



# Digital Transformation

Thriving Through the  
Transition

I just heard a double-click. Somebody must be in trouble!



Tweets  
**19K**

Following  
**1,250**

Followers  
**32.1K**

Likes  
**7,647**

Lists  
**3**

## Jeffrey Snover

@jsnover

Jeffrey Snover: Microsoft Technical Fellow  
/ Chief Architect for Azure Storage &  
Cloud/ Azure Stack Architect / PowerShell  
Inventor / Science geek.

📍 Redmond, WA

# Microsoft mission

Empower every person and  
every organization on the  
planet to achieve more





- Who believes the Digital Transformation hype?
- Who is retiring in the next 3 years?

# Stair Jobs







# Elevator Jobs

---



Transitions can be the wind in your  
sail

# Or Not



# facebook



Who is Moving The  
Business Forward?

# Attendance Manager®

## Performance Evaluation

First Name:

Date of Review (Month/Year):

1. Meets acceptable standards.

2. Below Expectations

3. Consistently Exceeds Expectations

4. Exceeds Expectations

5. Meets Expectations

6. Unobservables

to neat and complete is the individual's work? Give an example of



# Transitions & My Career

# Transitions and my Career



# UNIX

---



**digital**<sup>TM</sup>



ECU Diskette V1.8 DEC Alpha  
For use in configuration of systems to  
be used with Windows NT

©1993 Micro Computer Systems Inc.

