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# Mini Paper on Turnover/Output for Software Publishers in Canada 

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Statistics Canada

### 1.0 Definition of the service

The Software publishers industry is defined in the North American Industrial Classification System Canada, under NAICS 51121, Software Publishers. This industry comprises "establishments primarily engaged in publishing computer software, usually for multiple clients and generally referred to as packaged software. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation and providing support services to software purchasers. These establishments may design and publish, or publish only."

### 2.0 Unit of measurement being collected

Turnover is collected annually as part of a survey of Software Development and Computer Services sent to establishments. The survey is sent to three industries that include Software publishers (NAICS 51121), Computer Systems design and related services (54151) and Data processing, hosting and related services (51821). See appendix, item 1, for the survey questionnaire.

Turnover is defined as the sum of sales of goods and services, grants and subsidies, royalties, rights, licensing and franchise fees and other revenue. Value added tax and other sales taxes are excluded.
'Establishment' refers to the level at which the accounting data required to measure production is available (principal inputs, revenues, salaries and wages). The establishment, as a statistical unit, is defined as the most homogeneous unit of production for which the business maintains accounting records from which it is possible to assemble all the data elements required to compile the full structure of the gross value of production (total sales or shipments, and inventories), the cost of materials and services, and labour and capital used in production.

The turnover survey collects financial information for both revenue and expense items.

Revenue is collected for the following items:

- Sales of goods and services - defined as amounts derived from the sale of goods and services (cash or credit), falling within a business's ordinary activities. Sales should be reported net of trade discount, value added tax and other taxes based on sales.
- Grants, subsidies, donations and fundraising (including non-repayable grants, contributions and subsidies from all levels of government and revenue from private sector (corporate and individual) sponsorships, donations and fundraising)
- Royalties, rights, licensing and franchise fees
- Investment income (dividends and interest) excluding equity income from investments in subsidiaries or affiliates

Expenses are collected for the following items:

- Salaries and wages including vacation pay, bonuses and profit sharing, employee commissions, severance pay and taxable allowances (e.g., room and board, vehicle allowances, gifts such as airline tickets for holidays)
- Employer portion of employee benefits
- Commissions paid to non-employees
- Professional and business services fees
- Subcontract expenses (including contract labour, contract work and custom work)
- Charges for services provided by the establishment's head office
- Cost of goods sold (purchases plus opening inventory minus closing inventory)
- Office supplies
- Rental and leasing (e.g. rental of premises, equipment, motor vehicles)
- Repair and maintenance (e.g., property, equipment, vehicles)
- Insurance (professional liability, motor vehicles, etc.)
- Advertising, marketing and promotions
- Travel
- Utilities and telecommunications expenses (include gas, heating, hydro, water, telephone and Internet expenses)
- Property and business taxes, licences and permits
- Royalties, rights, licensing and franchise fees
- Delivery, warehousing, postage and courier
- Financial services fees
- Interest expenses
- Amortization and depreciation of tangible and intangible assets
- Bad debts
- Net profit/loss after tax and other items

The survey collects a commodity breakdown of sales representative of the various industries covered by the survey. See appendix, item 2. Software publishing is split between two commodities; system software (including programming languages) and application software (including entertainment and game software).

The survey also tries to estimate the sector of the economy that purchased the services. Respondents are asked to estimate the percentage of revenue originating from each sector:

- Clients in Canada
o Businesses (including sales to Crown corporations)
o Individuals and households
o Governments, not-for-profit organizations and public institutions
- Clients outside Canada (e.g. foreign businesses, foreign subsidiaries and affiliates, foreign individuals, foreign institutions and/or governments)

Data are also collected on the value of international transactions on goods, services, and royalties, rights, licensing and franchise fees. It covers imported services and goods purchased outside Canada as well as the value of exported services and goods to clients/customers outside Canada.

