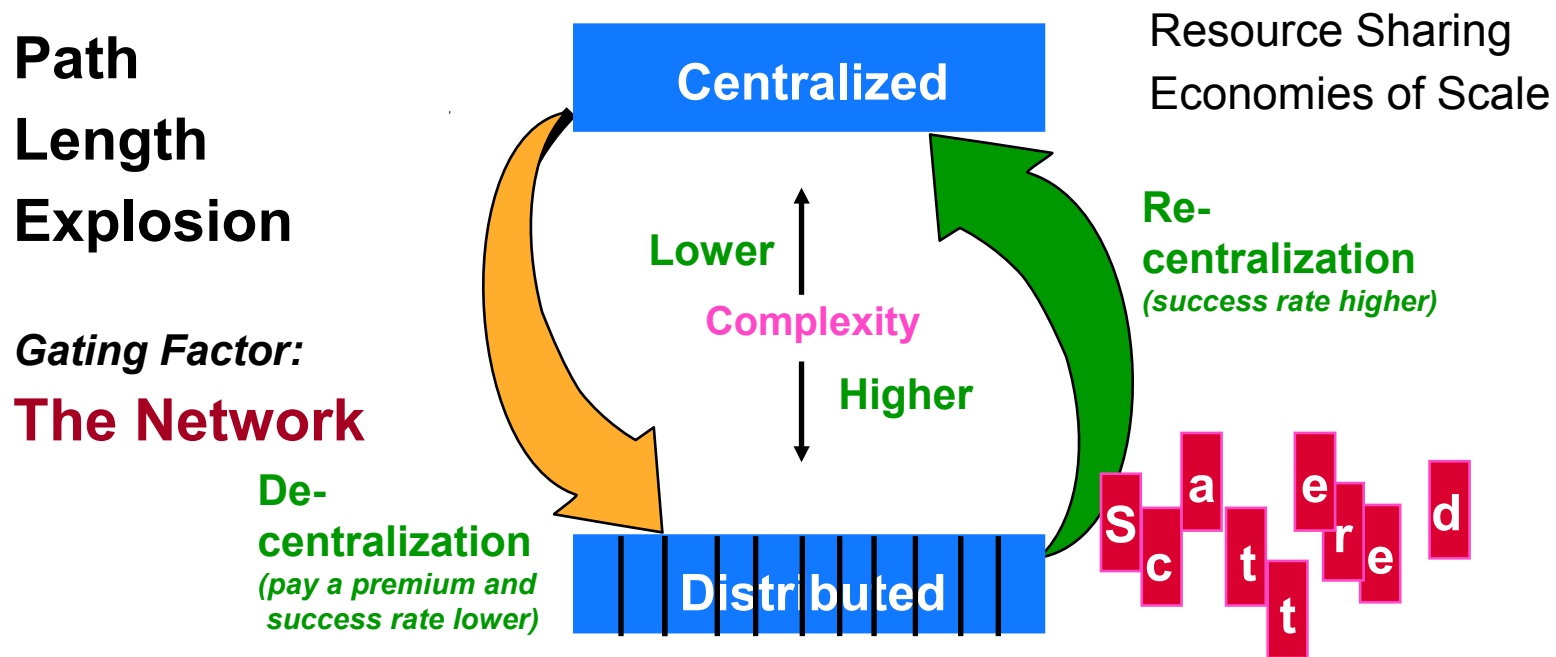
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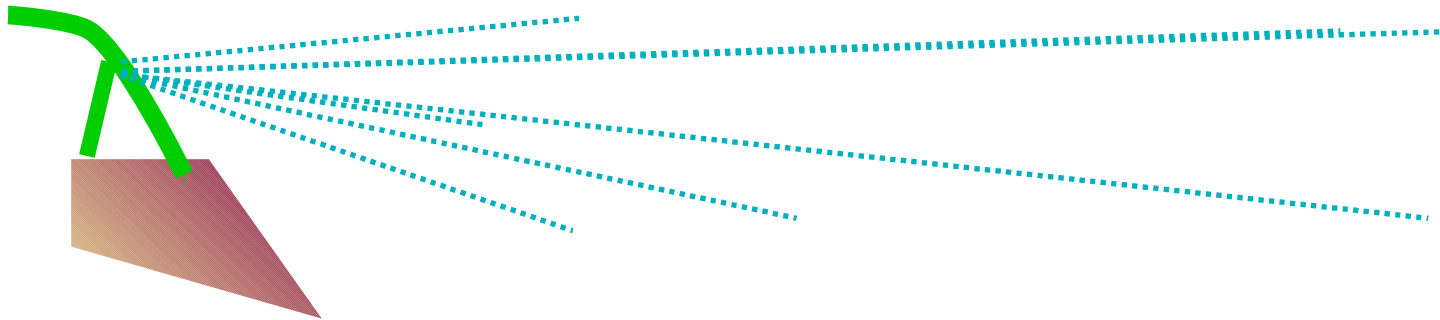
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# Customer Savvy

