# Now Ubiquitous, Not Yet Intensive: Preliminary Results from Two Studies of NYC Nonprofits' Use of ICT in 1996 & 2009

David Birdsell and Bill Ferns

Baruch College

Center for Nonprofit Strategy and Management

# On this Afternoon's Agenda:

- Brief summary of what we do and don't know about nonprofit ICT usage
- Description of our 1996 and 2009 studies
- 2009 results:
  - Key comparisons over 1996
  - The 2009 findings in detail
- Opportunities for improving nonprofits' use of information technology

# Studies of Nonprofit ICT Use:

- Fall into three broad categories:
  - Thought pieces on what ICT can achieve
  - Case studies
  - Survey-based efforts to generalize
- In the last case, there are many complications:
  - Low response rates/unrepresentative samples
  - Surveys tend to:
    - Focus on ICT at the expense of organizational info
    - Focus on organizational info at the expense of ICT

# The Apparent Lay of the Land

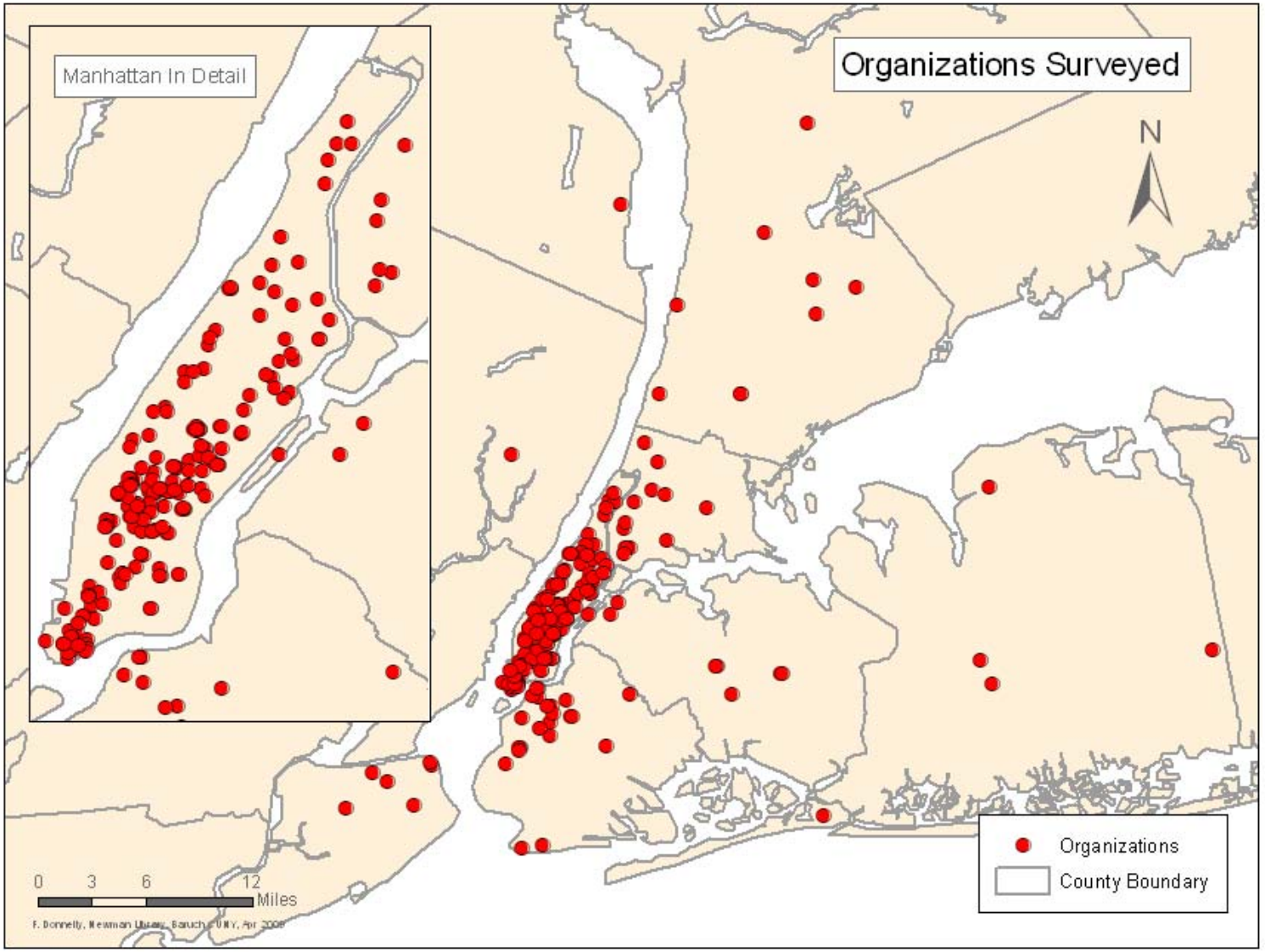
- Nonprofits adopted technology more slowly than their counterparts in business
- Nonetheless, nonprofits have shown steady increases in usage over 15 years
- Nonprofits continue to identify expense as a barrier to more intensive use of ICT
- We don’t know in any systematic way:
  - What most influences NPO’s success w/ ICT
  - How ICT influences NPOs’ performance overall

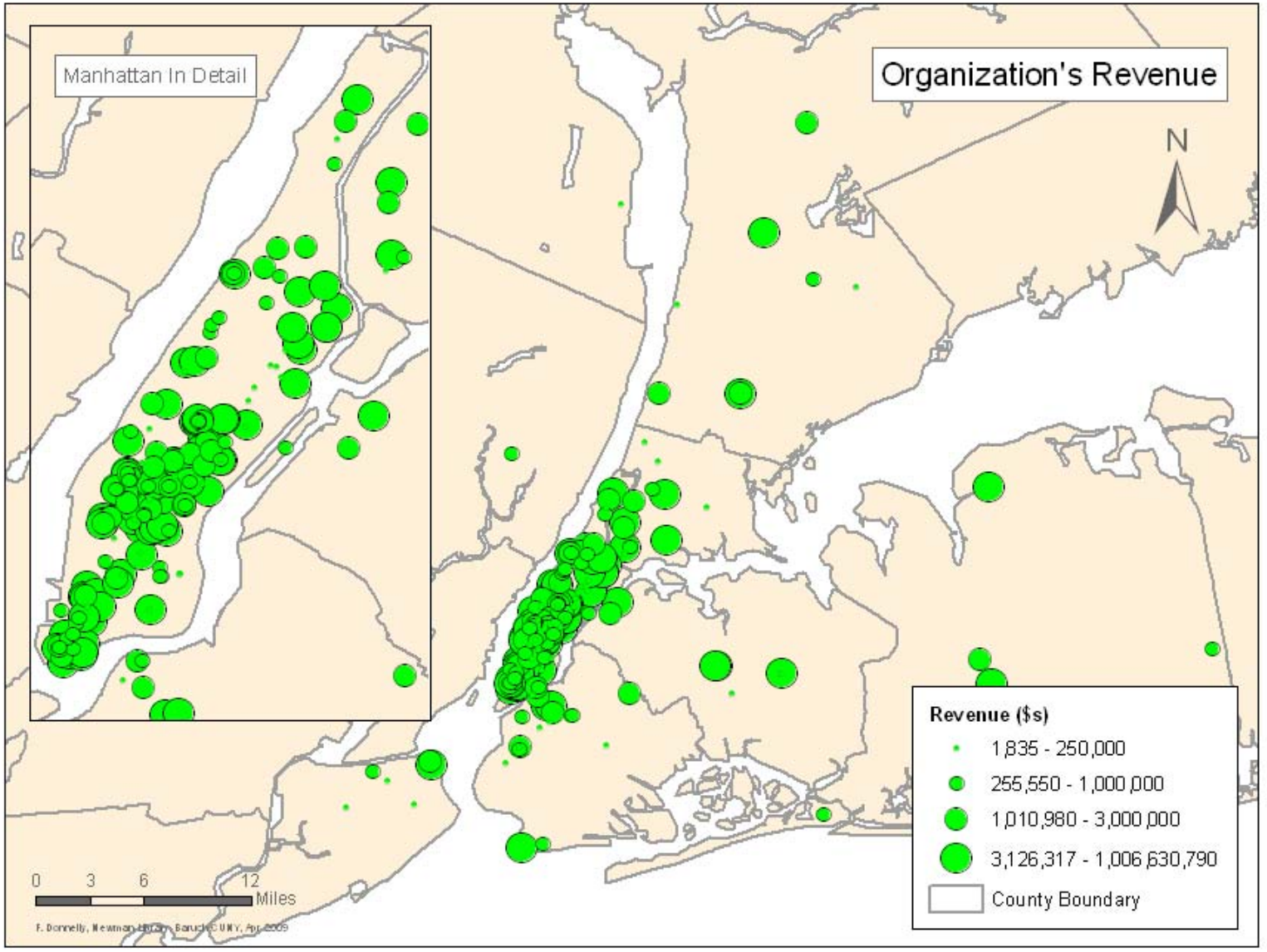
# Our 1996 Study

- Asked organizations supported by a funder about ICT use
- Probed for the way ICT changes workplace practice in gross ways, such as:
  - The way data is entered & stored
  - The way staff are trained
- Used more extensive analyses of what makes businesses successful with ICT to see if those factors held for NPOs.
- They didn't