### 3.0 Market conditions and constraints

### 3.1 Size of Industry

In 2011, the industry of Software publishers (NAICS 51121) accounted for $14 \%$ of the turnover for the Software Development and Computer Services industry grouping. The Computer systems design and related services industry (NAICS 54151) represents the largest of the three, comprising over three-quarters of the combined turnover (79\%), with Data processing (NAICS 51821) accounting for $7 \%$ of the share.

Chart 1. Distribution of turnover by NAICS, Survey of Software Development and Computer Services, 2011


Over the 2009 to 2011 period, the software publishers industry has seen steady growth in its turnover. The industry generated $\$ 6.6$ billion in turnover for 2011, representing a growth of $9 \%$ over 2010. See Chart 2.

Chart 2. Turnover (in \$billions), Profit margin (\%): Software publishers industry, 2009 to 2011


The profit margin stood at $9.8 \%$ in 2009 and 2010. In 2011, higher salaries and wages and costs of goods expenses drove total expenses up at a faster pace than the increase in revenues. The result was a decline in the profit margin to $6.7 \%$.

This industry employs around 30,000 people throughout Canada. It has been hovering around that number since 2009. This is a highly labour intensive industry requiring highly skilled and educated employees to keep up with the changing technology. Wages and salaries account for almost half of all operating expenses, increasing 8.8\% from 2010 to 2011.

Table 1. Wages and salaries, Employment: Software publishers industry, 2009 to 2011

| Year | Wages and salaries <br> (\$millions) | Employment <br> (number) |
| ---: | ---: | ---: |
| 2009 | 2,317 | 29,990 |
| 2010 | 2,589 | 30,625 |
| 2011 | 2,816 | 30,570 |

Software publishers provide a number of services, including services that are typically provided by the other computer services industries. In 2011, this industry generated over half of its sales (59\%) from the activity in software publishing, while one-quarter was derived from computer systems design sales. Data processing and hosting activities, together with other sales, made up the remaining $16 \%$, as seen in Chart 3.

Chart 3. Distribution of Sales, by type of service: Software publishers industry, 2009 to 2011


Software publishing sales are further broken down into application software services and system software services. As seen in Chart 4, almost three-quarters of total sales are derived from application software publishing. The remaining sales are generated from systems software.

Chart 4. Distribution of Sales of Software publishing: Software publishers industry, 2009 to 2011


Although domestic sales account for the majority of total sales, the industry also relies on export activity. The industry generates almost $40 \%$ of its sales through exports. Export levels reached $\$ 2.5$ billion in 2011. There was a small but steady growth of one percentage point each year in exports over the past three years, as shown in Chart 5.

Chart 5. Exports Share of Sales: Software publishers industry, 2009 to 2011


### 3.2 Special conditions and constraints

The software publishing product is produced by more industries than just the software publishers industry. For example, the computer systems design industry in Canada produces a significant amount of software publishing even though software publishing is not their primary activity. This lends itself to including all computer service industries on the same questionnaire to ensure coverage of a large proportion of software publishing activity in Canada.

The trend has been for the larger software publishers to buy smaller publishers in order to compete in the software market. As well, in order to remain competitive, they have sought to diversify as the traditional concept of "software publishing" (packaged software) is on the decline. To achieve that, they engage in other cross-NAICS activities by offering a "full service" to their clients. The example of a new way of providing software publishing services are, among several, downloadable software; SAAS (software as a service), which could imply classification to different industries depending on whether the service provided is writing software or providing access to it. As a result, these potential changes in output can lead to a change in the industry to which an establishment is classified, which can change the level of the industry estimates over time.

Another challenge in developing the turnover statistics is that establishments that are classified to one of the three computer service industries can purchase or merge with companies classified to another computer service industry or other industry outside of computer services altogether. This can result in changes to the dominant activity from one year to the next. The dynamic nature of this industry, with these mergers and acquisitions, as well as innovation and new inventions that occur in these types of industries, brings about the challenge of keeping the frame up-to-date to reflect the changing business structures and activity.