©1995 Digital Equipment Corporation

All rights reserved

AK-QF1GB-CA

MPR092054

All in on the  
transition to  
Windows NT

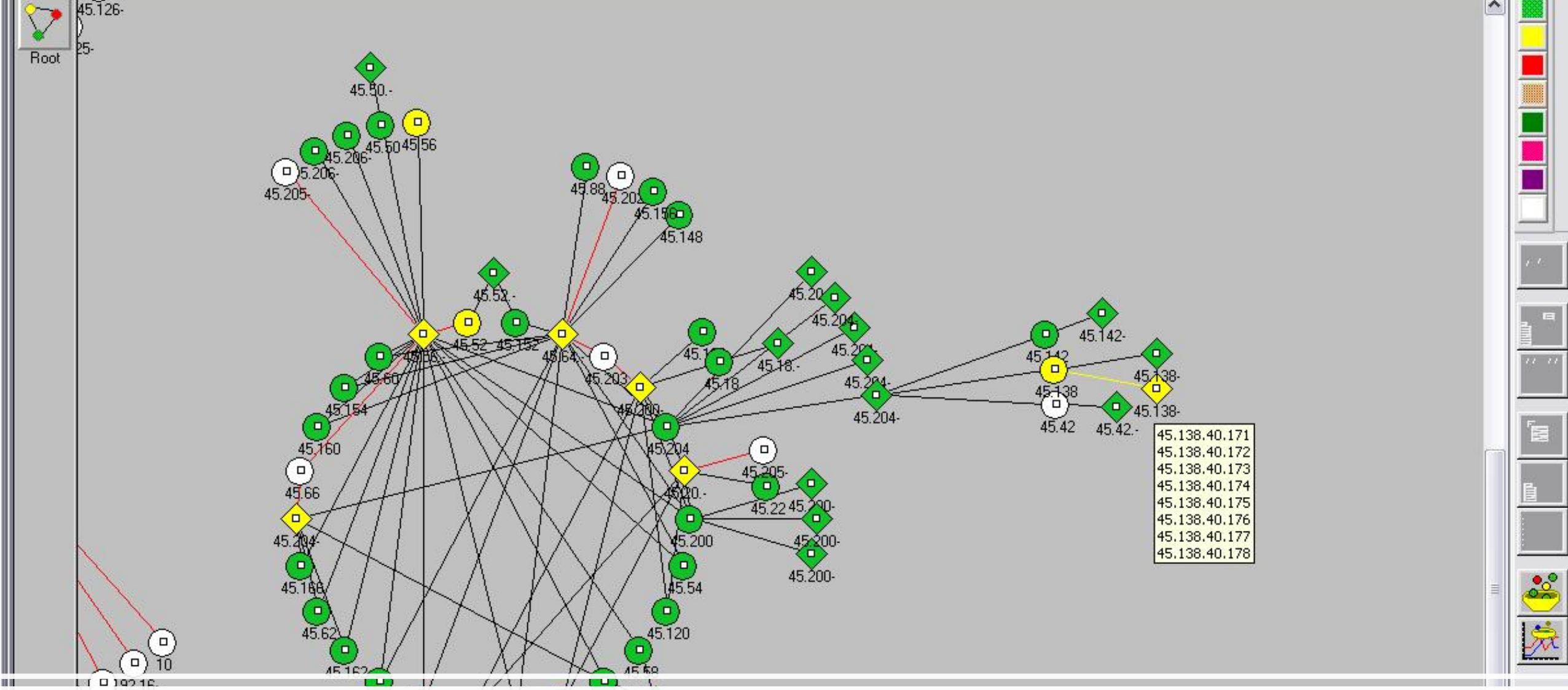


I Read **EVERYTHING!**





I Evangelized



# The NetView Opportunity

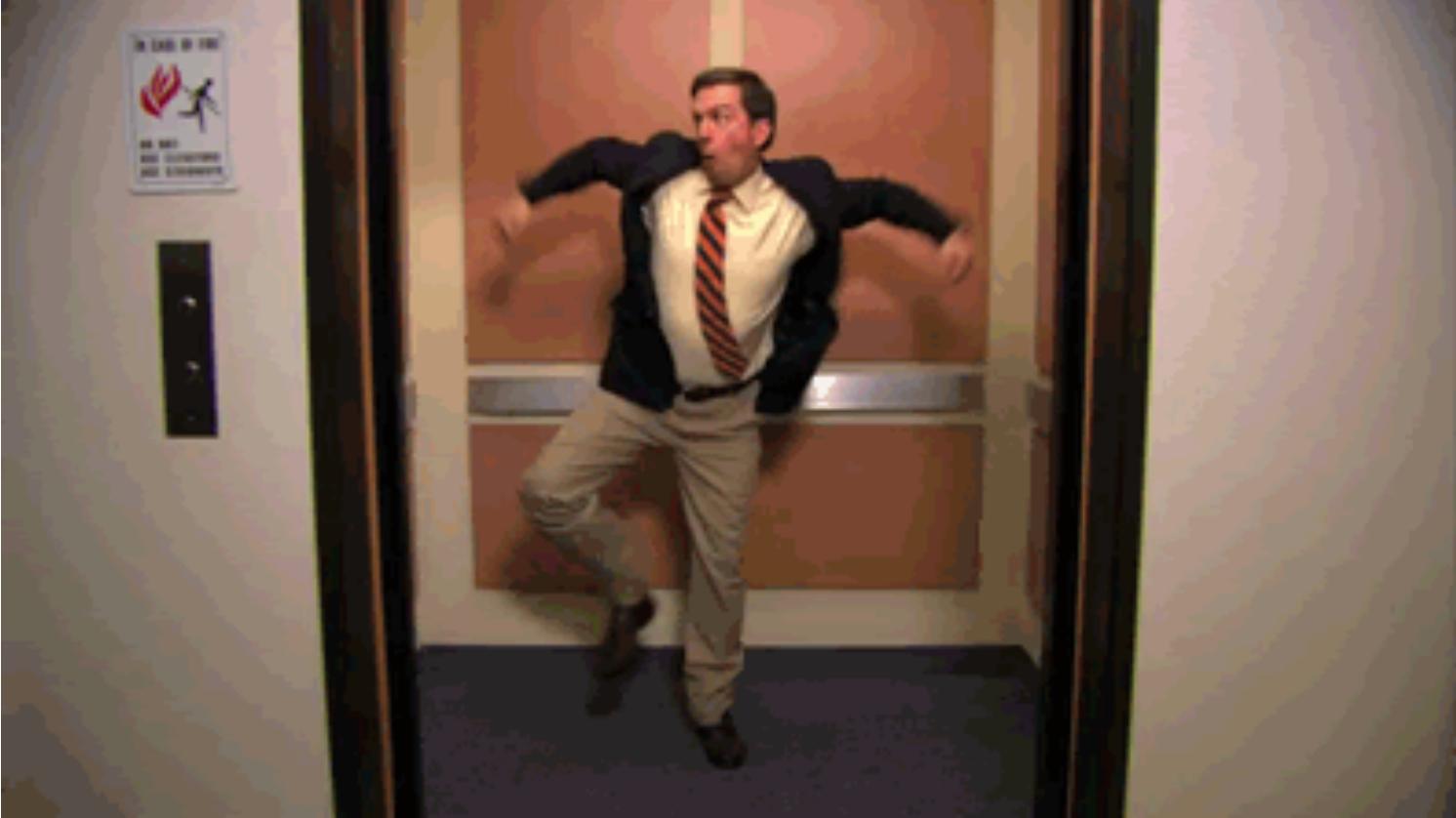


45.138.40.171 -> 45.138.40.171 45.138.40.172 45.138.40.173 45.138.40.174 45.138.40.175 45.138.40.176 45.138.40.177 45.138.40.178

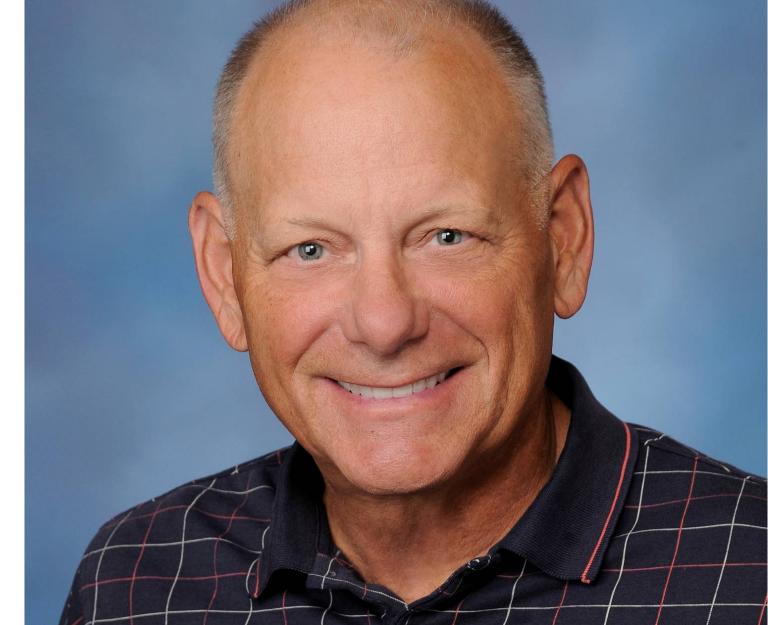
Nodes: 124

Zoom X 2 10:51

Tivoli



# Elevator Job



Consulting Engineer

---



A:AI: 'EMP' [Exit]

Worksheet Range Copy Move File Print Graph Data System Quit  
Global Insert Delete Column Erase Titles Window Status Page Hide

A	A	B	C	D	E	F	G
1	EMP	EMP NAME	DEPTNO	JOB	YEARS	SALARY	BONUS
2	1777	AziBad	40000	Sales	2	40000	10000
3	81964	Brown	60000	Sales	3	45000	10000
4	40370	Burns	60000	Mgr	4	75000	25000
5	50706	Caeser	70000	Mgr	3	65000	25000