It is easier to pull a plow with oxen than with

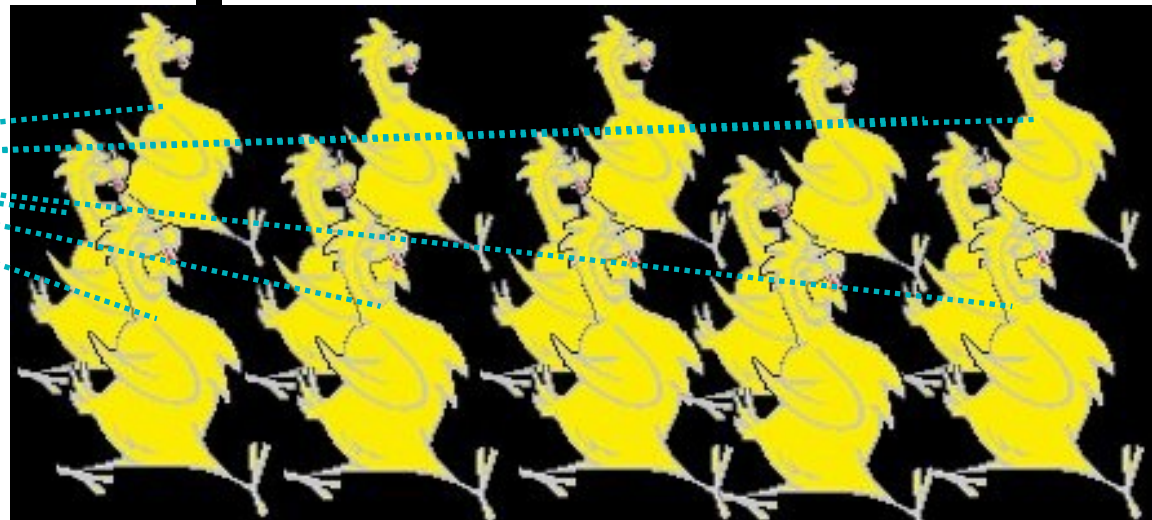
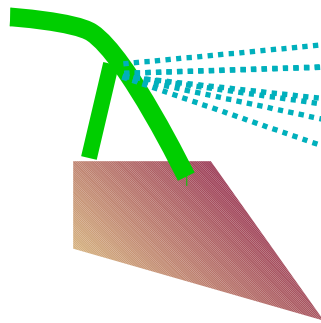
a \_\_\_\_\_.



# Customer Savvy

It is easier to pull a plow with  
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**\*Fred McCallum, Government of Canada**

# How do you define value?

"Value" is a pretty nebulous term.

Value derived from peace-of-mind that it will be running and available 99.999% of the time ???

Value in knowing it wont be successfully assaulted by a virus ???

Value in trusting its security model to the point of allowing most any user to do just about anything they want to without jeopardizing the stability and function of the system ???

Value in building new capability integrated with legacy functions on one platform ???

Value of projecting an image of stability and trustworthiness to our customers because our systems are available to support their needs