# Our 2009 Study

- E-mail solicitation driving to web survey, response rate over 20%
- 359 respondents overall, 53 from the group surveyed in 1996, 309 from a control group
- We asked ICT & organizational questions, supplementing from 990 filings
- Maintained as many 1996 questions as possible (except the business comparisons)
- Added questions to address new technology


Manhattan In Detail
Organizations Surveyed
N
Organizations
County Boundary
0 3 6 12
Miles

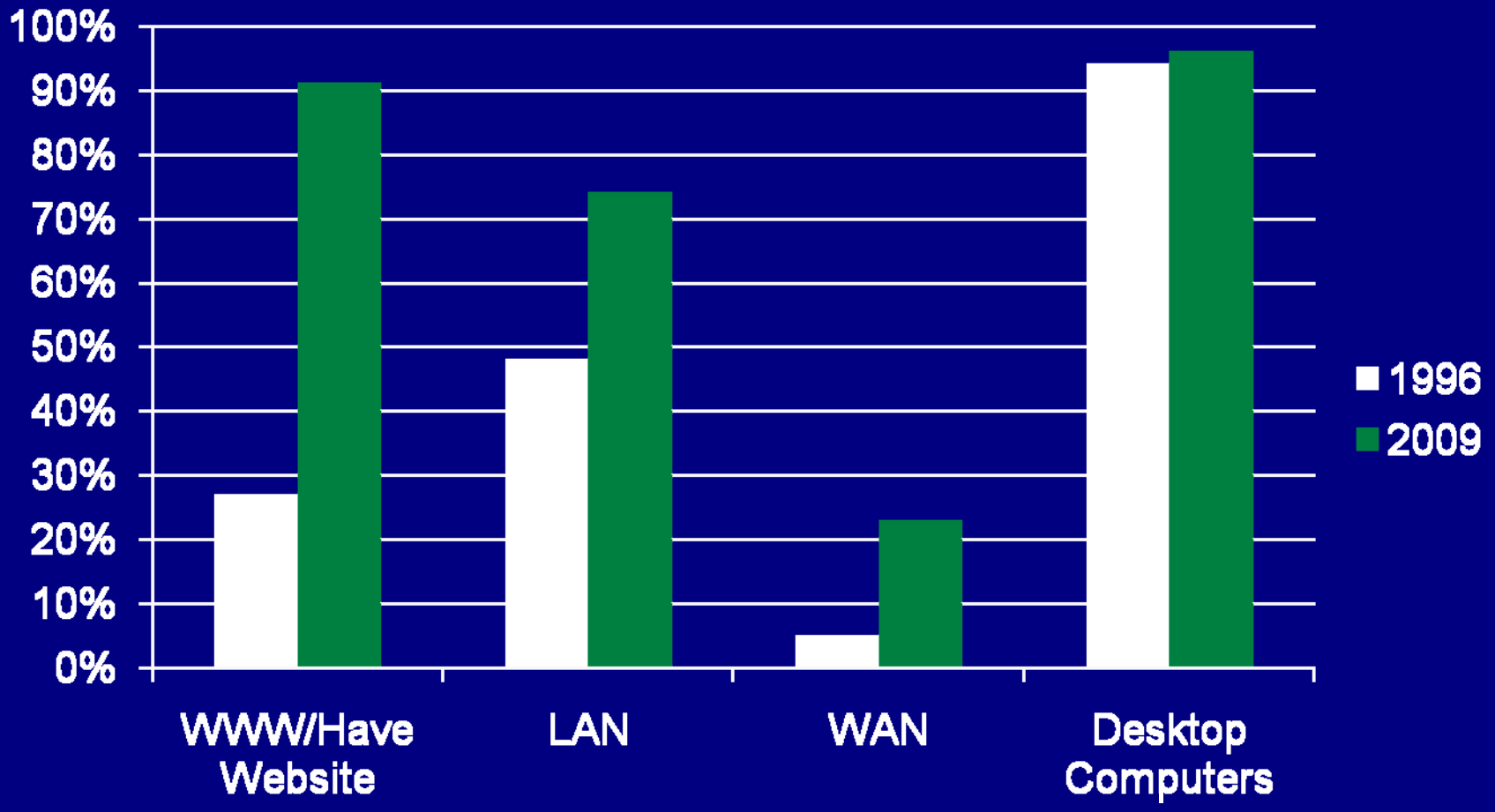

Manhattan In Detail
Organization's Revenue
N
Revenue ($s)
1,835 - 250,000
255,550 - 1,000,000
1,010,980 - 3,000,000
3,126,317 - 1,006,630,790
County Boundary
0 3 6 12
Miles

# What We Found

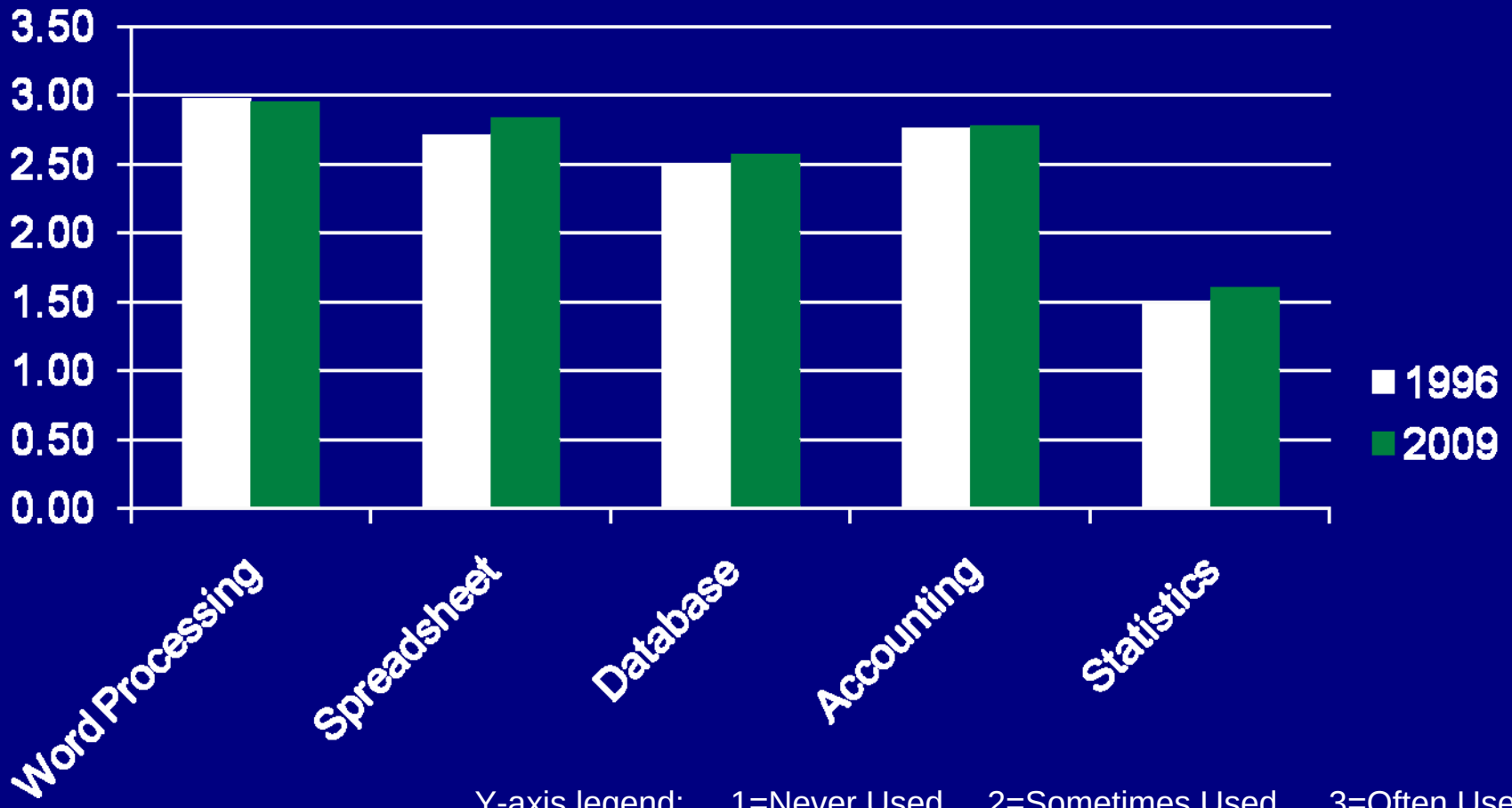
- Revenue makes a difference, but less so than other factors
- Our “study” group – the organizations linked to the funder – did better on most measures beyond what revenue would predict
- Organizational position matters
- Organizational championship matters
- Behavior matters: more intensive technology begets . . . more intensive technology