6	49692	Curly	30000	Mgr	5	65000	20000
7	34791	Dabbarrett	70000	Sales	2	45000	10000
8	84984	Daniels	10000	President	6	150000	100000
9	59937	Dempsey	30000	Sales	3	40000	10000
10	51515	Demovan	30000	Sales	2	30000	5000
11	40338	Fields	40000	Mgr	5	70000	25000
12	91574	Fiklore	10000	Adm	6	35000	---
13	64596	Fine	50000	Mgr	3	75000	25000
14	13729	Green	10000	Mgr	5	90000	25000
15	55957	Hermann	40000	Sales	4	50000	10000
16	31619	Hedgedon	50000	Sales	2	40000	10000
17	1773	Howard	20000	Mgr	3	80000	25000
18	2165	Hugh	10000	Adm	5	30000	---
19	23907	Johnson	10000	VP	1	100000	50000
20	7166	Laflare	20000	Sales	2	35000	5000

DATA.WK3



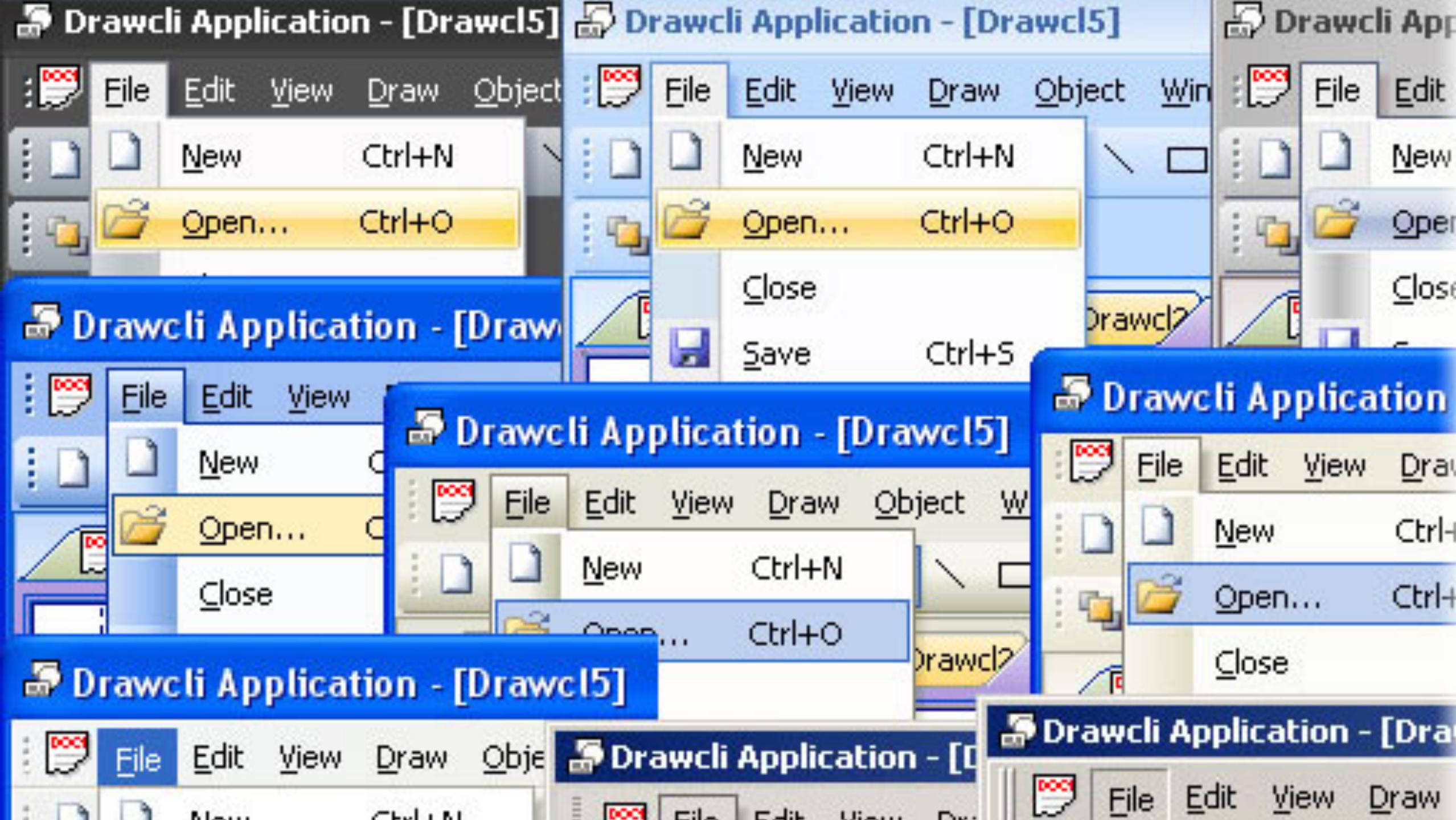
The logo consists of two parts. On the left, a red square contains the word "Tivoli." in white, bold, sans-serif font. To the right of the square, the word "software" is written in a large, black, bold, sans-serif font.