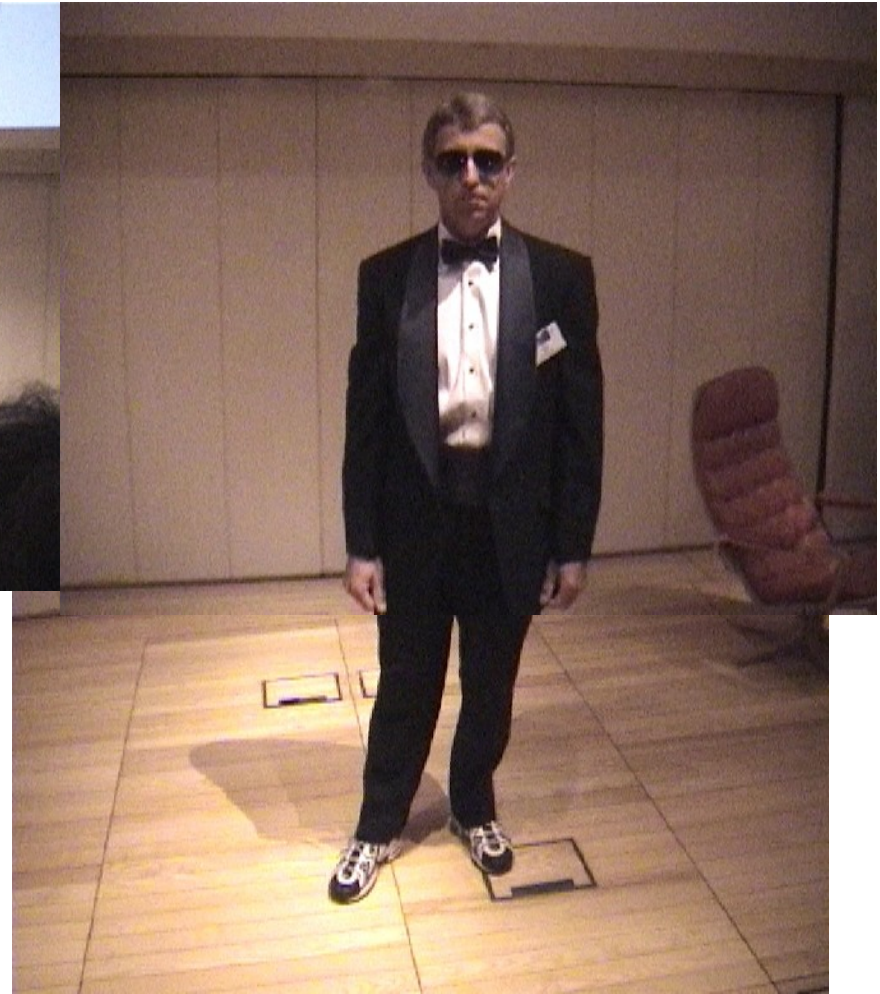
# Value Proposition

## *IT value is related to:*

- **Access to Data**
- **Security**
- **Performance/response time**
- **Scalability**
- **Resource and System Mgt**
- **Leveraging virtualization and centralization**
- **Availability, Recoverability**
- **Connectivity**
- **Affordability**

*On a scale from 1 (low) to 10 (high), how would you rate the mainframe's functionality in each of these areas?*

# Image Rehab



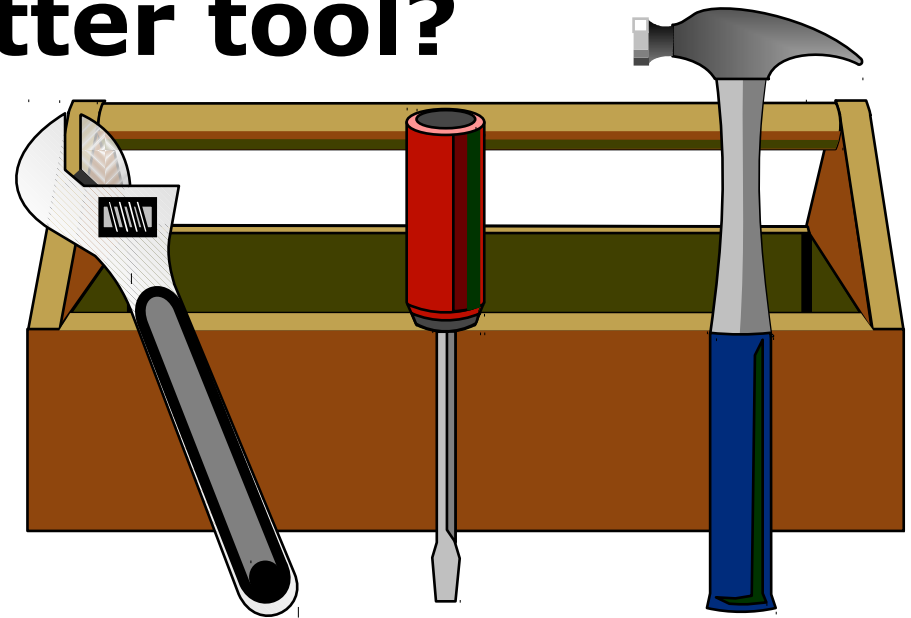
"Image is everything!"

*Audience poll:*

*Is the mainframe's image improving at your place of work? (show of hands please...Yes? No?)*

# Avoid Foolish Arguments

Which is the better tool?

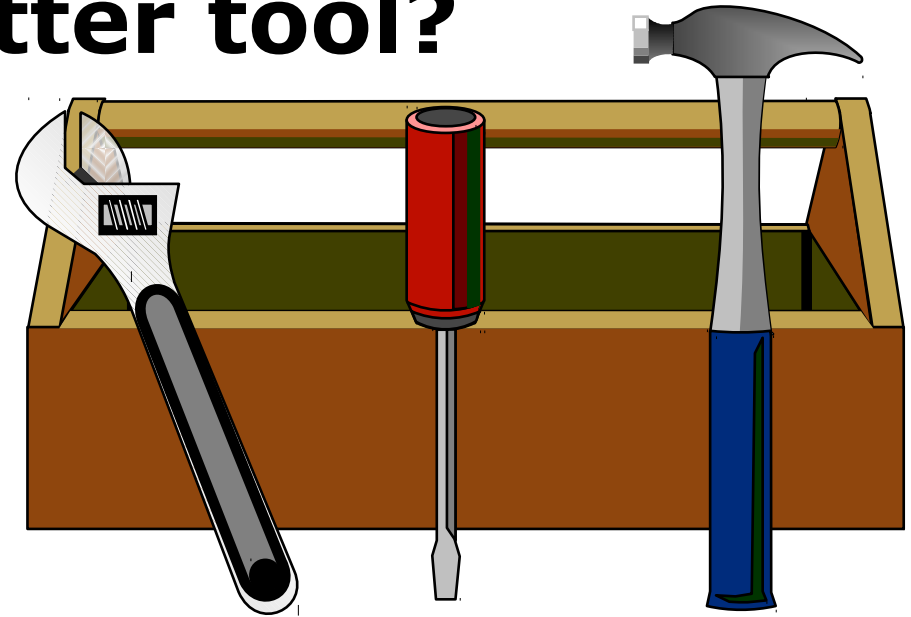


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Thank you!