# Findings

# Select 1996-2009 Comparisons

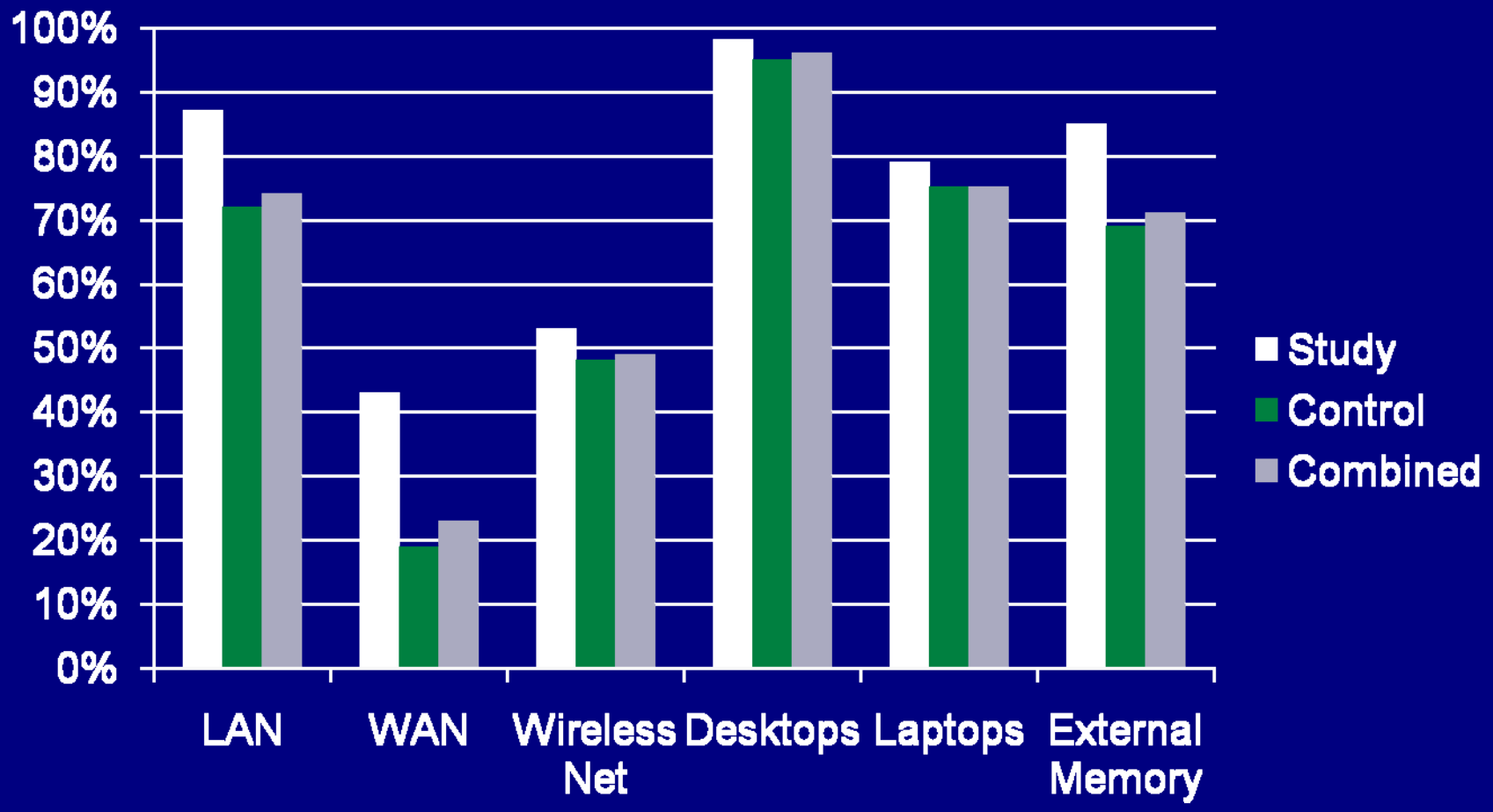


# Select 1996/2009 Software Comparisons




Y-axis legend: 1=Never Used 2=Sometimes Used 3=Often Used

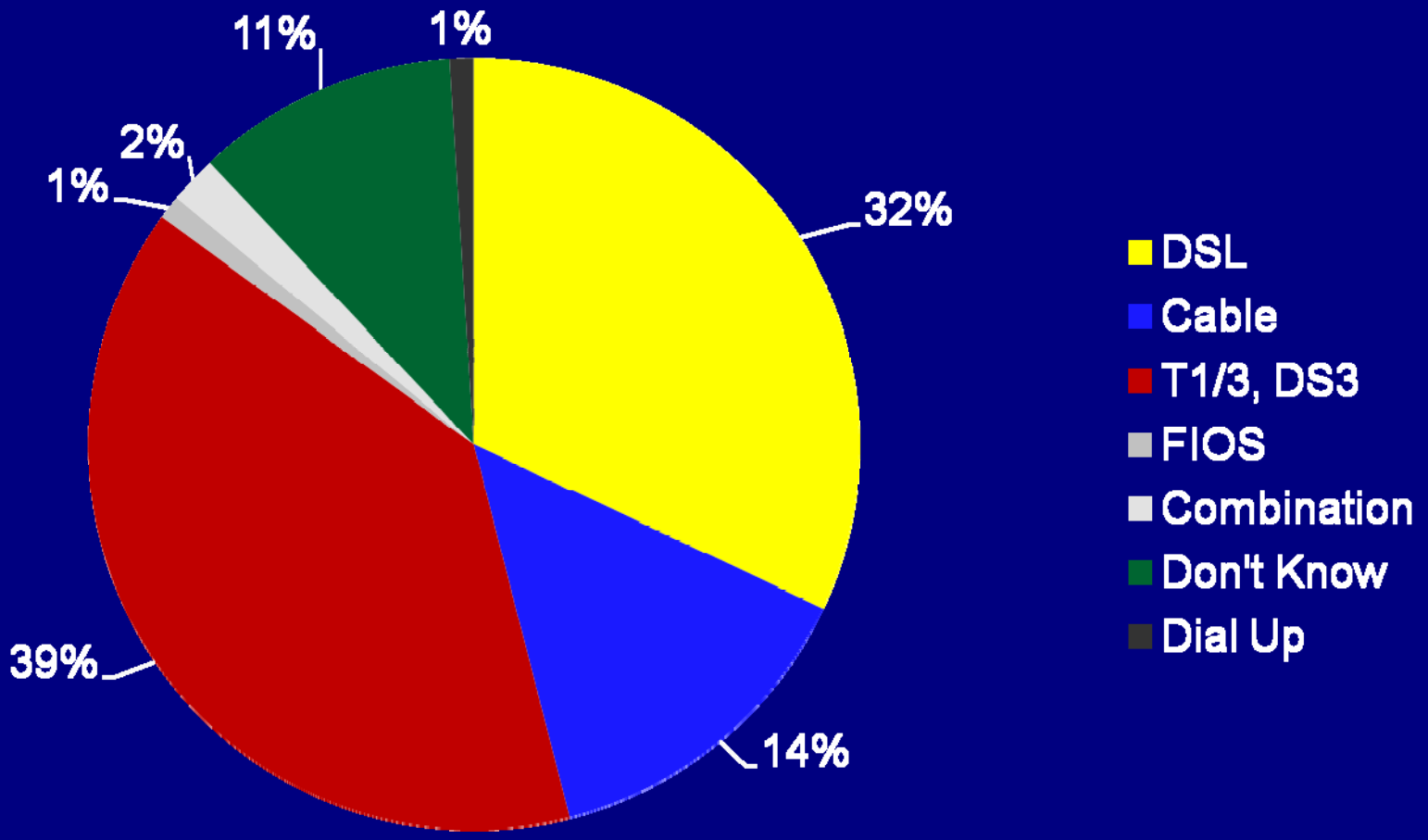
# Hardware Used Today

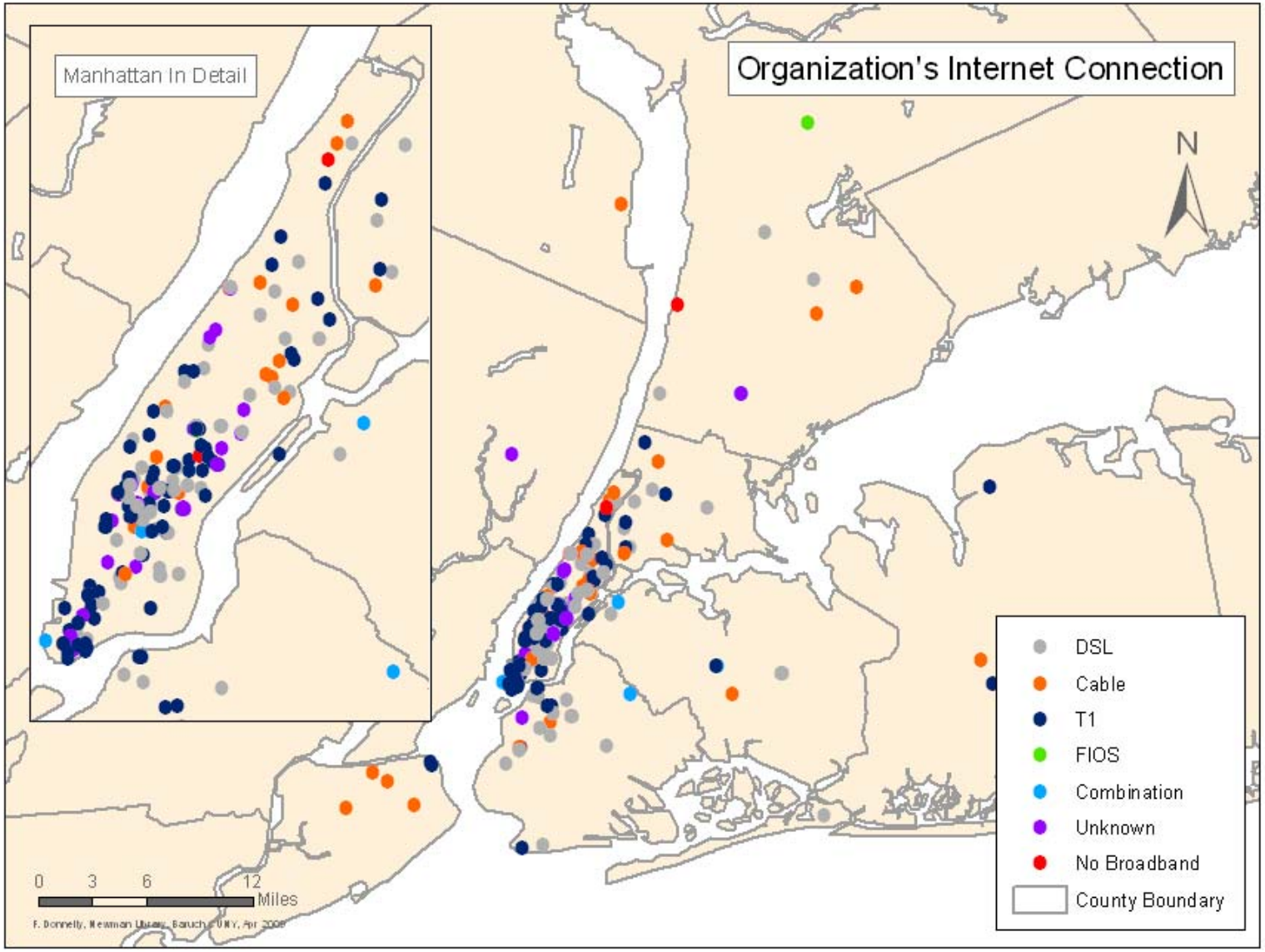


# Drivers of Hardware Use

- Desktops are ubiquitous, period
- WANs (and to a lesser extent, LANs) reflect:
  - Membership in the study group
  - Revenue
  - Institutional affiliation
- Wireless nets not clearly derived from above