Tivoli. software



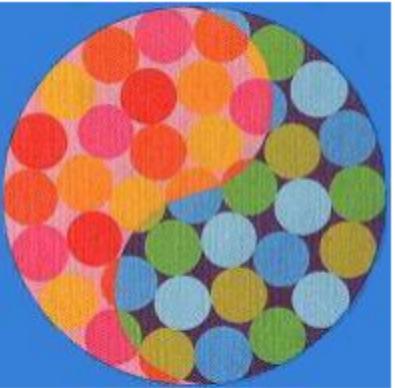
# One Question







Transition to Large Datacenters



# Monad<sup>12</sup> Manifesto

*Jeffrey P. Snover*

*Aug 8, 2002*

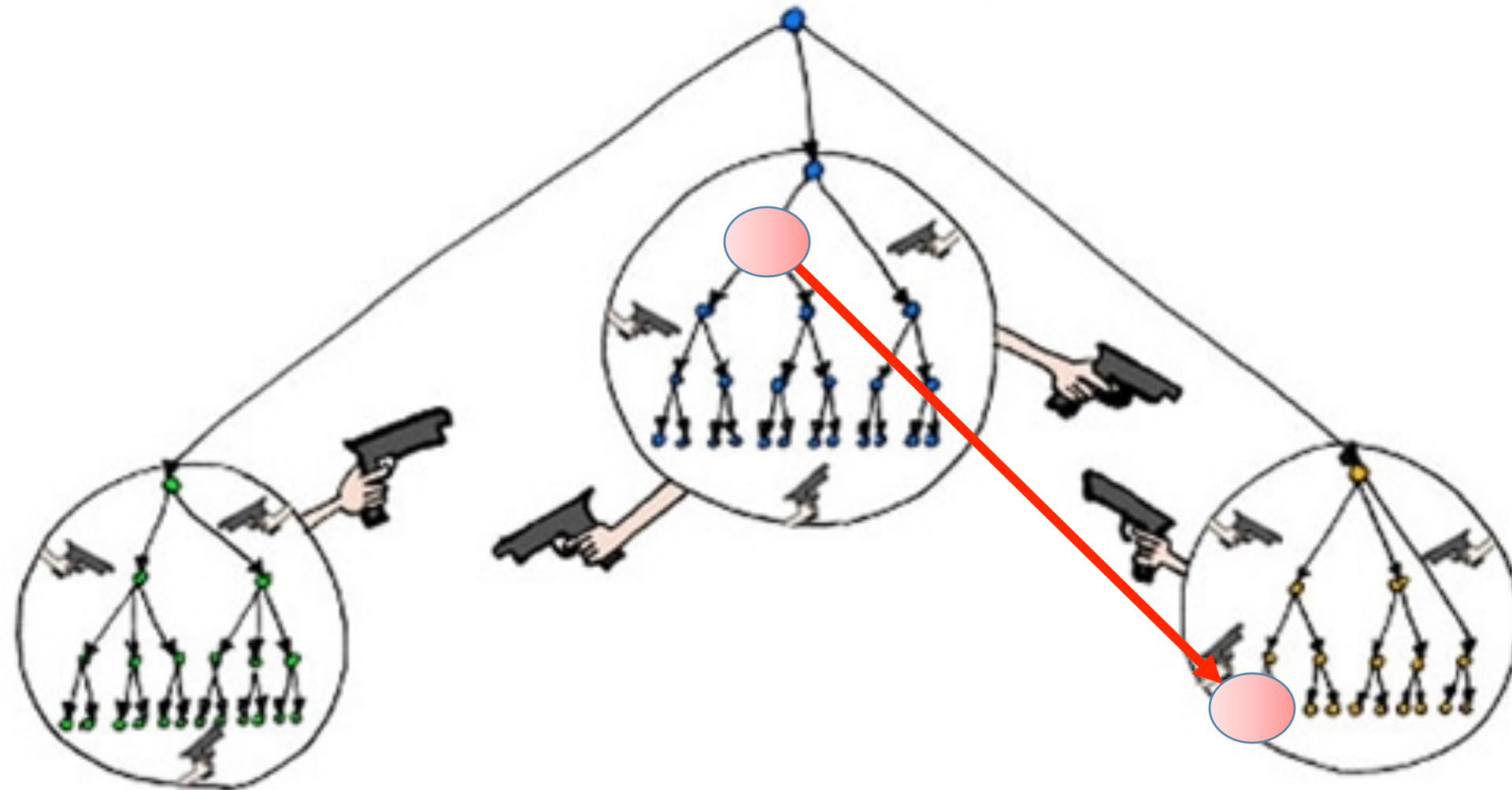
*Version 1.2*

## 1 What is Monad?

Monad is the next generation platform for administrative automation. Monad solves traditional management problems by leveraging the .Net Platform. From our prototype (though limited), we can project significant benefits to developers, testers, power users, and administrators. Monad leverages the .NET Common Runtime to provide a powerful, consistent, intuitive, extensible and useful set of tools that drive down costs of administration and make the life of non-programmers a lot easier. Monad consists of:

1. [Monad Automation Model](#) (MAM): An automation model based upon .Net classes, methods and attributes to produce Cmdlets.
2. [Monad Shell](#) (MSH): A .Net based script execution environment for exposing Cmdlets as APIs command line tools and interactive programmable command line shell.
3. [Monad Management Models](#) (MMM): The set managed code base classes (or interfaces) to implement specific management scenarios and in-the-box administrative tools to execute those scenarios.
4. [Monad Remote Scripting](#) (MRS): A set of Web Service based components that allow scripts to be remotely executed on many machines.
5. [Monad Management Console](#) (MMC). A .Net based model and set of services for building management GUIs on top of MSH and exposing all GUI interactions as user-visible scripts.

