# Windows DNA and Manufacturing In The Information Age

**Neil Charney Microsoft Corporation** 

### Neil's Top 5 memories of last year's conference

- 5. Customer case study bonanza
- 4. Must Stop pretending to know manufacturing really well (HMI, SCADA, eg.)
- 3. MS needs to increase events budget
- 2. Always have Pat Kennedy on your side
- 1. "Drag me, drop me, treat me like an object"

### Digital Nervous System Principles

The Internet changes everything

Every worker is a knowledge worker

Customers should be at the center

Bad news must travel fast

### Rating Your DNS

- Can everyone access customer information?
- How quickly can you adapt when a machine breaks down?
- Can you identify the contributors to failure?
- Can your production line be quickly reconfigured to support new products?
- Can problems with quality be rapidly remedied?

### **Platform**

## Microsoft's Focus

**Partners** 

Integration, Interoperability

### Initiative "Building Blocks"

**Microsoft Industry Initiatives** 

**Microsoft** ActiveStore Windows DNA **Financial** Services

ActiveX for Healthcare

Windows **DNA-M** 

**LOB-Specific** Interfaces

Retail

Financial Services

Healthcare Manufacturing

Basic Infrastructure "Task-Centric" Middleware

Windows NT, Microsoft SQL Server

COM/DCOM

**Device Interface Initiatives** 

**OLE POS** 

**OFX** 

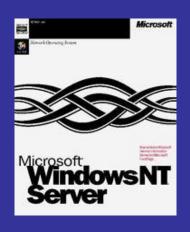
Medical **Equipment** 

**OPC** 

#### **Platform Momentum**



15+ ISVs/IHVs in Manufacturing



25+ SQL 7.0 apps 179% growth in ERP 86% growth in plant ops



50% plant ops on 32-bit Windows 135% growth in ERP



14+ Manufacturing ISVs embedding 3M Visual Basic programmers WW

### Integration - Removing The "Gaps Between Apps"

**Supply Chain Applications** 

**ERP Applications** 

Plant Operations Applications

**Control Systems and Devices** 

### Windows DNA For Manufacturing



**Supply Chain Applications** 

Commerce Interchange Pipeline (CIP)

**ERP Applications** 

**COM Interfaces to Business Logic** 

Plant Ops Plant Ops Plant Ops

**OPC (COM) Clients and Servers** 

**Control Systems and Devices** 

### Windows DNA-M Benefits

- Integrates previously separate applications
  - Seamless data exchange
  - Faster, more informed decision making
  - Less duplication
- Does not require new infrastructure, training
- Uses industry-proven technologies, tools
- Provides flexibility and choice of solutions

#### **VBA and Win-DNA-M**

- We put the VBA in Win-DNA-M?
- Visual Basic for Applications:
  - Premier development environment
  - Customization and Integration technology
  - VB for Applications

### **VBA Licensing**

Featuring Microsoft Technology

RATIONAL

- 75+ shipping applications
- 14 Manufacturing Licensees
- More shipping every week