- Relatively limited use of:
  - Mobile devices
  - Removable storage

# Type of Internet Connection

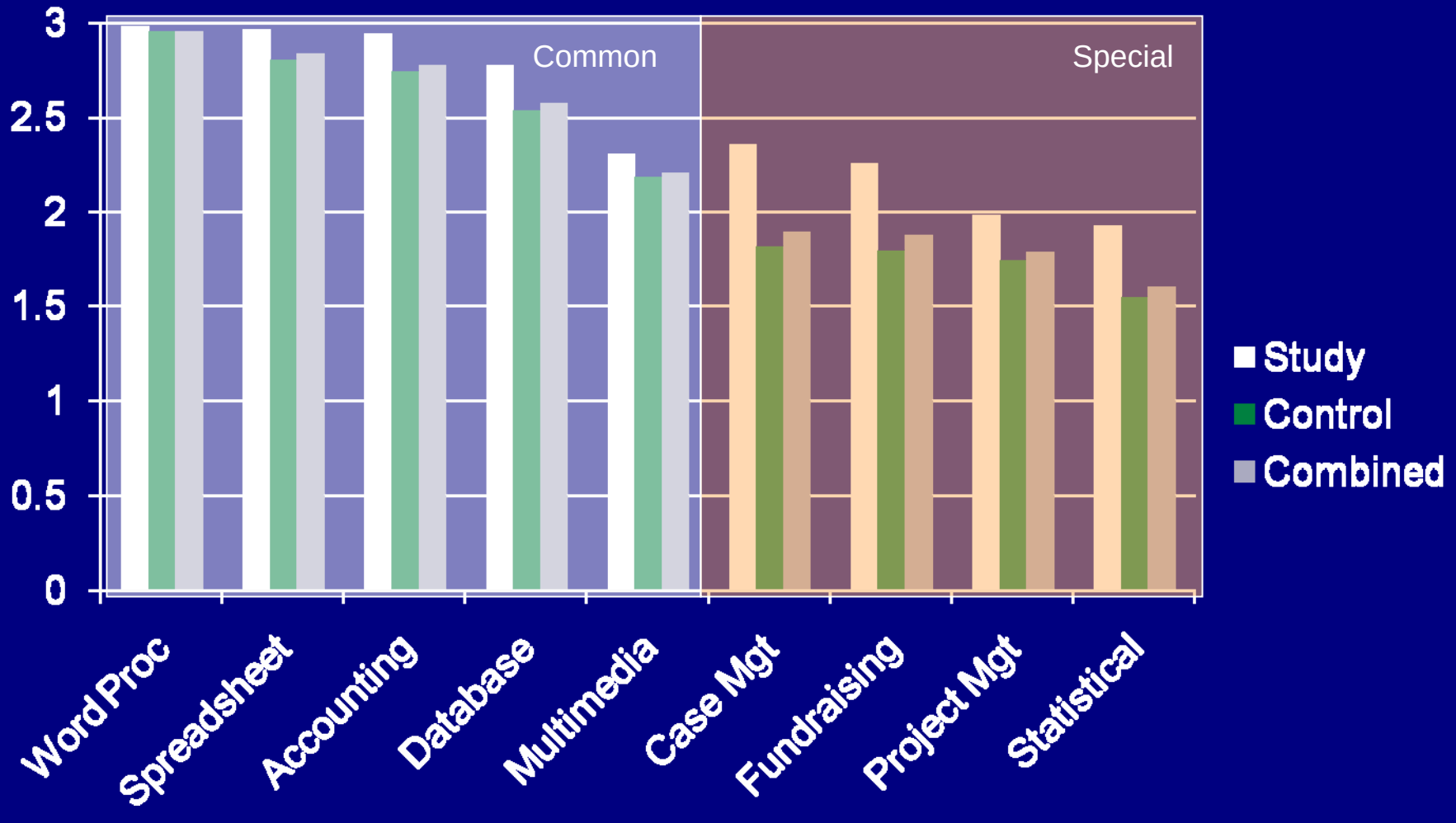



Manhattan In Detail
Organization's Internet Connection
N
DSL
Cable
T1
FIOS
Combination
Unknown
No Broadband
County Boundary
0 3 6 12
Miles

# Drivers of Connection Type

- Use of DSL/T-1/FIOS or a combination overall is revenue driven, but . . .
- T-1 adoption strongly affected by:
  - Membership in the study group
  - Organizational placement
- DSL is the choice of independents