# MiCROSOFT







Microsoft®

# Windows Longhorn

---

Transition To .NET

---



# 7 rules for using .NET in Windows

**“Admins don’t want CLIs”**

**“Which part of f\*\*\*ing Windows is confusing you?”**

# Coalition of the Willing



Whitepaper: How Exchange and PowerShell got the administration model right.

8

# 7~~X~~Rules for using .NET in Windows

**NO .NET in Windows**



Transition to Large Datacenters

```
$page = (new-object Net.WebClient).DownloadString("http://scriptolog.blogspot.com")  
function get-param  
{  
    param([string]$cmd)  
    if($cmd -eq "")  
    {  
        Write-Warning "Please specify cmdlet name"  
        exit  
    }  
  
    $ErrorActionPreference = "SilentlyContinue"  
    # check the existence of the command-lets  
    $check = get-command | ? {$_. CommandType -eq "Cmdlet" -and $_.Name -eq $cmd}  
    if($check -eq null)  
    {  
        Write-Warning "No such command ($cmd)"  
        exit  
    }  
  
    # some cmd-lets do not support parameters  
    if($cmd -eq "get-help")  
    {  
        $check = get-help $cmd -parameter  
        if($check -eq null -or $check -eq "")  
        {  
            Write-Warning "No parameters for $cmd"  
            return  
        }  
    }  
  
    $check = get-help $cmd -parameter  
    $obj = $check | select -first 1  
  
    $cmd | Add-Member -memberType noteProperty  
    $cmd | set-help $cmd -parameters:$parameters  
    $cmd | add-member -name "Usage" -value $obj  
}
```

Powered by

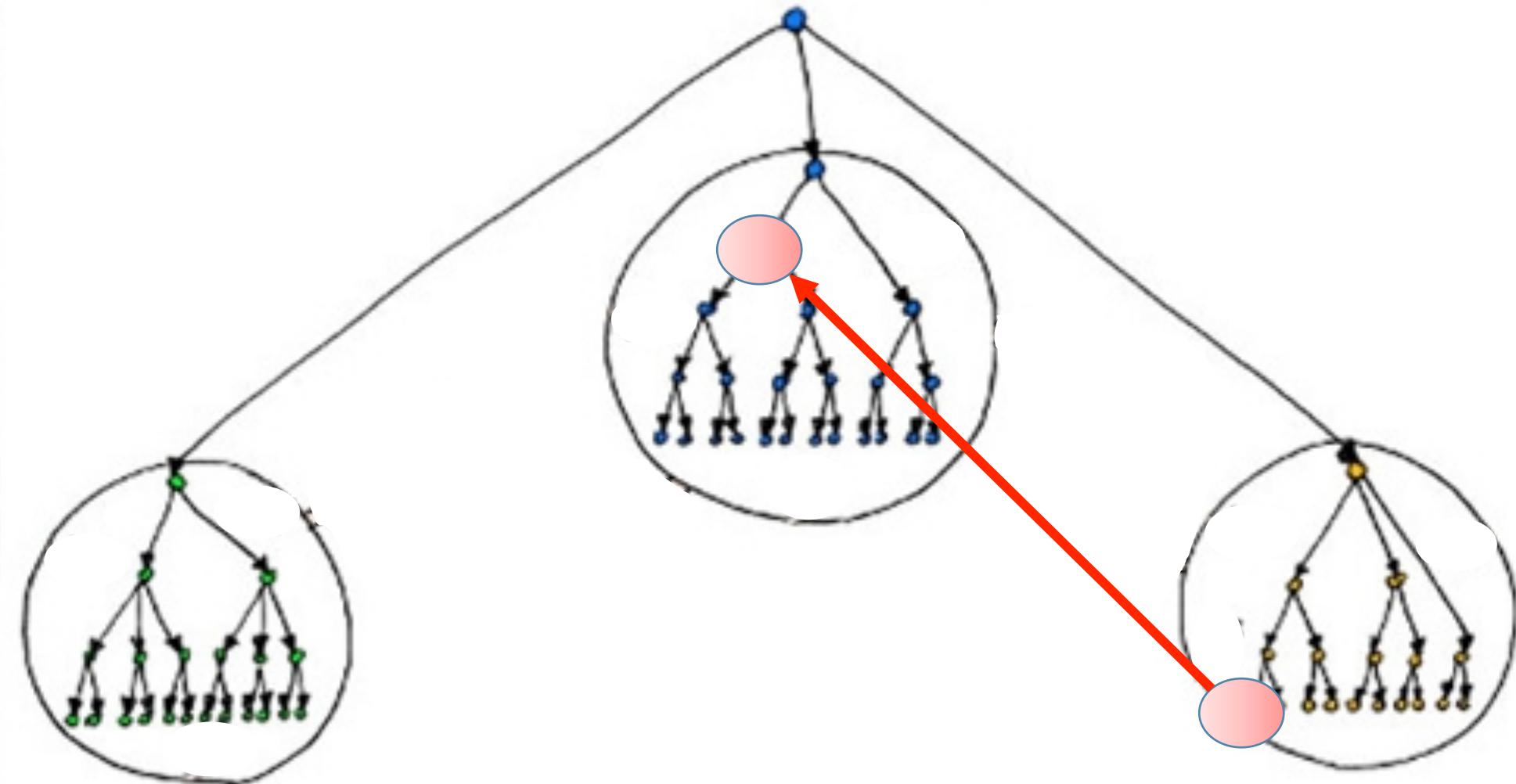






I just heard a double-click. Somebody must be in trouble!

# MICROSOFT





“You were a  
pariah for years”

Who is Moving The  
Business Forward?

# Attendance Manager®

## Performance Evaluation

First Name:

Date of Review (Month/Year):