Under the NAICS 2007 structure, the software publishers industry (NAICS 5112) included video game publishers. Publishers that engage in video publishing were not distinguished from those that did not provide video game publishing. However, with the implementation of the Canadian
version of NAICS 2012, this distinction is made. In addition, with the implementation of NAPCS 2012, application software has been further split into video gaming and other software.

### 4.0 Standard classification structure

### 4.1 Industrial classification

The industry of Software publishers, is defined in the North American Industrial Classification System Canada, under NAICS 51121. It is an industry under sector 51 Information and Cultural Industries:

NAICS 2007 Canada:
51 Information and Cultural Industries
511 Publishing Industries (except Internet)
5112 Software Publishers
51121 Software Publishers

Currently, the turnover survey follows the NAICS 2007 structure whereby software publishers (NAICS 51121) is not split into further industrial detail. The Canadian version of NAICS 2012 further splits out Video game publishers at the 6-digit country level; NAICS 511211 Software publishers (except video game publishers) and NAICS 511212 Video game publishers. The Annual Software and Computer Services Survey will implement NAICS 2012 beginning with the 2013 reference year, but will sample and publish at the aggregate NAICS-5 level.

NAICS 2012 Canada:
51 Information and Cultural Industries
511 Publishing Industries (except Internet)
5112 Software Publishers
51121 Software Publishers
511211 Software publishers (except video game publishers) ${ }^{\text {CAN }}$
511212 Video game publishers ${ }^{\text {CAN }}$

NAICS 5112 corresponds to most of Class 5820 in section J of ISIC Rev. 4 with the exception of software publishing or publishers who publish exclusively on the Internet. Such publishers are included in NAICS 519130, Internet Publishing and Broadcasting, and Web Search Portals.

### 4.2 Product classification

The 2012 North American Product Classification System (NAPCS) divides software publishing into three outputs:

- 481411 System software;
- 481421 Game software; and
- 481431 General business productivity, home use, and other application software.


### 5.0 Evaluation of standard vs. definition and market conditions

Turnover data for software publishers (NAICS 5112) are collected from the Annual Survey of Software Development and Computer Services. The data are sampled and published by NAICS.

The commodities collected on the survey reflect the former structure of the NAPCS Canada (Provisional Version 0.1) that preceded NAPCS 2012 for services commodities. In the earlier Canadian commodity structure, Packaged software publishing was divided into two categories, System software publishing and Application software publishing. Each was further divided into more detailed products in the provisional commodity classification for which data were not collected on the turnover survey.

System software publishing is defined as the publication of low-level software required to manage computer resources and support the production or execution of application programs but which is not specific to any particular application. It includes:

- Operating system software - Software that controls a computer and its peripherals;
- Network software - Software that monitors an active communications network in order to diagnose problems and gather statistics for administration and fine-tuning;
- Database management software; and
- Development tools and programming languages software - Software used to assist in the development and/or authoring of computer programs.

Application software is defined as any self-contained program that performs a specific function directly for the end user. It includes:

- General business productivity and home use applications - Software used for general business purposes to improve productivity, or in the home for entertainment, reference or educational purposes;
- Cross-industry applications - Software that is designed to perform and/or manage a specific business function or process that is not unique to a particular industry;
- Vertical market applications - Software that performs a wide range of business functions for a specific industry;
- Utilities software - A small computer program that performs a very specific task. Utilities differ from other software applications in terms of size, cost and complexity. Examples include: compression programs, anti-virus, search engines, font, file viewers, and voice recognition software.

The NAPCS 2012 includes the same definition for System software but splits game software out of the rest of application software. The turnover survey does not yet reflect the new game software commodity. This will be implemented for the reference year 2013.

The entire turnover survey is part of a new Integrated Business Statistics Program (IBSP) framework that is being implemented in Statistics Canada beginning with reference year 2013. The IBSP framework includes a common Business Register as the frame for all business surveys; a tax data universe for the estimation of financial information; electronic data collection as the principal mode of collection; and a common editing strategy for automated and manual editing.