# Software in Use Today

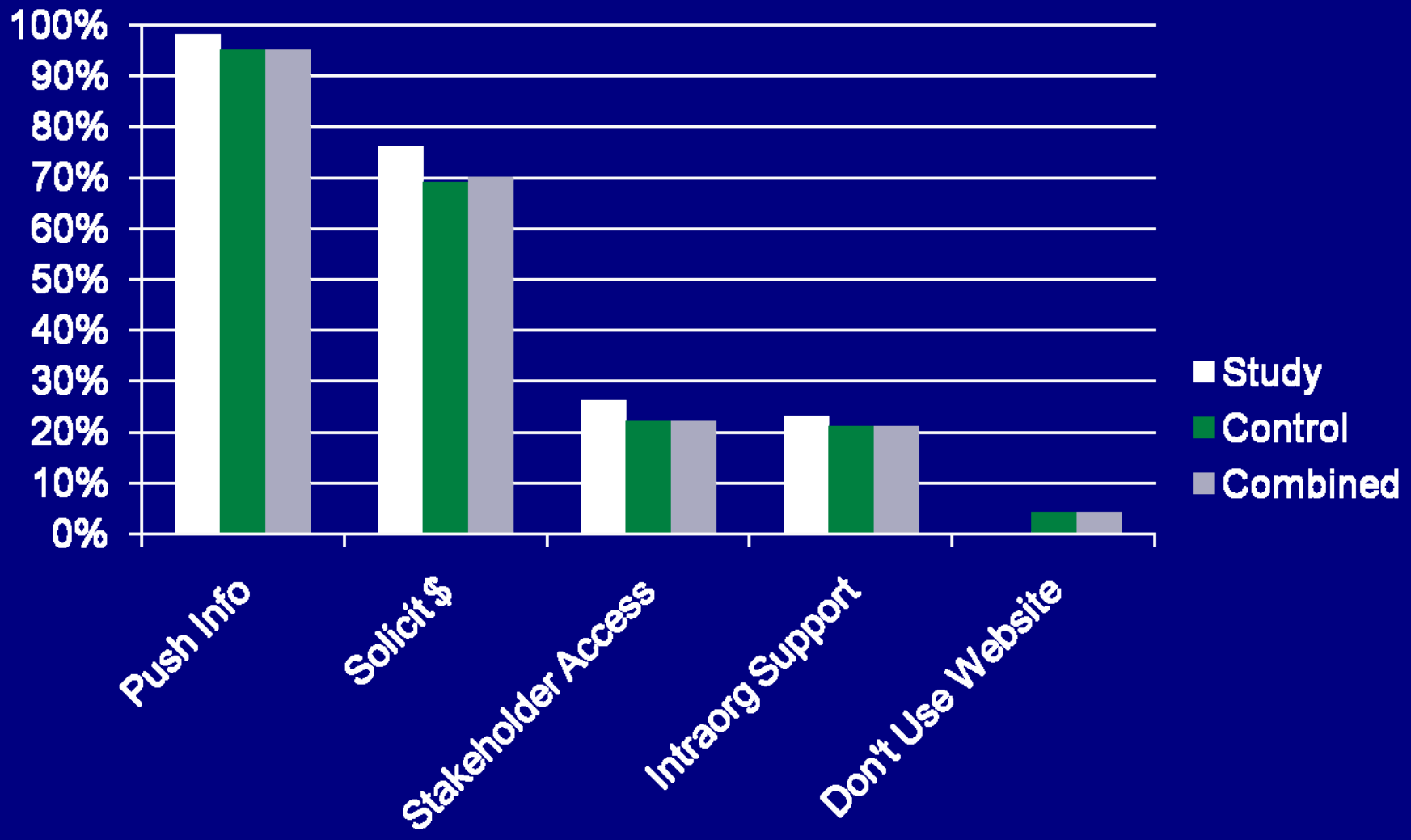


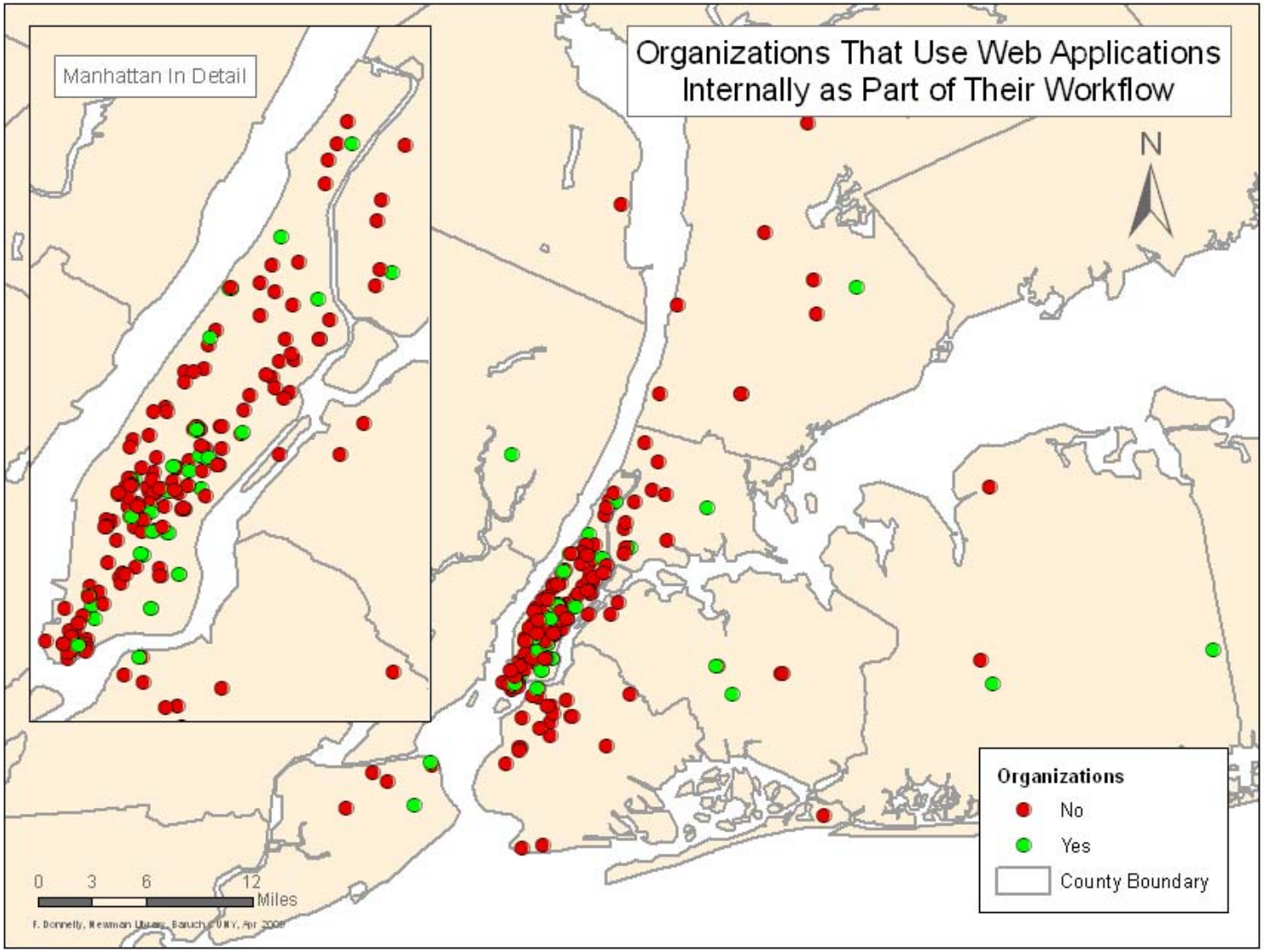

Y-axis legend: 1=Never Used 2=Sometimes Used 3=Often Used

# Drivers of Software Usage

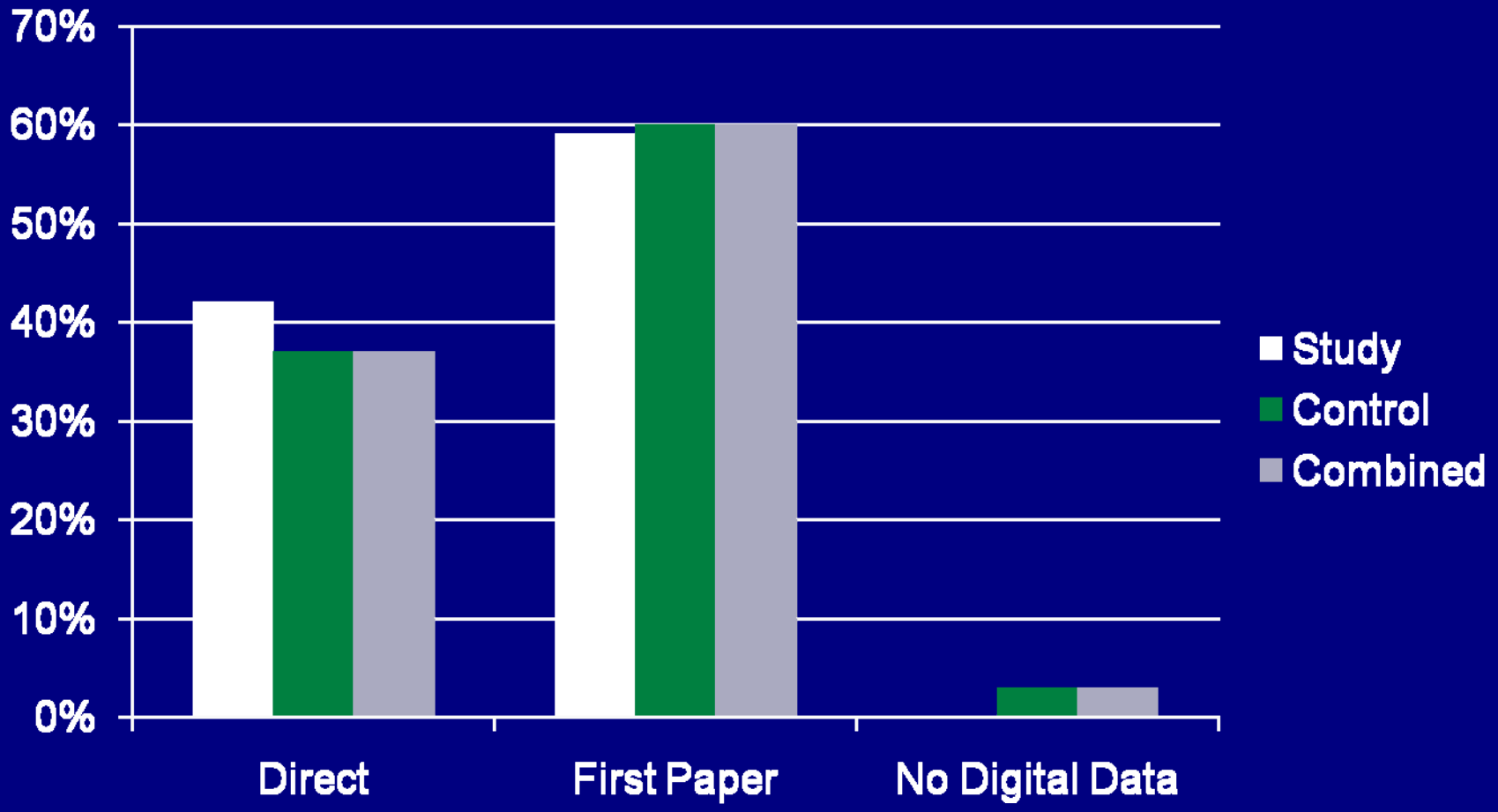
- “Never” above 50%: Client Management Systems, Fundraising, and Statistical
- “Often” above 50%: Word Processing, Accounting, Spreadsheet and DBMS
- Revenue and organization placement not strong influencers of software usage
- Membership in the study group strongly influenced use of “Special” cluster software