1. Meets acceptable standards.

2. Below Expectations

3. Consistently Exceeds Expectations

4. Exceeds Expectations

5. Meets Expectations

6. Unobservables

to neat and complete is the individual's work? Give an example of



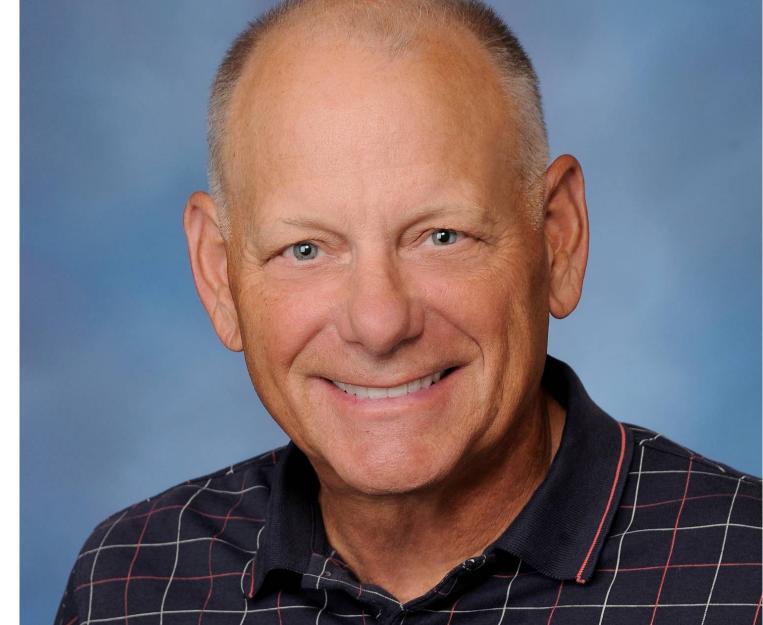
Microsoft®  
System Center



Windows Server 2012 R2

# Distinguished Engineer & Chief Architect

---



# Windows Server Chief Architects

---



Technical  
Fellow

Large  
Datacenter  
Transition been  
berry berry  
good to me

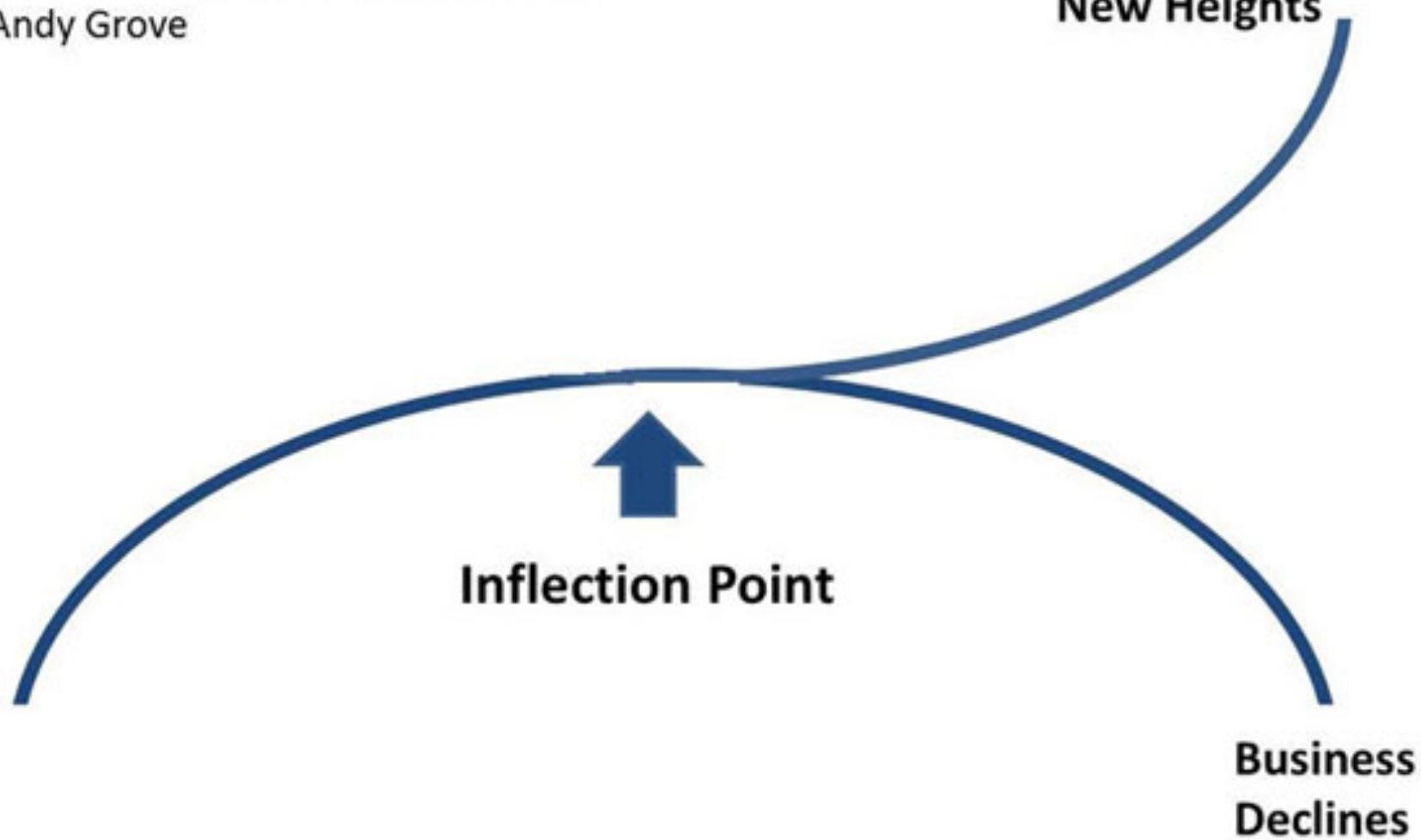
---



Baseball been berry berry good to me!

## **The Inflection Point Curve**

- Andy Grove



# Why software is eating the world

## Eats traditional businesses

Bookstores	Amazon
Ads	Google
Music	iTunes, Spotify, Pandora
Telecom	Skype
Recruiting	LinkedIn
Financial	PayPal, Square

## Eats the value chain

Car	Defense
Engine/safety control	Satellite imagery
Entertain passengers	Smart weapons
Guidance	Communications
Connectivity (OnStar)	& logistics
Retailers	
Logistics and distribution	
Price optimization	
Route optimization	

“Companies in **every**  
**industry** need to assume  
that a software  
revolution is coming”

---

Marc Andreesen

# Largest companies by market value in 2017

Ranking of the companies rank 1 to 100

	Market value in billion U.S. dollars
Apple	752
Alphabet	579.5
Microsoft	507.5
Amazon.com	427
Berkshire Hathaway	409.9
Facebook	407.3
ExxonMobil	242.2
Johnson & Johnson	338.6
JPMorgan Chase	306.6
Tencent Holdings	277.1
Wells Fargo	274.4
Alibaba	264.9
General Electric	261.2

# Largest companies by market value in 2017

Ranking of the companies rank 1 to 100

Market value in billion U.S. dollars

Apple	752
Alphabet	579.5
Microsoft	507.5
Amazon.com	427
Berkshire Hathaway	409.9
Facebook	407.3
ExxonMobil	242.2
Johnson & Johnson	338.6
JPMorgan Chase	306.6
Tencent Holdings	277.1
Wells Fargo	274.4
Alibaba	264.9
General Electric	261.2

# Largest companies by market value in 2011

Ranking of the companies rank 1 to 100

---

JPMorgan Chase

---

HSBC Holdings

---

General Electric

---

Exxon Mobil

---

Royal Dutch Shell

---

PetroChina

---

ICBC

---

Berkshire Hathaway

---

Petrobras-Petroleo Brasil

---

Citigroup

---

BNP Paribas

---

Wells Fargo

---

Banco Santander

---

# Every company is a software company

“Silicon Valley is coming.  
We are going to work  
hard to make our  
services as seamless  
and competitive as  
theirs”

Jamie Dimon  
JP Morgan CEO

J.P.Morgan

“We are putting 70%  
of our applications on  
the cloud to improve  
flexibility. And, we  
are launching game-  
changing applications to  
improve our efficiency”

Jeffrey Immelt  
GE CEO



“Walmart is redefining the  
next generation of retail  
growth and is the best-  
positioned retailer to win  
at the convergence of  
digital and physical  
retail”