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434-426-2287



Then....



Allie speaking about Moore's law and fabrication technology at IBM Conf. in Orlando (age 8)

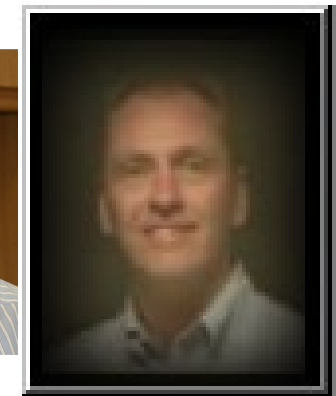
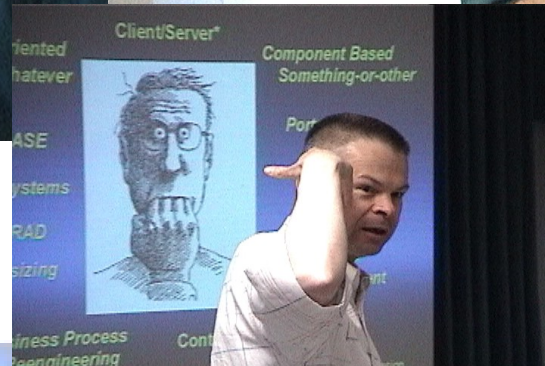
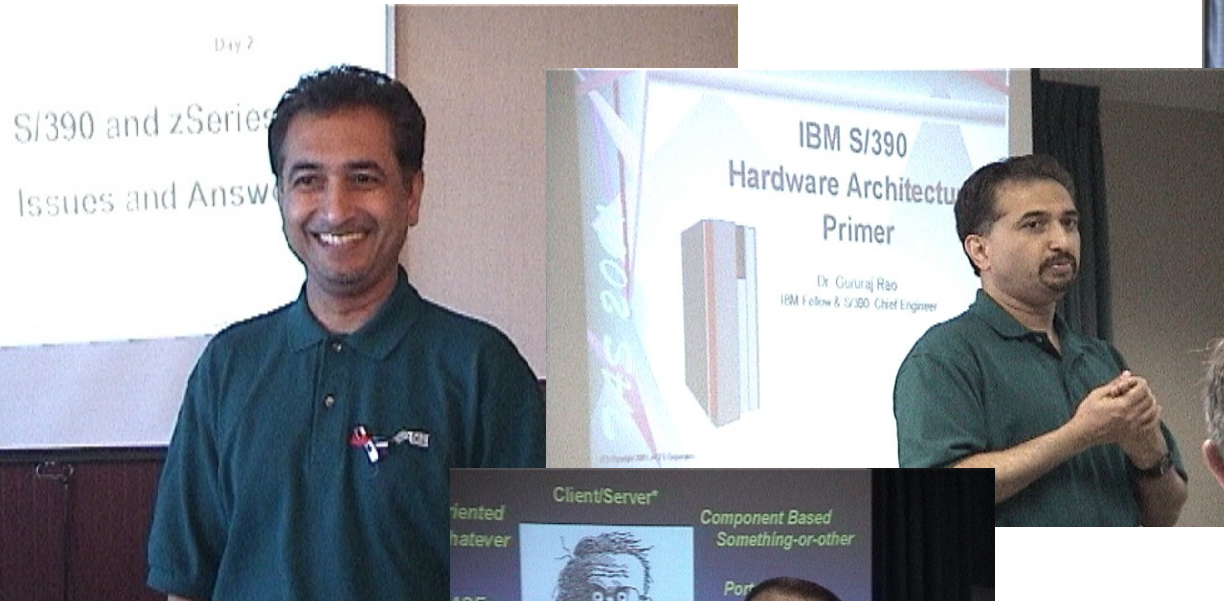


And now  
She just turned 20.





# Recognize anyone?



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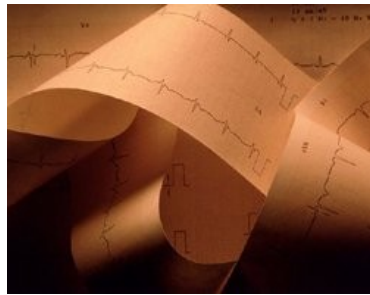
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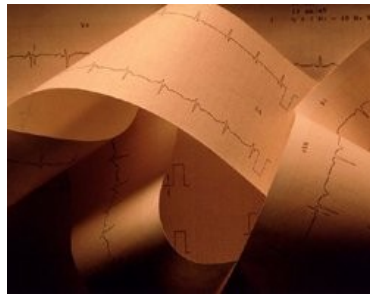
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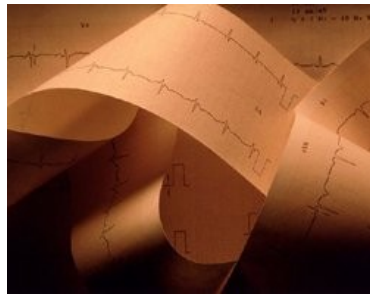