# How Websites are Used




Organizations That Use Web Applications Internally as Part of Their Workflow
Manhattan In Detail
N
Organizations
No
Yes
County Boundary
0 3 6 12
Miles

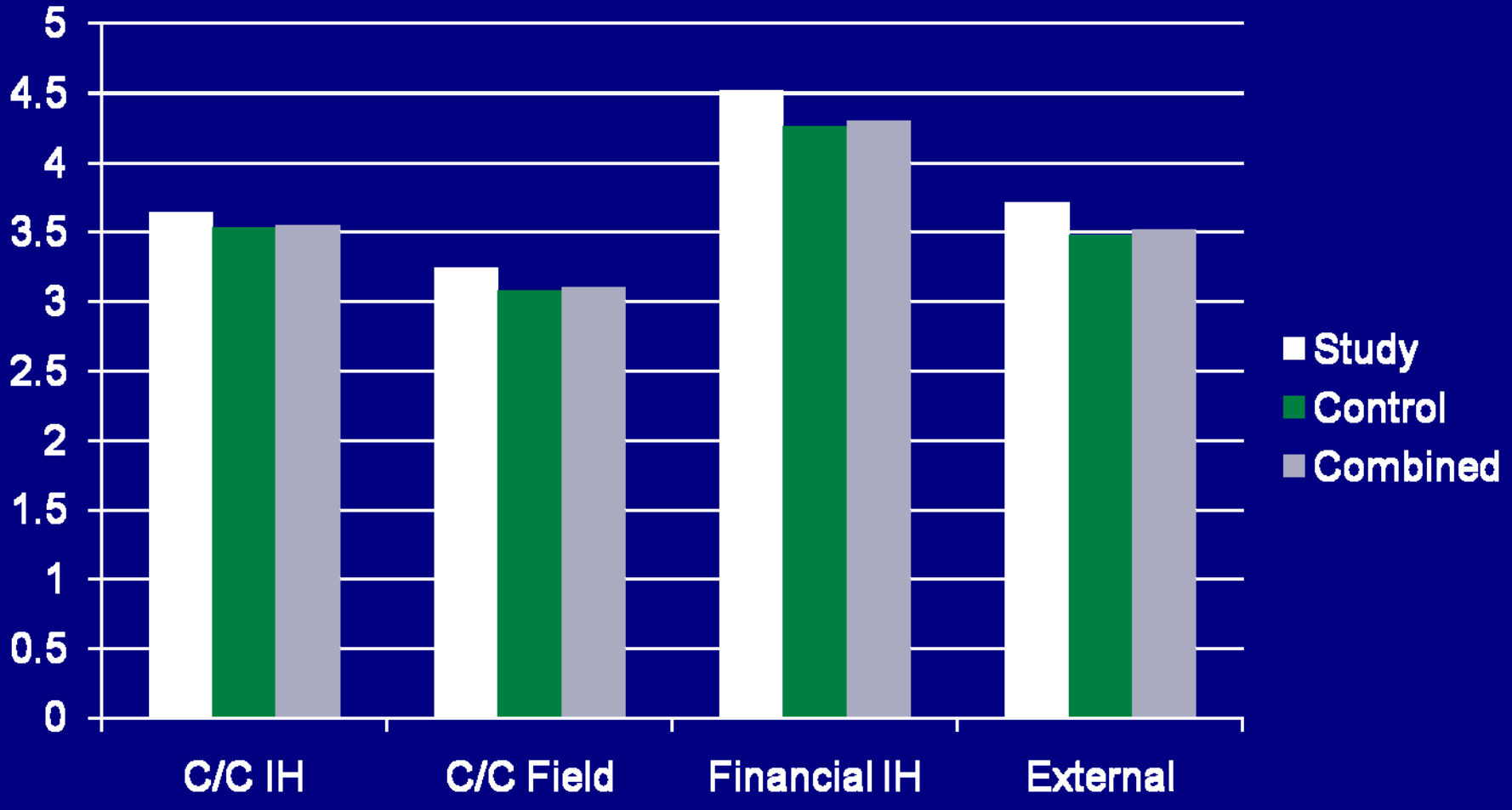
# How Data Are Entered



# Drivers of Digital-First Entry

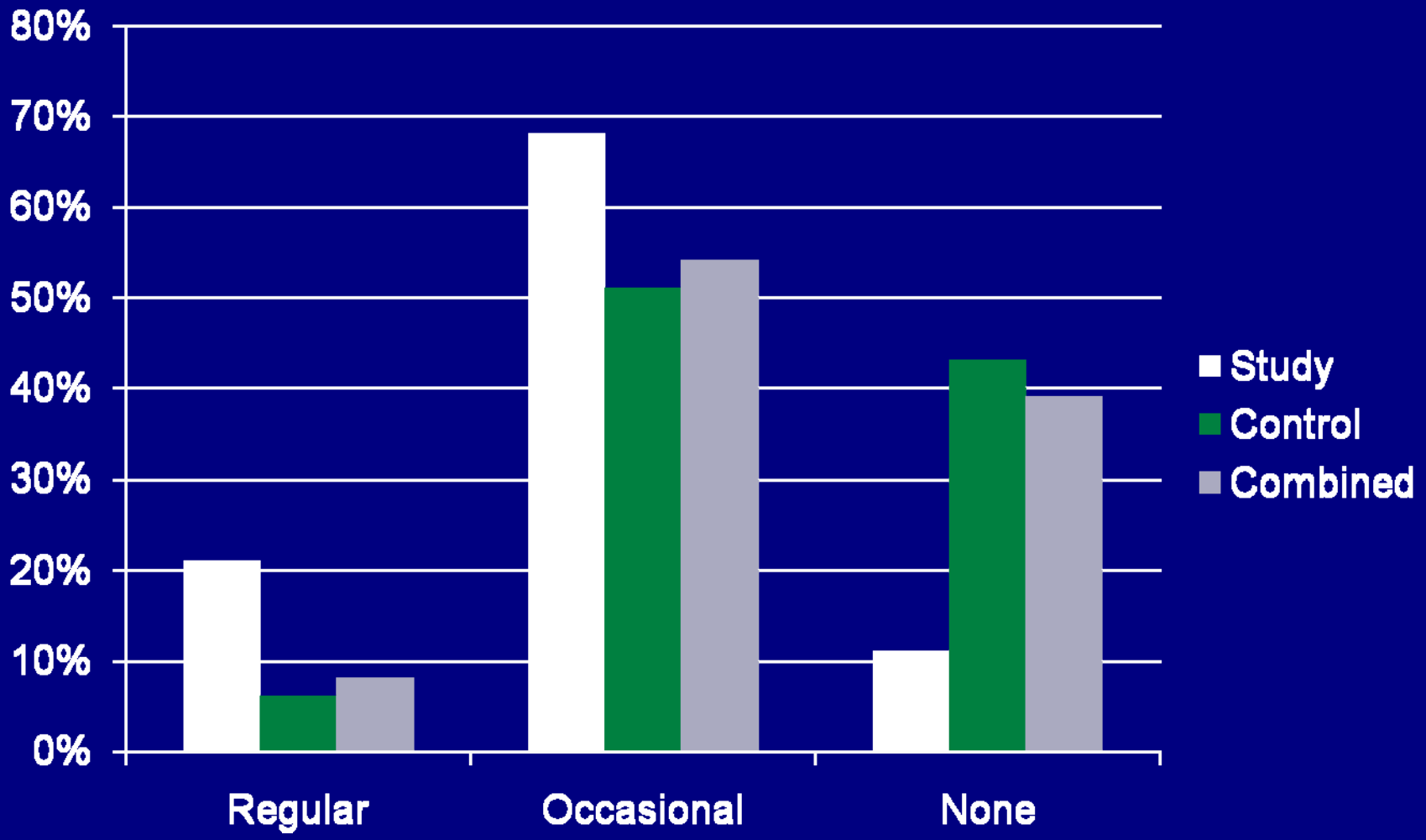
- It was not revenue
- Control group was more likely to enter data on paper first
- In a side question, we asked “what percentage of digital-first data is entered in the office and what percentage is captured with a portable/mobile device?”
  - 87.8% entered only in the office
  - Only 4.5% captured data in the field