### 6.0 National accounts concepts and measurement issues related to GDP measurement

The Canadian System of National Accounts (CSNA) derives supply and intermediate use using the turnover survey of Software Development and Computer Services as described in Section 7. The recommended statistical unit for industry accounts in Canada is the establishment The input-output accounts of the CSNA uses the following classification:

- Pre-packaged software
- Custom design
- Own-account

The supply and demand components are listed in the table below. Values are reported in the cells marked with an X while those with zeros are usually empty. One fundamental difference between the turnover data reported on the survey and the supply data in the Input-Output tables is the treatment of goods purchased for resale of prepackaged software. As the table below shows, resale of packaged software appears as a margin (wholesale and retail) while the total value of the sale would appear in the revenue of the firm.

| Category | Prepackaged | Custom | Own Account | Total |
| :---: | :---: | :---: | :---: | :---: |
| Supply |  |  |  |  |
| Gross Output | X | $X$ | X | X |
| Tax Margins | X | X | 0 | X |
| Transportation Margins | X | 0 | 0 | X |
| Trade Margin - Wholesale | X | 0 | 0 | X |
| Trade Margin - Retail | X | 0 | 0 | X |
| Merchanise Imports | X | X | 0 | X |
| Royalties Imports | 0 | X | 0 | X |
| Import of Services | 0 | X | 0 | X |
| Supply Total | X | X | X | X |
| Demand |  |  |  |  |
| Merchanise Exports | X | 0 | 0 | X |
| Merchanise Re-exports | X | 0 | 0 | X |
| Export of Services (from survey) | 0 | X | 0 | X |
| Service Exports - Licensing Pre-Packaged | X | 0 | 0 | X |
| Service Exports - Software Royalties | 0 | X | 0 | X |


| Personal Expenditure | X | 0 | 0 | X |
| :--- | :--- | :--- | :--- | :--- |
| Intermediate Expenses | X | 0 | 0 | X |
| Capital expenditures | X | X | X | X |
|  |  |  |  | X |
| Demand Total | X | X | X |  |
|  |  |  |  |  |

The total supply of pre-packaged and custom software is an important control total used in determining software capitalization across industries, since firms will often expense software and these amounts are not identifiable in input detail collected on economic surveys. The challenge is also in identifying intermediate inputs such as licensing or fee for service (which may include imbedded software) and software capital.

To calculate constant price annual value added estimates by industry from the Input-Output accounts, a double deflation method is used. The real value added by industry is derived by taking the difference between the industry gross output and the sum of industry intermediate inputs (that is, goods, services and energy) in constant prices. Deflated industry output is the summation of deflated output by commodity, and deflated industry input is the summation of deflated input by commodity. The double deflation method is applied to derive the constant price value added for the Software Publishing industry. The outputs of the industry from the turnover survey, align with prices collected on the SPPI (see section 8).

The Balance of Payments accounts of the CSNA use the international transactions data from the turnover survey to supplement their tax administrative source and their Survey of Transactions in Services, to estimate trade in services for the software publishers industry.

### 7.0 Turnover data methods

Statistics Canada produces annual turnover statistics by industry and in current dollars at both the provincial and Canada level. Product detail is produced currently at the Canada level only. These statistics are published with a lag of about 15 months following the end of the reference period.

Turnover for the software publishers industry is collected annually as part of a survey of Software Development and Computer Services sent to establishments. This survey collects data for three industries: Computer Systems Design and Related Services, Data Processing and related Services, and Software Publishers. Data collected from businesses are aggregated with information from administrative sources to produce official estimates of national and provincial economic production for these industries.

The survey questionnaire contains generic modules designed to cover several service industries, with questionnaire modules covering revenue, expense, and employment. In order to reduce respondent burden, smaller firms receive a characteristics questionnaire (shortened version) which does not include the revenue and expense modules. For smaller firms, revenue and expense data are extracted from administrative files.