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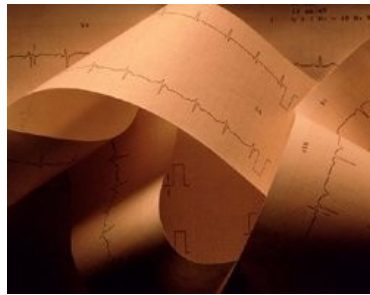
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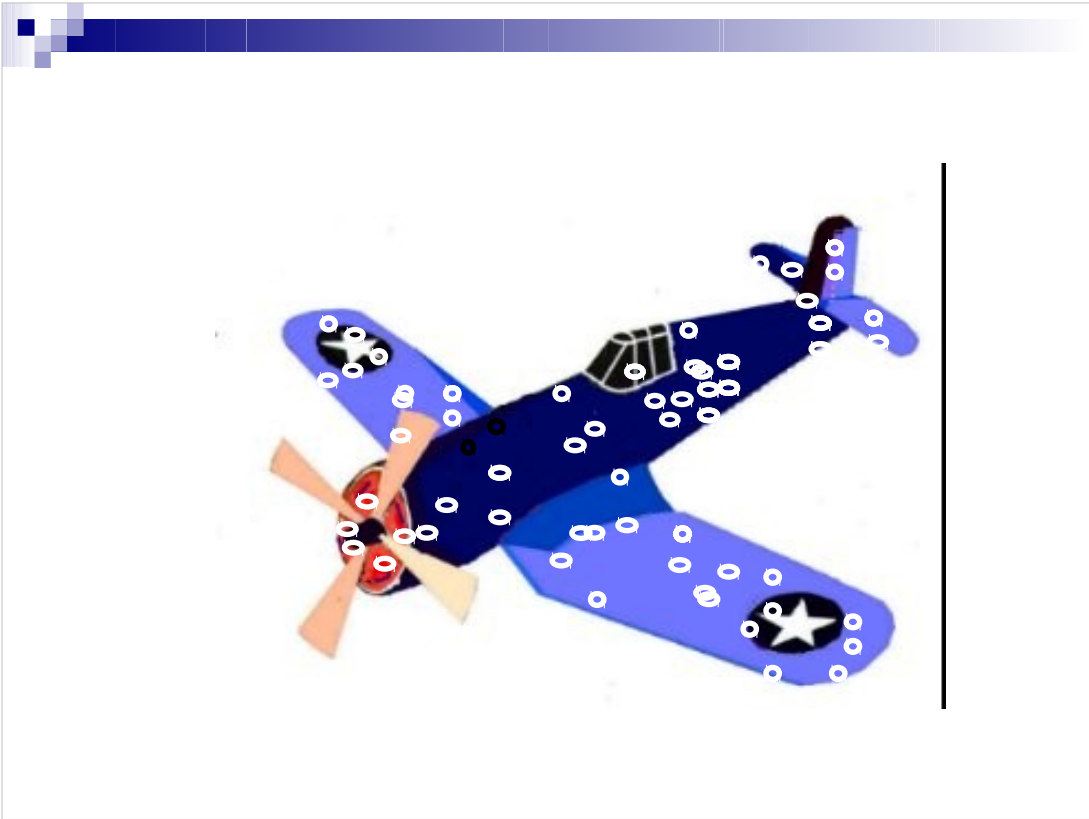


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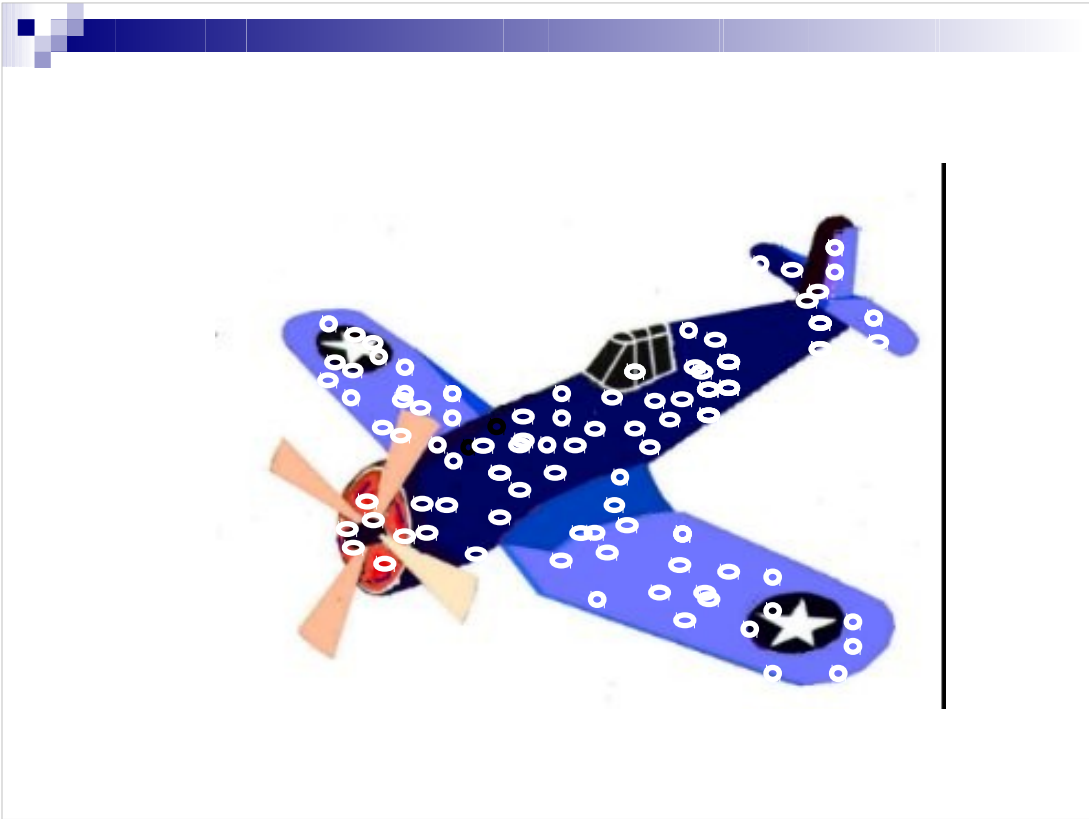