CREDIT FIRST SUISSE BOSTON

ѕшәұѕѦҁ



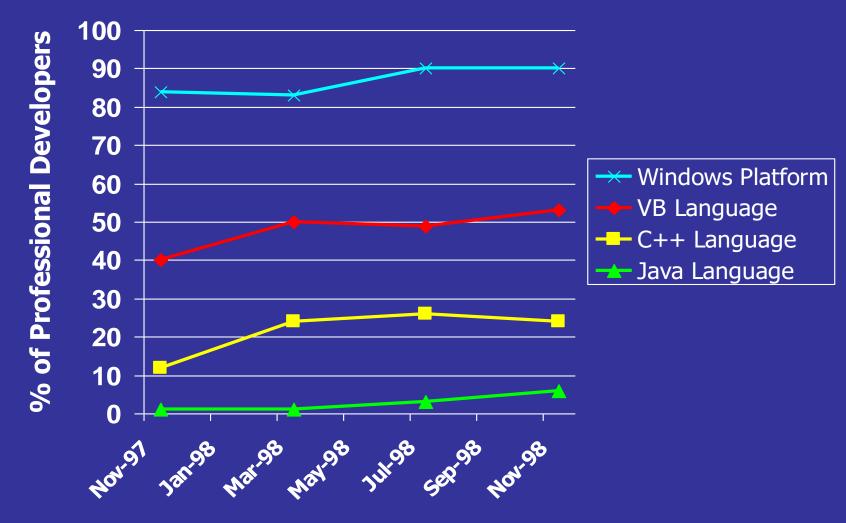




Riverton Software



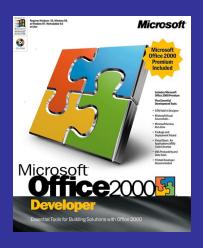
#### VB Language most popular



Percentages project to 2.4 million Pro Developers in the US. Source: Market Decisions Corporation, 1996-1997 US Developer Tracking Study, international projection based on % of Microsoft license sales

### **Describing Office**

- 1 Suite?
- 7 integrated applications?
- Over 600 programmable objects





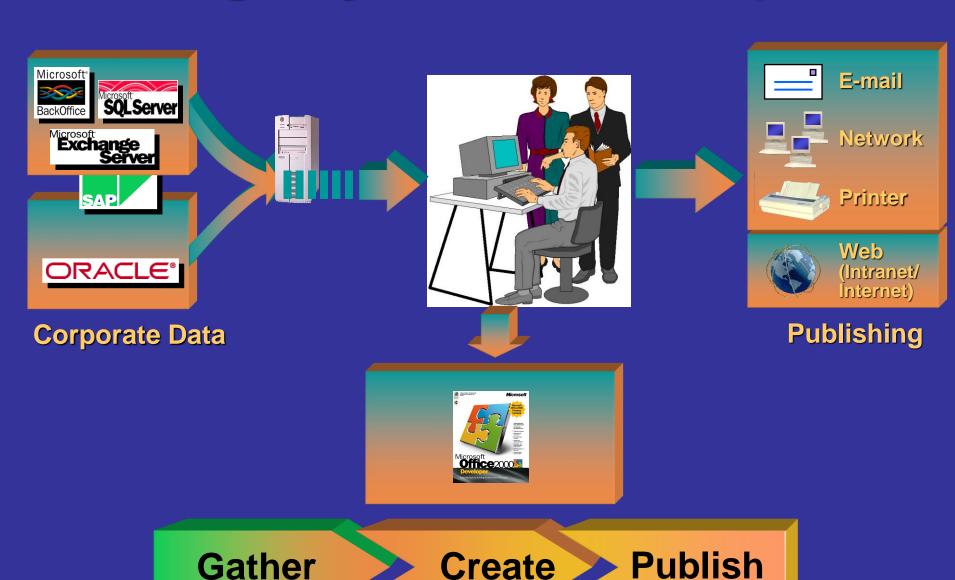








### Getting beyond "cut and paste"



### Office 2000 Family



Word 2000 Excel 2000 Outlook 2000 Publisher 2000 Small Bus. Tools Access 2000
PowerPoint 2000
Word 2000
Excel 2000
Outlook 2000
Publisher 2000
Small Bus. Tools

FrontPage 2000
PhotoDraw 2000
Access 2000
PowerPoint 2000
Word 2000
Excel 2000
Outlook 2000
Publisher 2000
Small Bus. Tools

Dev Prodctivity Tools
Make COM Add-in
Visual SourceSafe 6.0
VBA 6.0 Tools
Pkg & Deploy Wizard
Access Run Time
FrontPage 2000
PhotoDraw 2000
Access 2000
PowerPoint 2000
Word 2000
Excel 2000
Outlook 2000
Publisher 2000
Small Bus. Tools

Small Bus. Professional

**Premium** 

Developer

#### Microsoft Office 2000 Developer

- Productivity tools
- Data access technology
- Deployment wizards

Everything for building and deploying solutions with Microsoft Office 2000