The basic objective of the survey is to produce estimates for the whole industry - incorporated and unincorporated businesses. The data come from two different sources: a sample of all businesses with revenue above or equal to a certain threshold (note: the threshold varies between surveys and sometimes between industries and provinces in the same survey) for which either survey or administrative data may be used; and administrative data only (what is referred to as tax replacement) for businesses with revenue below the specified threshold. It should be noted that only financial information is available from businesses below the threshold; e.g., revenue and expenses such as depreciation and salaries, wages and benefits. Detailed characteristics are collected only for surveyed establishments.

The list of establishments called the "frame" is the basis from which the portion eligible for sampling is determined and the sample is taken. The frame provides basic information about each firm including address, industry classification and information from administrative data sources. The frame is maintained by Statistics Canada's Business Register Division and is updated using administrative data.

This is a sample survey with a cross-sectional design. Prior to the selection of a random sample, establishments are classified into homogeneous groups (i.e. groups with same NAICS codes and same geography). Quality requirements are targeted, and then each group is divided into sub-
groups called strata: take-all, must-take, and take-some. The take-all stratum represents the largest firms in terms of performance (based on revenue) in an industry. The must-take stratum comprises units that are selected based on complex structural characteristics (multi-establishment, multi-legal, multi-NAICS, or multi-province enterprises). All take-all and must-take firms are selected to the sample. Units in the take-some strata are subject to simple random sampling.

The sample size for reference year 2011 is 231 collection entities in the software publishers industry. The industry stratification is at the NAICS-5 level and geographical stratification at the provincial level. The size variable is either the gross business income provided on the business register, an administrative tax variable, or other specified revenue.

Sampling parameters for the Annual Survey of Software development and Computer Services are:

RY2011 Sample size $=1,726$
Tax replacement only $=169$
Tax replacement with characteristics questionnaire $=1,113$
Units receiving full questionnaire $=417$

The survey of Software Development and Computer Services was the pilot survey in 2008 when Statistics Canada sought to introduce electronic reporting. In 2011, over $70 \%$ of sampled units responded using the electronic questionnaire.

### 8.0 Evaluation of comparability of turnover/output data with price index practices

The Informatics Professional Services Price Index (IPSPI) collects financial, wage and contractor fee information that is used to produce price indexes measuring changes in prices for informatics professional services such as data processing, hosting and related services, software development, packaged software and publishing, hardware and software consultancy, computer facilities management and system maintenance. Similar to the turnover survey, a variety of industries are covered under a single program but separate indexes are produced for each industry:

- Computer Systems and Related Services (NAICS 5415)
- Software Publishers NAICS (5112)
- Data Processing, Hosting and Related Services (NAICS 5182)
- Internet Publishing and Broadcasting, and Web Search Portals (NAICS 519130) Establishments engaged in publishing and/or broadcasting content on the Internet or operating web sites, known as web search portals.

These Services Producer Price Indexes (SPPIs) are published at an industry level. Canada does not produce sub-indexes by commodity.

The IPSPI uses the same frame as the turnover survey. The weights come from Statistics Canada's Business Register and represent the gross business income for each enterprise for the current reference year. The weights are updated annually.

The prices collected for the IPSPI represent the input costs of labour and the realized profit for the firm. The labour cost is calculated as the weighted average of the firm's contract fees and wage rates for the year, while the profit portion reported is used to derive the realized net multiplier. Both of these inputs are multiplied to arrive at a total price index.

Canada is investigating possible changes in method for these SPPIs such as a pricing model based on representative contract pricing.

### 9.0 Summary

The software publishers industry has been actively involved in buyouts and mergers as well as diversification into other related computer services. The resulting change in output composition can lead to changes in the classification of the industry. This in turn requires the continual maintenance of the frame to ensure up-to-date business structures.

Furthermore, the increase in output of products such as gaming has led to the need for more detailed industry and product classifications. NAICS 2012 and NAPCS 2012 will provide this detail, allowing for the potential distinction between software publishers that engage in video game publishing from those that do not. Although NAPCS 2012 and NAICS 2012 now reflect this demarcation, we have not altered the sampling strategy for RY2013 and, thus, the publishing intentions for the turnover survey will continue to group these two new six-digit NAICS within their five-digit groupings. The split NAPCS will be published only if data quality and confidentiality permit.