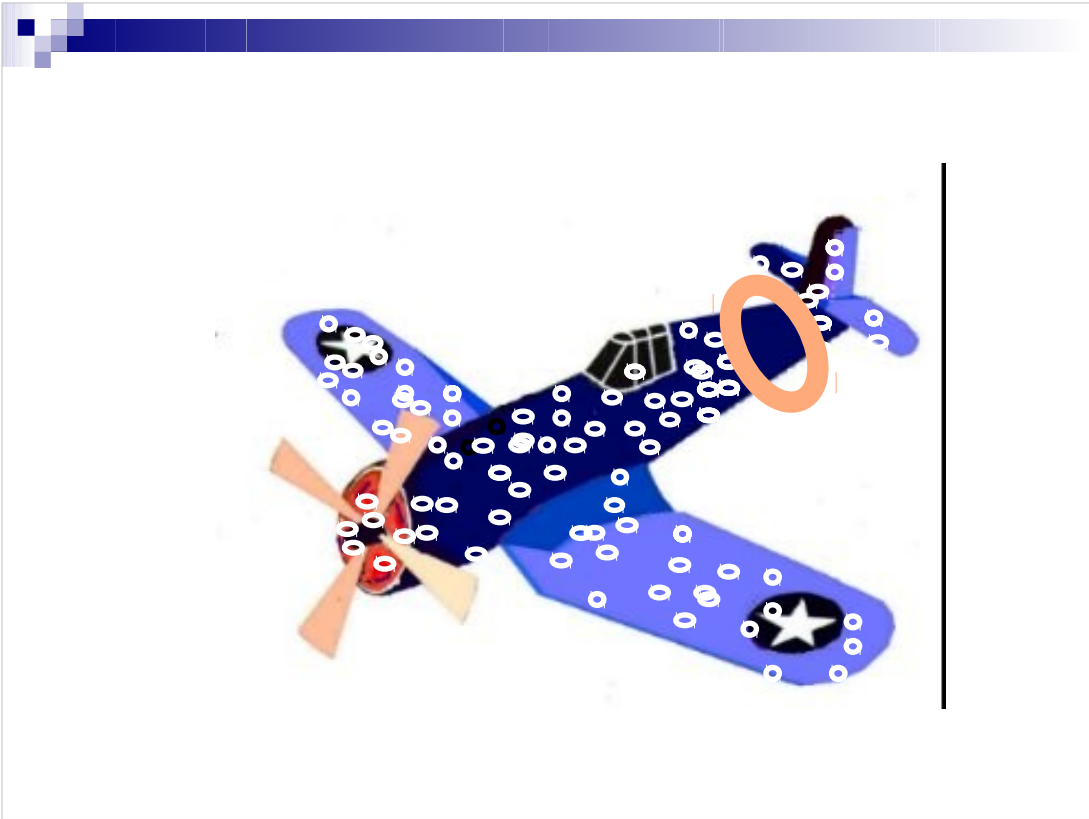
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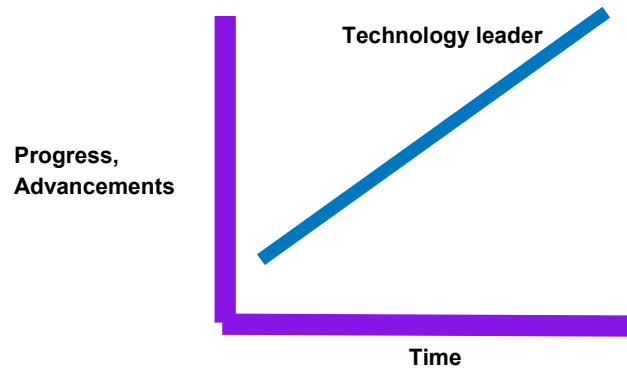