Doug McMillon  
Walmart CEO



“It's about looking ahead  
to the changes coming  
to the global auto  
business, particularly  
from potential  
“disruptors” in Silicon  
Valley—and preparing  
Ford to thrive through  
those changes”

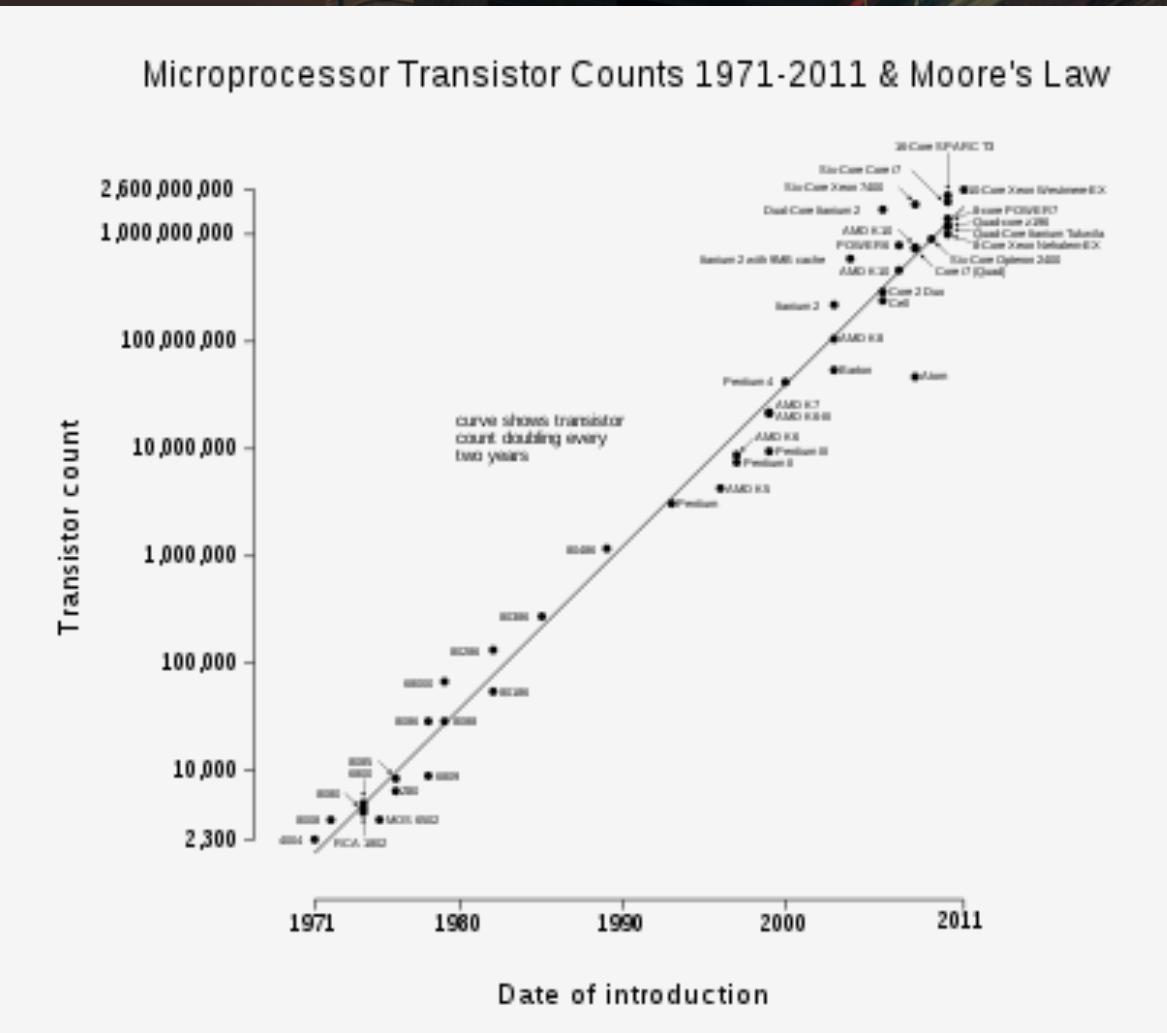
Mark Fields  
Ford Motor Company CEO





Connect to Opportunity<sup>TM</sup>

# You've heard of “Moore's Law”



# The Other Moore's Law

**Core**

Differentiation  
that wins customers

**Mission Critical**  
Failure=> Deep trouble

\$\$\$

**Enabling**  
Everything else

**Context**

Everything else

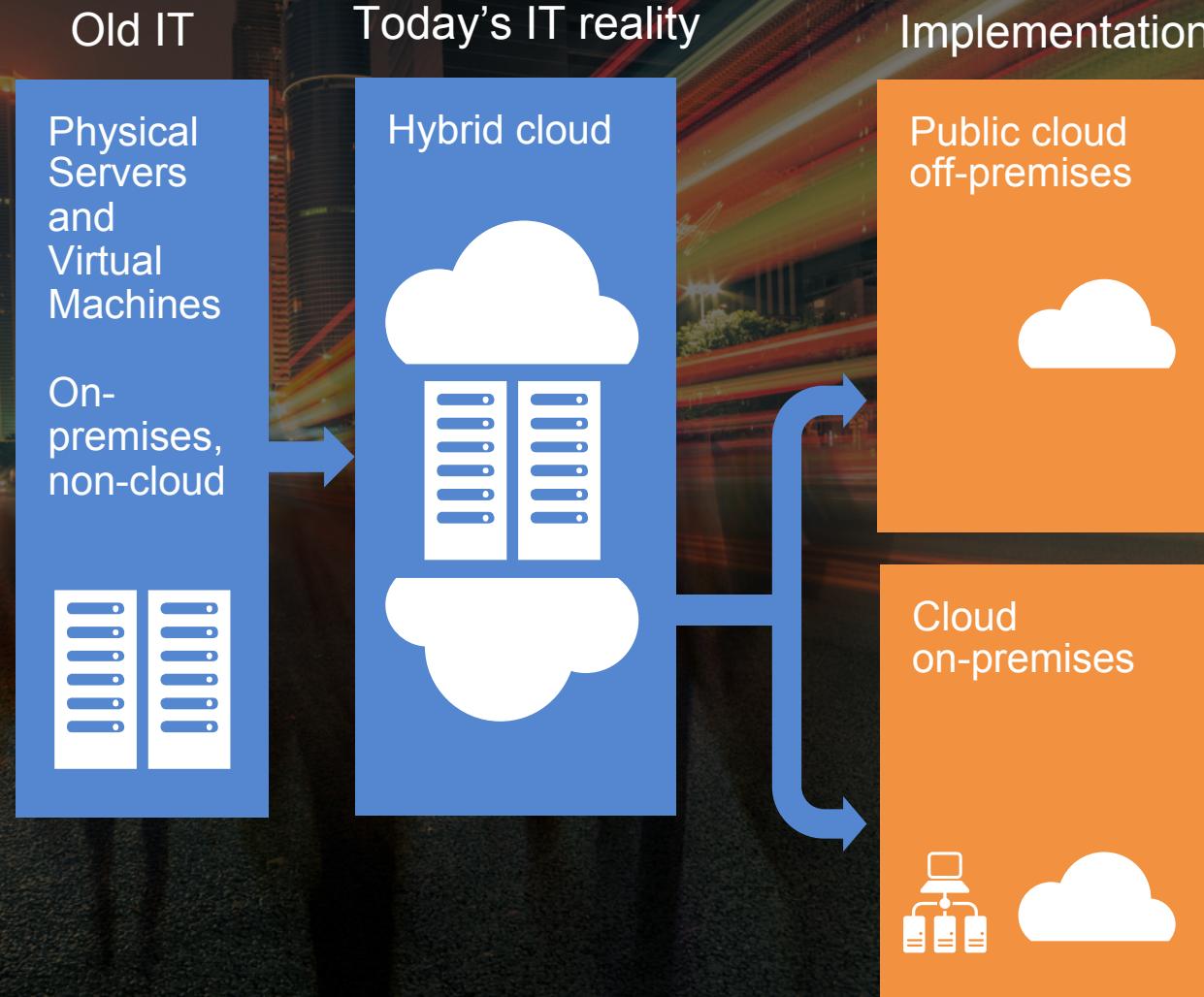
**Risk**

\* <http://ecorner.stanford.edu/videos/1327/Core-and-Context>

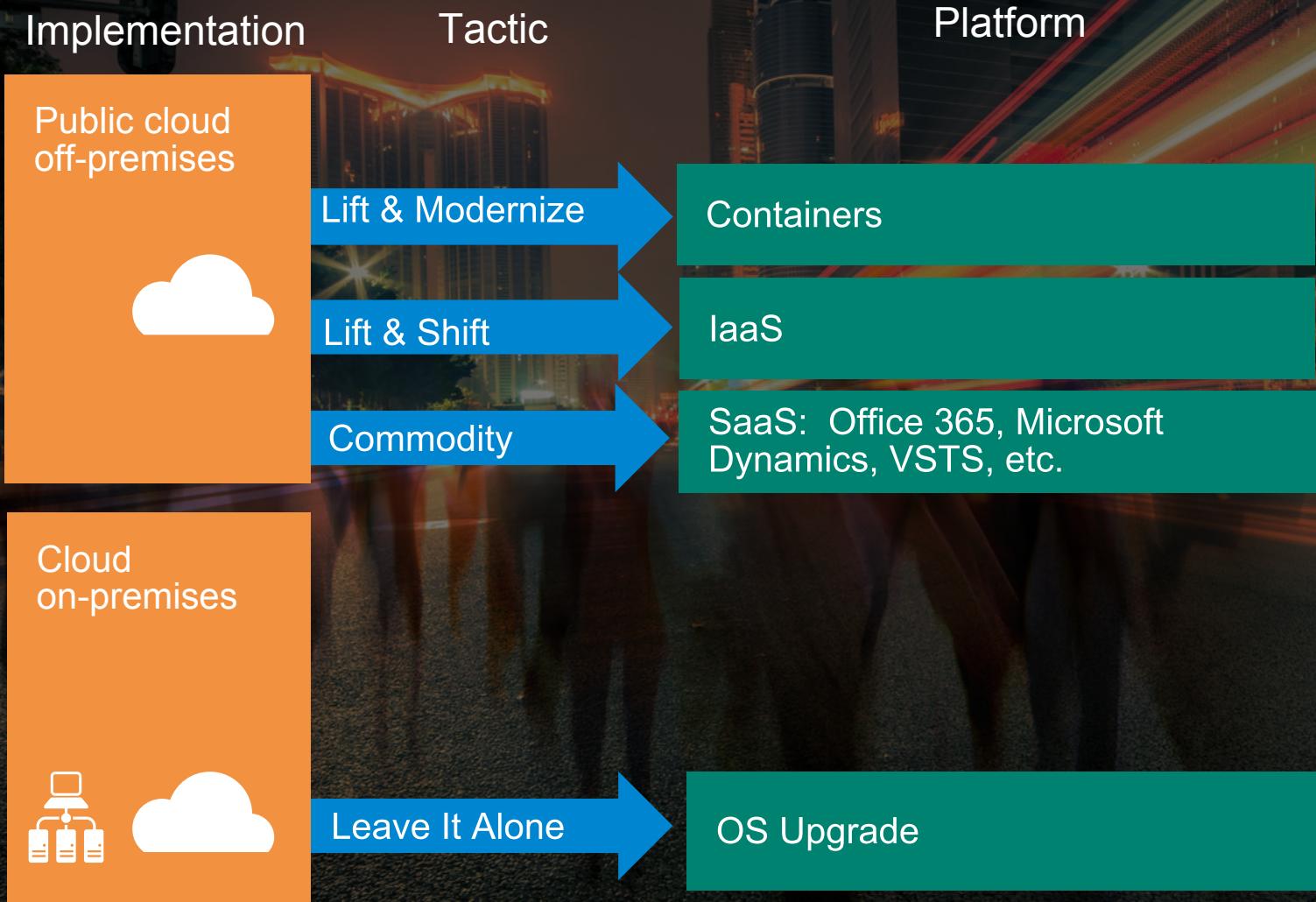
# Create Bandwidth



# Applying the Other Moore's Law



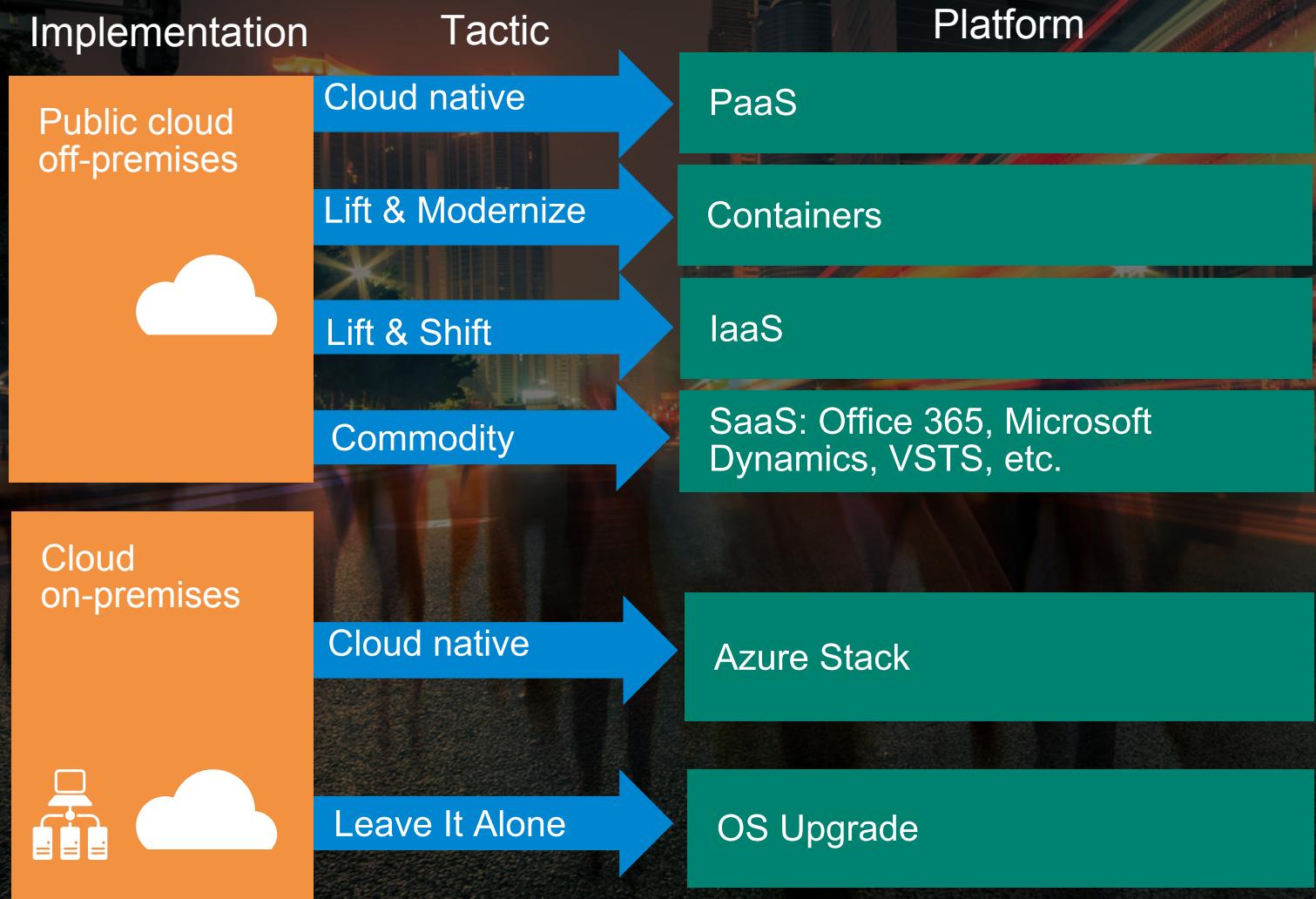
# Applying the Other Moore's Law



The background of the image is a nighttime cityscape. The scene is filled with motion blur, creating streaks of light in various colors (red, orange, yellow, green, blue) that suggest the movement of vehicles on a highway or bridge. In the upper right, there are several tall, modern skyscrapers with illuminated windows. A bright, starburst-like light source is visible on the right side. The overall atmosphere is dynamic and forward-moving.