Due to the nature of the computer services industry, the software publishing product is produced by more industries than just software publishers. Similarly, the software publisher industry produces more than just software publishing. This lends itself to including other computer service industries on the same questionnaire to broaden coverage of the entire software publishing activity in Canada. Combining these industries also allows the turnover survey to include other computer services products that are secondary to this industry.

## Appendix

1. Sample of the Software development and computer service industries survey questionnaire, reference year 2012
2. Characteristics portion of the Software development and computer service industries survey questionnaire, NAPCS compliant

Unified Enterprise Survey - Annual

## 2012 Survey of Service Industries: <br> Software Development and

## Computer Services

This document is confidential when completed.
Si vous préférez recevór ce questionnaine en français, veuilez nous appeler au muméro sans frais suivant: 1-800-972-9692.

If necessary, please make address label corrections in the boxes below.


## C - Reporting period information

1. Please report information for your fiscal year (normal business year) ending between April 1, 2012 and March 31, 2013. Please indicate below the period covered by this questionnaire.

2. If the reporting period does not cover a full year, please check the reason(s) below:


## Reporting instructions

- Report for business unit(s) specified on the label on the front page.
- Complete only the questions that apply to your business
- When precise figures are not available, please provide your best estimate.
- Report in Canadian dollars. Dollar amounts and percentages should be rounded to whole numbers.
- Consult the reporting guide at www.statcan.gc.ca/guides-e for further information.


## D - Revenue

A detailed breakdown may be requested in other sections.

1. Sales of goods and services (e.g., rental and leasing income, commissions, fees, admissions, services revenue)
Report net of returns and allowances.
CAN\$
2. Grants, subsidies, donations and fundraising
3. Royalties, rights, licensing and franchise fees

2022
2097
4. Investment income (dividends and interest)

2097 $\qquad$
5. Other revenue (please specify): $\square$ 2077 $\square$
6. Total revenue (sum of questions 1 to 5 )

## E-Expenses

2. Employer portion of employee benefits (include employer contributions to pension, medical/life insurance plans, employment insurance, etc.)
3. Commissions paid to non-employees
4. Professional and business services fees (e.g., legal, accounting)
5. Subcontract expenses (include contract labour, contract work and custom work)
6. Charges for services provided by your head office
7. Cost of goods sold, if applicable (purchases plus opening inventory minus closing inventory)
8. Office supplies
9. Rental and leasing (include rental of premises, equipment, motor vehicles, etc.)
10. Repair and maintenance (e.g., property, equipment, vehicles)
11. Insurance (include professional liability, motor vehicles, etc.)
12. Advertising, marketing and promotions (report charitable donations at question 22)
13. Travel, meals and entertainment
14. Utilities and telecommunications expenses (include gas, heating, hydro, water, telephone and Internet expenses)
15. Property and business taxes, licences and permits
16. Royalties, rights, licensing and franchise fees
17. Delivery, warehousing, postage and courier
18. Financial services fees
19. Interest expenses
20. Amortization and depreciation of tangible and intangible assets
21. Bad debts
22. All other expenses (please specify):

23. Total expenses (sum of questions 1 to 22)
24. Corporate taxes, if applicable
25. Gains (losses) and other items (see reporting guide)
26. Net profit/loss after tax and other items (see reporting guide)

## F - Industry characteristics

## Sales breakdown by products

Please provide a breakdown of your sales, indicating amounts in either Canadian dollars or percentages.
mation technology (IT) technical consulting services
${ }^{9973} \quad 1 \quad \square$ \$ or ${ }^{2} \square \%$
2. Custom software design and development services
a) Website design and development services
b) database design and development services
c) customization and integration of packaged software
d) other custom software development services

1016

3. Computer systems and network design and development services
a) network design and development services (include network security design)
1017
b) computer systems design, development and integration services