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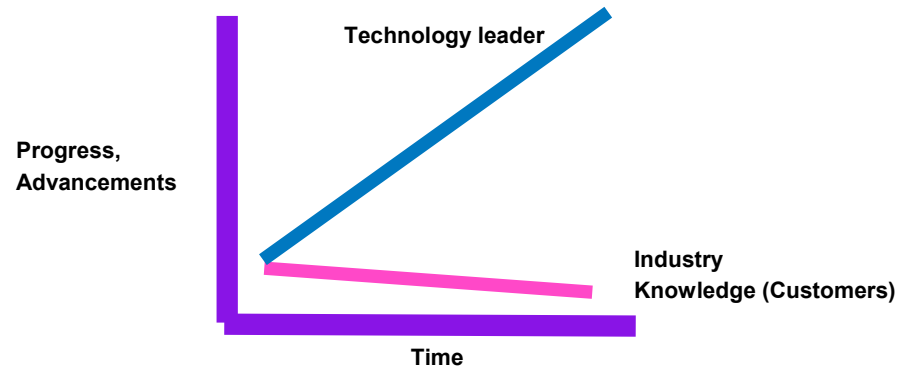
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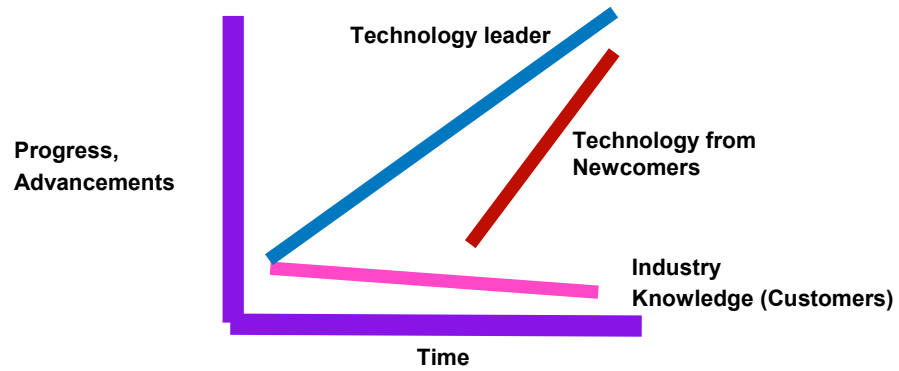


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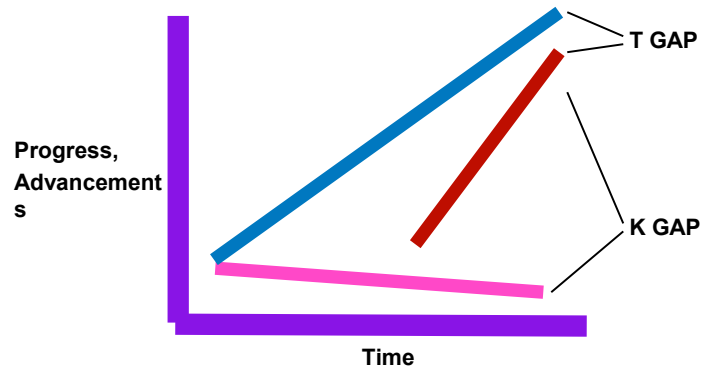
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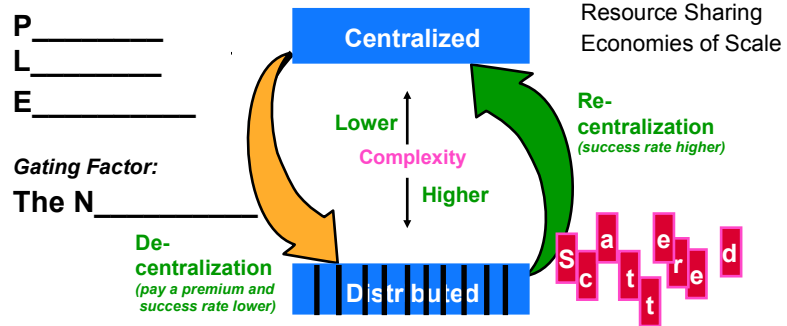
# Reboot Hill





# Why Consolidation works

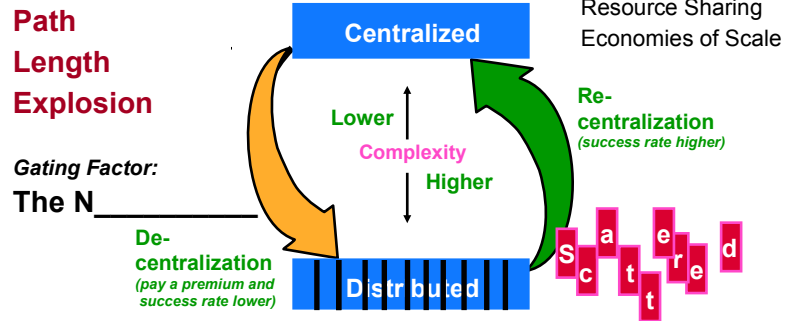
Centralized | Decentralized |  
Scattered



Applies to organizations and  
business processes, as  
well as computing platforms.