# Invest in Innovation

# Applying the Other Moore's Law



# IT Spend

Core

Context



# The Other Moore's Law effect IT Spend

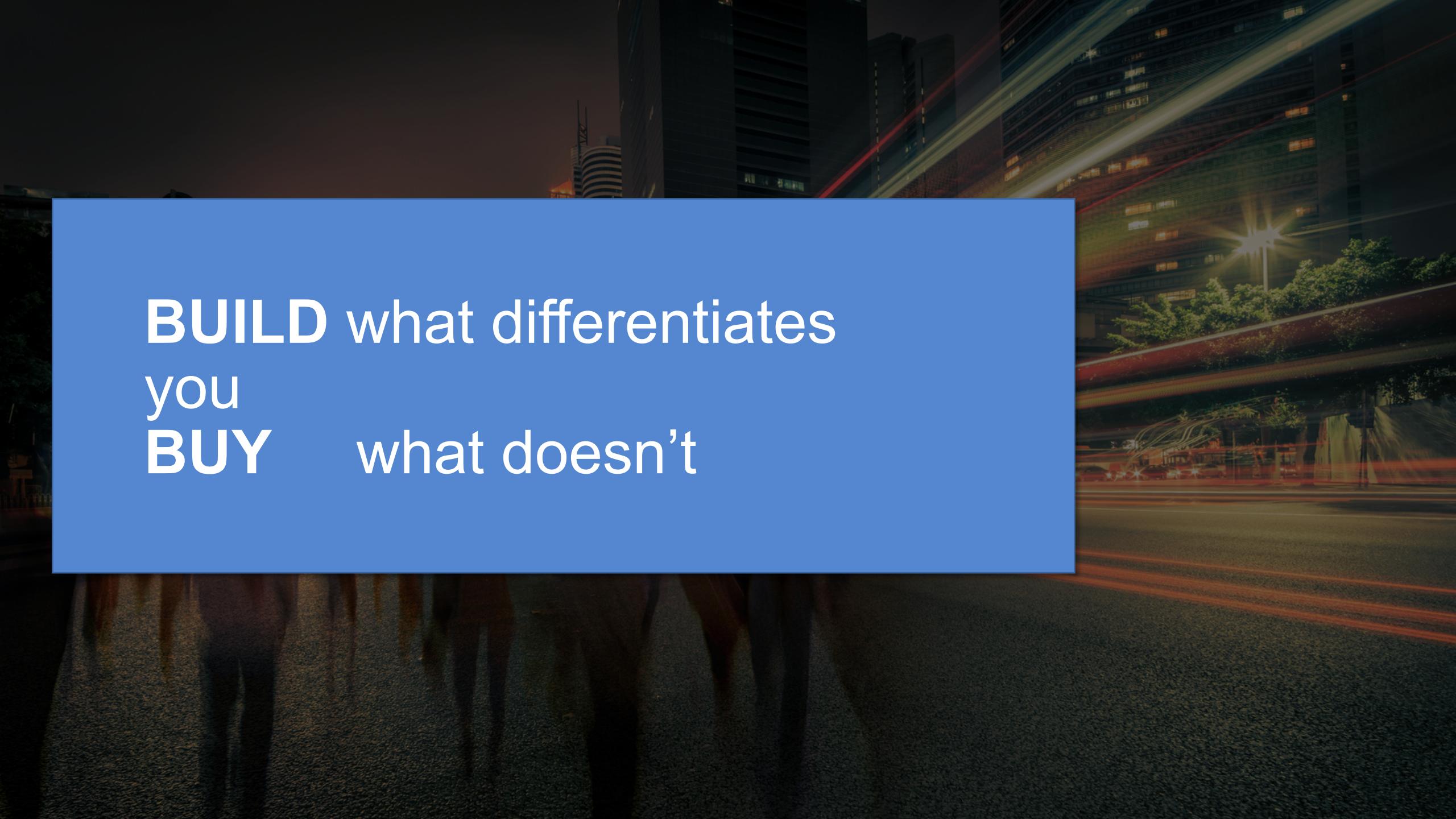
Core

Context



Invest in Innovation  
Automate

Buy Infrastructure and  
SaaS  
Automate



**BUILD** what differentiates  
you  
**BUY** what doesn't



trouble!

This  
transition  
needs new  
heroes

**Stop**

Clicking NEXT

**Start**

Automating

# Uncomfortable Is the New Normal



Stop	Start
Clicking NEXT	Automating
Crafting no-value add solutions	Leveraging SaaS to free up talent
Building snowflake servers & clouds	DevOps
Low leverage architectures	Leveraging Cloud (public and on-prem)



Be this guy



Not this guy

Who is Moving The  
Business Forward?

# Attendance Manager®

## Performance Evaluation

First Name:

Date of Review (Month/Year):

1. Meets acceptable standards.

2. Below Expectations

3. Consistently Exceeds Expectations

4. Exceeds Expectations

5. Meets Expectations

6. Unobservables

to neat and complete is the individual's work? Give an example of

uble-click. Somebody m



**Jeffrey Snover** 

@jsnover

Jeffrey Snover: Microsoft Techni  
/ Chief Architect for Azure Str  
Cloud/ Azure Stack Archit  
Inventor / Science ges'

Redmond, WA

Supercharge  
your career!

Thank You