# Approaches to Data Storage

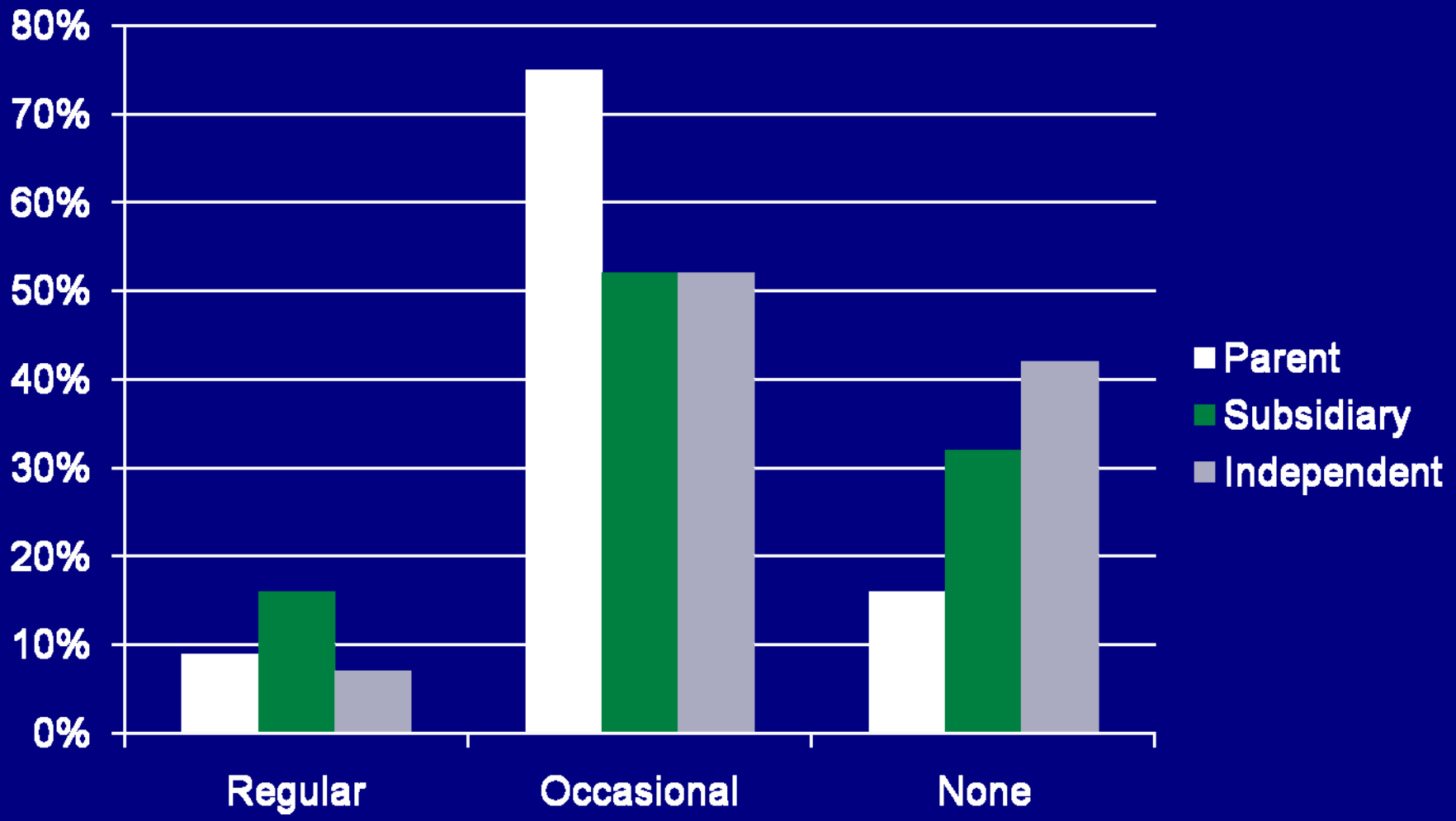



Y-axis legend: 1=All Paper 2=Most Paper 3=50/50 4=Most digital 5=All Digital

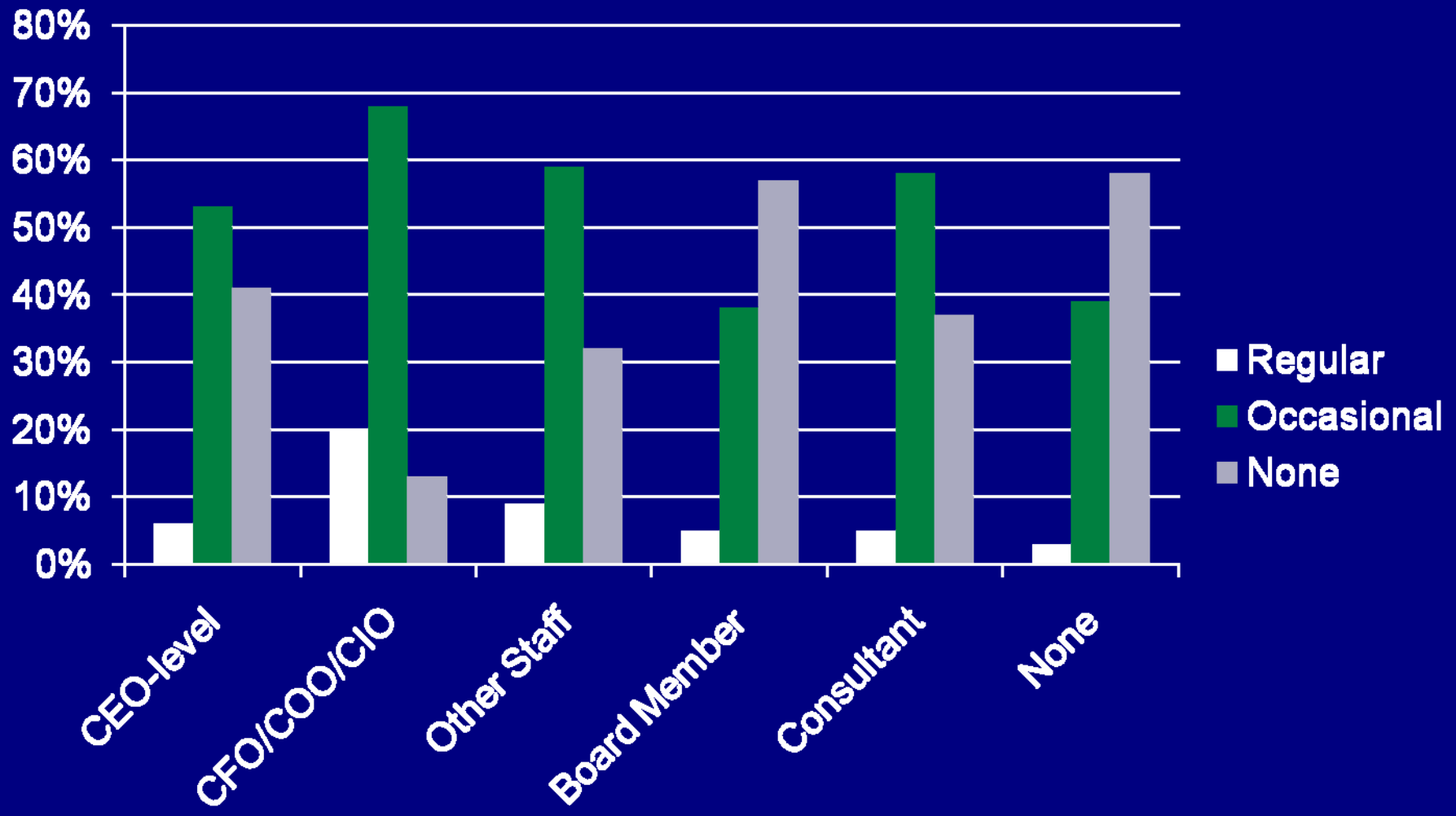
# Approaches to ICT Training



# Approaches by Organizational Type



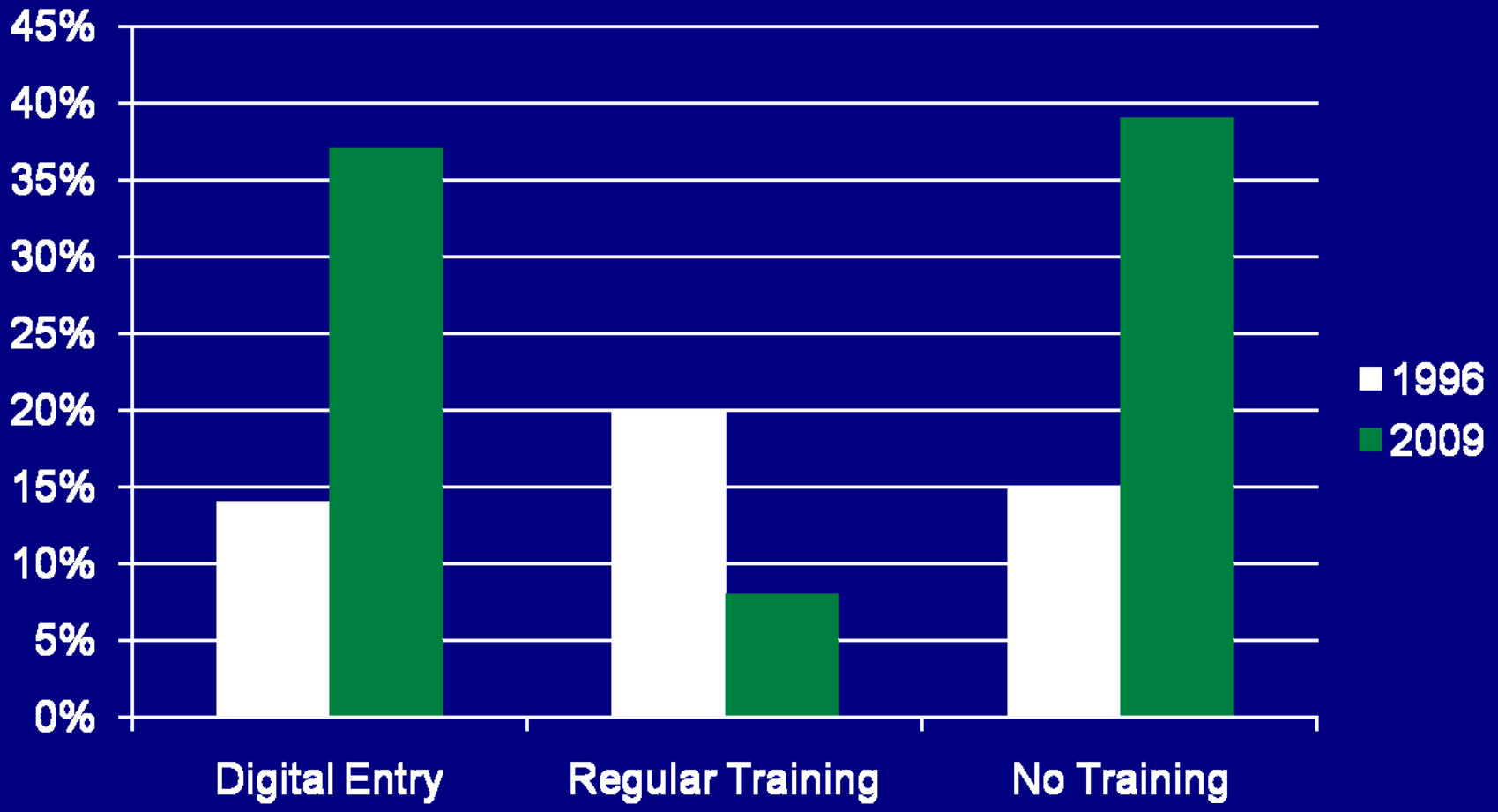
# Approaches by “Champion” Role



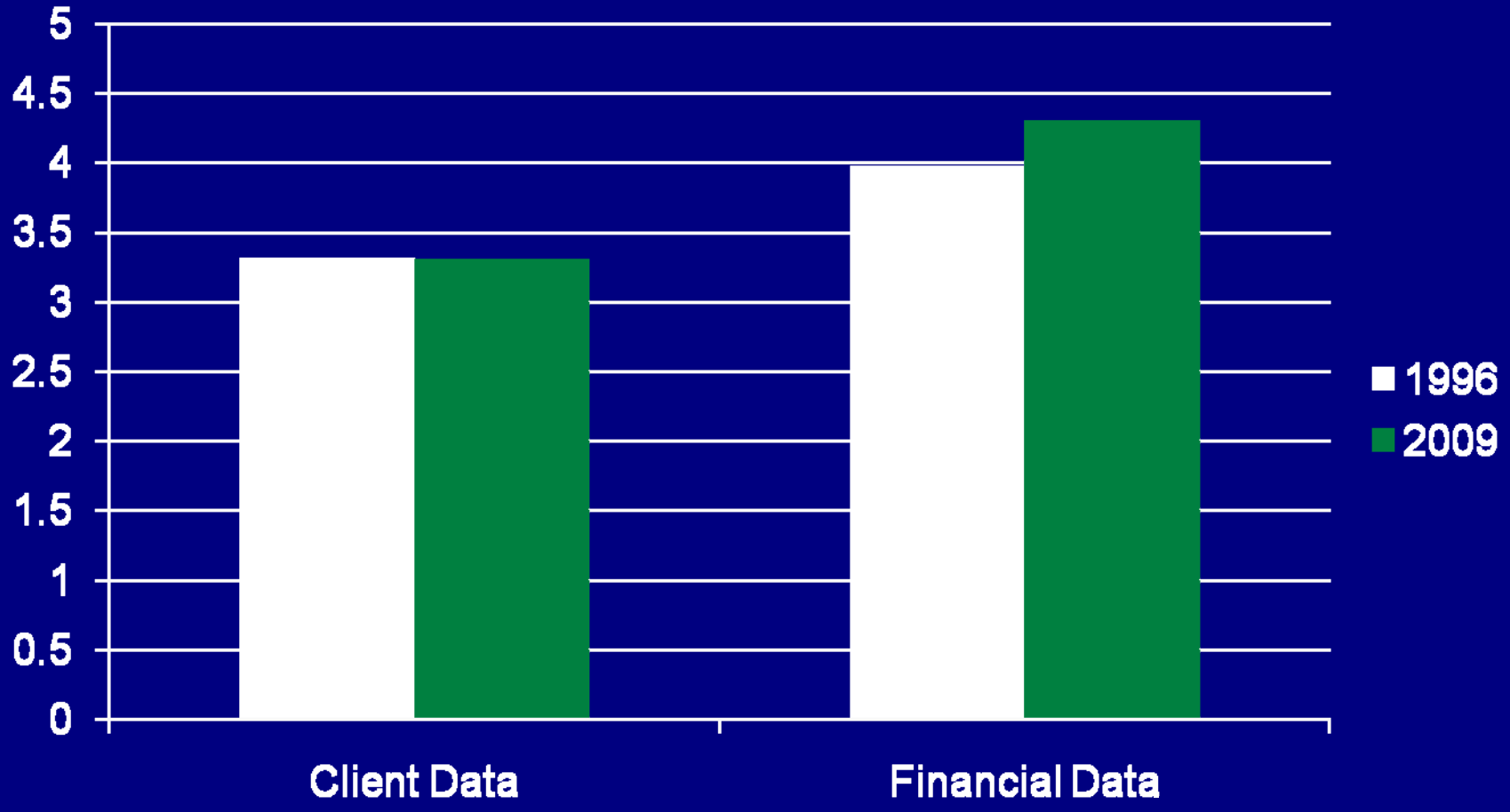
# Drivers of Training

- Things that mattered most:
  - Revenues
  - Membership in the study group
  - Having a COO/CIO/CFO-level champion
- Champion role had other effects:
  - Use of “Common” software
  - Use of “Special” software
  - Percentage of data entered directly to computer

# Data Entry & Training, ’96 v. ’09



# Data Storage, ’96 v. ’09



# Conclusions

- Revenue is not the limit of ICT ambition
- Championship drives training, and training drives intensive uses
- Receiving funding from at least one organization that pays attention to capacity & operating challenges pays ICT dividends
- Intensive users train; trainers use intensively
- The technology is there; the challenge is using it well

# Opportunities

- To improve mobile computing generally
- To improve remote data collection
- To increase digital-first data entry
- To improve training
- To encourage EDs and boards to empower C-level tech champions
- To encourage funders to provide sustained support for ICT usage

# Acknowledgements


- Diane Hibbert and Shveta Mathur
- Frank Donnelly, Newman Library
- Mike Clark and Craig Weinrich of NPCC
- Jack Krauskopf and Peter Dobkin Hall
- Gregg Van Ryzin
- The Clark Foundation

# Now Ubiquitous, Not Yet Intensive: Preliminary Results from Two Studies of NYC Nonprofits' Use of ICT in 1996 & 2009

David Birdsell and Bill Ferns

Baruch College

Center for Nonprofit Strategy and Management