

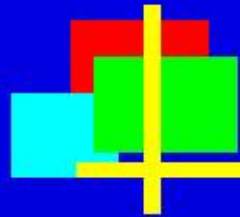
Computer Programming,
Consultancy, Information Service,
and Related Activities
Turnover Measures and Practices
at the U.S. Census Bureau

22nd Meeting of the Voorburg Group

John Murphy

Assistant Division Chief for Classification Activities

U.S. Census Bureau



Definition of the Service

Revenue received for the provision of IT services

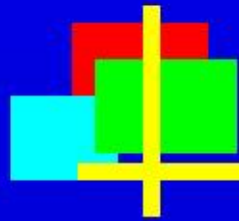
- Market provision of services
 - Employers
 - Non-employers
- Captive provision of services
 - Cost of services
 - Industry being served



2002 Size Data

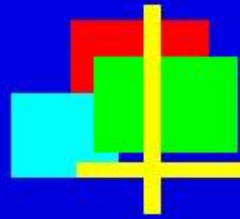
Type	Estabs.	Employment	Revenue
Employers	121,982	1.6 million	\$240 billion
Non-employers	319,124	N/A	\$ 12 billion
Total	441,106	1.6 million	\$252 billion

ISIC 6201, 6202, 6209, 6311, 6312/NAICS 5415, 518112, 518210, 51611



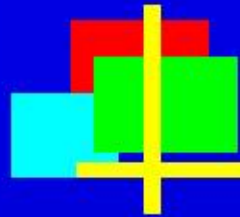
Industry Comparison: ISIC, NACE, NAICS United States

ISIC	NACE	NAICS
6201 Computer programming activities	62.01 Computer programming activities	541511 Custom Computer Programming Services
6202 Computer consultancy and facilities management act.	62.02 Computer consultancy activities	541512 Computer Systems Design Services
	62.03 Computer facilities mgt. activities	541513 Computer Facilities Mgt Services
6209 Other IT and computer service activities	62.09 Other IT and computer service activities	541519 Other Computer Related Services
6311 Data processing, hosting and related activities	63.11 Data processing, hosting and related activities	518210 Data Processing, Hosting, and Related Services
6312 Web portals	63.12 Web Portals	518112 Web Search Portals 516110 Internet Publishing and Broadcasting (pt.)



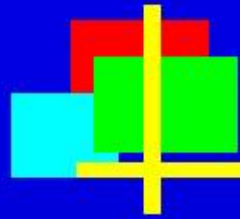
Turnover Data Availability

- **Comprehensive Economic Census Data**
 - Collected in years ending with 2 and 7
 - Detailed industry and product turnover data
- **Services Annual Survey**
 - Sample based estimates
 - Industry turnover estimates
 - Product turnover estimates at Industry Group level
- **Quarterly Services Survey**
 - Sample based estimates
 - Industry group revenue estimates
 - Class of customer breakouts



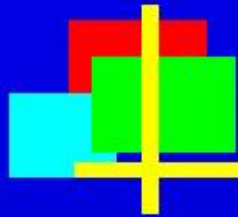
Additional Data Collected

- **Economic Census**
 - Class of customer breakdown
 - Value of exported services
 - Occupation of employees
 - Resale of hardware, software,
 - Value of custom software provided
- **Services Annual Survey**
 - Operating expenses (personnel costs, expensed materials and supplies, expensed purchased services, other expenses)
 - Sales taxes collected, e-commerce revenue, export revenue



Census Collection Practices

- Single survey form covers multiple NAICS industries
- Industry assigned by respondent based on kind-of-business (kb) activity inquiries
- Common product list collected across many industries
- Both sections (kb and product) of the survey form are considered
- Resulting data tabulated at 2, 3, 4, 5, and 6 digit levels of NAICS