# Why Consolidation works

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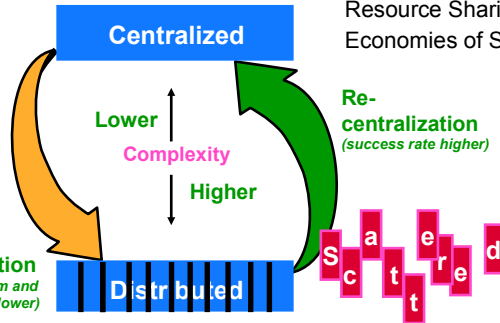
# Why Consolidation works

Centralized | Decentralized |  
Scattered

Path  
Length  
Explosion

Gating Factor:  
The Network

De-  
centralization  
*(pay a premium and  
success rate lower)*



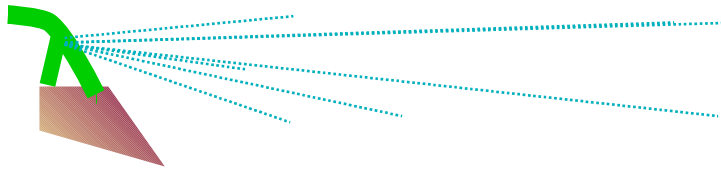
Resource Sharing  
Economies of Scale

Applies to organizations and  
business processes, as  
well as computing platforms.

# Customer Savvy

It is easier to pull a plow with  
oxen than with

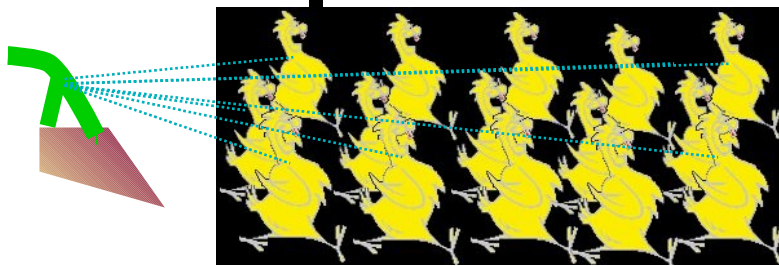
a \_\_\_\_\_.



# Customer Savvy

It is easier to pull a plow with  
oxen than with

a thousand chickens.



\*Fred McCallum, Government of Canada



## **How do you define value?**

**"Value" is a pretty nebulous term.**

**Value derived from peace-of-mind that it will be running and available 99.999% of the time ???**

**Value in knowing it wont be successfully assaulted by a virus ???**

**Value in trusting its security model to the point of allowing most any user to do just about anything they want to without jeopardizing the stability and function of the system ???**

**Value in building new capability integrated with legacy functions on one platform ???**

**Value of projecting an image of stability and trustworthiness to our customers because our systems are available to support their needs**



# Value Proposition

## *IT value is related to:*

- Access to Data
- Security
- Performance/response time
- Scalability
- Resource and System Mgt
- Leveraging virtualization and centralization
- Availability, Recoverability
- Connectivity
- Affordability

*On a scale from 1 (low) to 10 (high), how would you rate the mainframe's functionality in each of these areas?*

## Image Rehab



"Image is everything!"

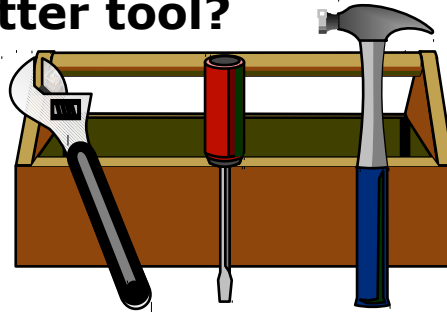
*Audience poll:*

*Is the mainframe's image improving at your place of work? (show of hands please...Yes? No?)*



# Avoid Foolish Arguments

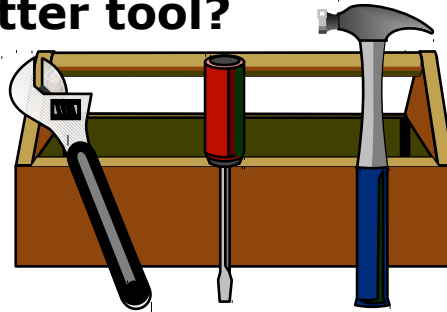
Which is the better tool?



**Warning:** *Prescription without proper diagnosis is...*

# Avoid Foolish Arguments

Which is the better tool?



*Prescription without proper diagnosis is*

***malpractice.***

Thank you!



Bill Carico  
bcarico@actscorp.com  
434-426-2287

Then....



Allie speaking about Moore's law and fabrication technology at IBM Conf. in Orlando (age 8)

And now  
She just turned 20.



# Recognize anyone?