1018
18 $\square$
4. Hosting and information technology (IT) infrastructure provisioning services (e.g., Website hosting, application service provisioning, business process management services, collocation, data storage and management)
$\square$
5. IT infrastructure and network management services
a) network management services
b) computer systems management services
6. Information and document transformation services (e.g., imaging, data conversion, and migration)
7. IT technical support services (for hardware or software; include disaster recovery services)
8. Software publishing
a) system software (include programming languages)
b) application software (include entertainment and game software)
9. Re-sale of computer hardware and software (retail and wholesale; include resale of end-use software licenses)

——_
$\square$
6. Information and document transformation services

1023 $\square$

$\square$
$1026 \square$
10. IT related training services $\square$
11. All other sales (please specify):

2559 $\square$
2773
12. Total sales (sum of questions and sub-questions 1 to 11)

2305

## F - Industry Characteristics (continued)

## Innovation, research and development and other

1. Please estimate the percentage (\%) of total revenues generated by new or substantially improved products or services introduced by your firm during the three-year period 2010-2012.

${ }^{2910}$| $\%$ |
| :---: |
|  |
|  |
|  |

2. Of your total expenses, please estimate the percentage (\%) related to product research and development.
3. Did your firm generate any revenues from developing or publishing gaming software products?

1027yes, please report percentage of total revenues attributed to gaming products
$\qquad$ no





1. Please describe the nature of your business.

0055
2. Please check the one main activity which most accurately represents your main source of revenue.
$0764 \quad$ Software publishers: business units primarily engaged in publishing and developing packaged computer software.
$0765 \quad \square$ Data processing, hosting and related services: business units primarily engaged in Web hosting, streaming services, application hosting, processing and preparation of reports from data supplied by the customer, optical scanning data service, data ent
$0766 \quad \square$ Computer systems design and related services: business units primarily engaged in computer information technology consulting, developing custom software, designing systems and networks, developing and analyzing systems, computer programming to meet

0040None of the above — Please call 1-800-972-9692 for further instructions.

| Questionnaire item number | Industry characteristics (type of service provided) | NAPSC |
| :---: | :---: | :---: |
| 1 | Information technology (IT) technical consulting services | 541061.1 |
| 2 | Custom software design and development services | 541051.1 |
| 2a | Website design and development services | 541051.1.1 |
| 2b | Database design and development services | 541051.1.2 |
| 2c | Customization and integration of packaged software | 541051.1.4 |
| 2d | Video game design and development services |  |
| 2 e | Other custom software development services | 541051.1.3 |
| 3 | Computer systems and network design and development services |  |
| 3a | Network design and development services (include network security design) | 541069.1 |
| 3b | Computer system design, development and integration services | 541069.2.2 |
| 4 | Hosting and information technology (IT) infrastructure provisioning services (e.g., Website hosting, application service provisioning, business process management services, collocation, data storage and management) | 518001.1 |
| 5 | IT infrastructure and network management services |  |
| 5a | Network management services | 518001.2.1 |
| 5b | Computer systems management services | 518001.2.2 |
| 6 | Information and document transformation services (e.g., imaging, data conversion, and migration | 518001.3 |
| 7 | IT technical support services (for hardware or software: include disaster recovery services | 541069.3 |
| 8 | Software publishing |  |
| 8a | System software (include programming languages) | 511031.1.1 |
| 8b | Application software | 511031.1.2 |
| 8c | Video gaming software |  |
| 9 | Re-sale of computer hardware and software (retail and wholesale; include resale of end-use software licenses |  |
| 9a | Computer hardware |  |
| 9b | Computer software |  |
| 10 | IT related training services |  |
| 11 | All other sales (please specify) |  |
| 12 | Total sales (sum of questions and sub-questions 1 to 11 |  |

The table above outlines the Industry characteristics, i.e. the type of service provided by the companies covered by this survey. The services are classified according to NAPCS. The questionnaire for this survey is designed to use only the highest level of NAPCS.