Other Practices

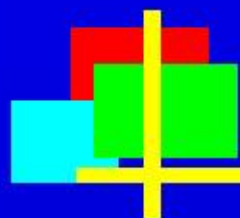
- Services Annual Survey (SAS) uses industry specific forms including product lines but no KBs
- SAS sample augmentation for births
- SAS benchmarked to Economic Census
- Quarterly Services Survey (QSS) subsample of SAS
- QSS benchmarked to SAS
- SAS – mandatory
- QSS – voluntary



Additional Details Collected in 2002 and Later

Annual Capital Expenditures Survey (ACES) – provides estimates of capital expenditures for structures, equipment, and capitalized software

Business Expenses – In Census years, the SAS and annual retail and wholesale trade programs collect 22 expense groupings, including estimates for expenditures on cost of custom software; cost of support and design services, including web design; cost of data processing and purchased computer services; and cost of rental and lease payments.



Iterative Process

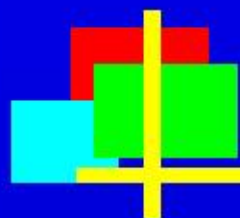
IT Consulting Example

1997 – KB for Computer Systems Consultants (5415122)

- No separate product inquiry for IT consulting services
- Combined with Other systems specification and design services

2002 – No KB, separate product 35000 for IT consulting services

2007 – Renumbered IT consulting services product 34910



Future Work

- Complete NAPCS and institute consistent coding of product lines across industries and Censuses
- Continued update of product lines and content as needed
- Map NAPCS products to CPC Ver. 2 for comparability analysis beyond North America



Product Distribution by Industry (1)

Distribution of IT Consulting Service by Industry

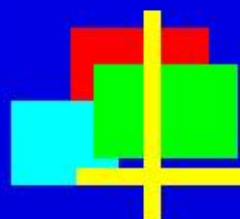
Industry	Establishments	Value (\$ approx)	Percent
516110	34	16,000,000	0.08%
518112	20	3,800,000	0.02%
518210	1,724	2,144,100,000	10.27%
514511	9,485	4,119,500,000	19.73%
541512	8,678	5,648,800,000	27.05%
541513	2,413	2,884,600,000	13.81%
541519	8,426	<u>6,064,800,000</u>	<u>29.04%</u>
		20,881,600,000	100%



Product Distribution by Industry (2)

Distribution of Custom Programming by Industry

Industry	Establishments	Value (\$ approx)	Percent
516110	122	52,100,000	0.10%
518112	75	12,800,000	0.02%
518210	3,428	2,158,000,000	4.15%
514511	48,073	43,901,200,000	84.47%
541512	12,299	5,270,100,000	10.14%
541513	490	209,700,000	0.41%
541519	2,329	<u>367,700,000</u>	<u>0.71%</u>
		51,971,600,000	100%



Inquiries for 2007 Products

Product lines, while renumbered and regrouped, remain substantially unchanged in 2007. Paper includes as appendix 1 a complete list of 2002 inquiries and their relationship to CPC Ver. 2.

- New split for network management and computer system management
- New inquiry for licensing the rights to reproduce and distribute computer software protected by copyright



Other Services Collected for 2007

- Temporary staffing – IT
- Rental and leasing of computer hardware
- IT related training services
- Electronic and precision equipment repair
- Data analysis services
- Engineering services (specify type)
- Resale of computer hardware and software
- Resale of other merchandise (specify type)
- Other operating receipts



Comparability of Price and Product Data

PPI and Census data are comparable in the limited areas that there is equal coverage:

Covered

6311/518210

6212/518112

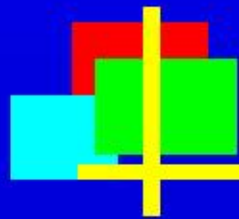
Not Covered

6201/541511

6202/541512

/541513

6209/541519



Questions?

John B. Murphy

Assistant Division Chief for Classification
Activities, U.S. Bureau of the Census

John.Burns.Murphy@census.gov

(301) 763-5172